

**Appendix A**  
**Facility Laboratory Cost Estimating Worksheets**

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|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 202 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 342   |         |                        |                                      |         | 342     |
| <b>Wall Area, ft<sup>2</sup></b>    | 935   |         |                        |                                      |         | 935     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 342   |         |                        |                                      |         | 342     |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    |                       |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 200                   |    |                     |                       |                      |                 |
| Casework/Cabinets        |                       |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 600                   |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 100                   |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    |                       |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 2   | 4      | 8       |         |         |           | 2        |
| <b>Equip. Release</b>  | 2   | 4      | 8       |         |         |           | 2        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

**# Lab Samples to be collected**

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 202          | <b>Room or Area</b> | X158                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Ampoule sealing room -uranium liquids<br/> <b>Use</b> Note: this room was listed as A158 in 2009DCE, U-nat </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> U-nat </div> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     |                                 |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 189          |                     |                                 |                                   |                | 189            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 485          |                     |                                 |                                   |                | 485            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 189          |                     |                                 |                                   |                | 189            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |   |                      |      |  |  |  |  |
|---|---|----------------------|------|--|--|--|--|
| <b>Building</b>                               | 202   | <b>Room or Area</b>  | X154 |  |  |  |  |
| <b>Use</b>                                    | Similar to X158, shrink wrapping SRM ampoule boxes prepared elsewhere |                      |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | U-nat (same as X158) |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                      |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                      |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                      |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 153   |         |                        |                                      |         | 153     |
| <b>Wall Area, ft<sup>2</sup></b>    | 451   |         |                        |                                      |         | 451     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 153   |         |                        |                                      |         | 153     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 217 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 7526  |         |                        |                                      |         | 7526    |
| <b>Wall Area, ft<sup>2</sup></b>    | 19415 |         |                        |                                      |         | 19415   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 7526  |         |                        |                                      |         | 7526    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    | 750                   |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 3350                  |    |                     |                       |                      |                 |
| Casework/Cabinets        | 1375                  |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 4900                  |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 1050                  |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    | 8                     |    |                     |                       |                      |                 |
| Sinks                    | 57                    |    |                     |                       |                      |                 |
| Drains                   | 16.0                  |    |                     |                       |                      |                 |
| Ventilation Drops        | 25.0                  |    |                     |                       |                      |                 |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 14  | 28     | 60      |         |         |           | 14       |
| <b>Equip. Release</b>  | 15  | 30     | 68      |         |         |           | 15       |
| <b>Pack/Load waste</b> | 0.5 | 1      |         | 4       | 4       | 4         | 0.5      |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 14  | 28     | 60      |         |         |           | 14       |

**# Lab Samples to be collected**

3

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 217   | <b>Room or Area</b> | C115 |  |  |  |  |
| <b>Use</b>                                    | Surface and Microanalysis, previous Pu spill, survey in Nov. 2023 <MDC. |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Unsealed TRU, U, Th |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1058  |         |                        |                                      |         | 1058    |
| <b>Wall Area, ft<sup>2</sup></b>    | 2016  |         |                        |                                      |         | 2016    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1058  |         |                        |                                      |         | 1058    |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 400                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 2000                  |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 5                     |                |                 |                   |                  |                      |
| Drains                   | 2.0                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 2.0 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |  |   |  |   |  |  |  |  |
|---|--|---|--|---|--|--|--|--|
| <b>Building</b>                               |  | <div style="border: 1px solid black; padding: 2px;">217</div>                       |  | <b>Room or Area</b>   |  |  | <div style="border: 1px solid black; padding: 2px;">D113</div> |  |
| <b>Use</b>                                    |  | <div style="border: 1px solid black; padding: 2px;">Surface and Microanalysis</div> |  |   |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  |   |  | <div style="border: 1px solid black; padding: 2px;">Sealed Fe-55 only</div> |  |  |  |  |
| <b>Area Classification</b>                    |  | <div style="border: 1px solid black; padding: 2px;">3</div>                         |  |   |  |  |  |  |
| <b># Floors above Basement</b>                |  | <div style="border: 1px solid black; padding: 2px;"></div>                          |  |   |  |  |  |  |
| <b># Floors below Roof</b>                    |  | <div style="border: 1px solid black; padding: 2px;"></div>                          |  |   |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 394   |         |                        |                                      |         | 394     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1160  |         |                        |                                      |         | 1160    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 394   |         |                        |                                      |         | 394     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 150                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 400                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 5                     |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |            |   |                  |   |                             |  |
|--------------------------|------------|---|------------------|---|-----------------------------|--|
| <b>Drains</b>            | <b>No.</b> | <div style="border: 1px solid black; padding: 2px;">1</div> | <b>Inch Dia.</b> | <div style="border: 1px solid black; padding: 2px;">2</div> | <b>Total ft<sup>3</sup></b> | <div style="border: 1px solid black; padding: 2px;"></div> |
| <b>Ventilation Drops</b> | <b>No.</b> | <div style="border: 1px solid black; padding: 2px;"></div>  | <b>Inch Dia.</b> | <div style="border: 1px solid black; padding: 2px;"></div>  | <b>Total ft<sup>3</sup></b> | <div style="border: 1px solid black; padding: 2px;"></div> |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |  |
|--------------------------------------|--|
| <b># Lab Samples to be collected</b> | <div style="border: 1px solid black; padding: 2px; width: 50px; text-align: center;">1</div> |
|--------------------------------------|--|



|   |  |  |                                 |                                   |                |                |  |
|---|--|--|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>                               | 217  | <b>Room or Area</b>  | D108                            |                                   |                |                |  |
| <b>Use</b>                                    | Surface and Microanalysis, Sealed Fe-55 only |  |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Sealed Fe-55 only RSIMS Authorized source<br>use location for HEU(U-235) |                                 |                                   |                |                |  |
| <b>Area Classification</b>                    | 3  |  |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>                |  |  |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>                    |  |  |                                 |                                   |                |                |  |
|   | <b>Total</b>                                 | <b>Class 1</b>   | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>             | 788  |  |                                 |                                   |                | 788            |  |
| <b>Wall Area, ft<sup>2</sup></b>              | 1668   |  |                                 |                                   |                | 1668           |  |
| <b>Ceiling Area, ft<sup>2</sup></b>           | 788  |  |                                 |                                   |                | 788            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 250       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 150       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 5         |                |                 |                   |                  |                      |
| Drains                   | 2.0       |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

|                        | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|------|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 0.5  | 1      | 4       |         |         |           | 0.5      |
| <b>Equip. Release</b>  | 1    | 2      | 8       |         |         |           | 1        |
| <b>Pack/Load waste</b> | 0.25 | 0.5    |         | 2       | 2       | 2         | 0.25     |
| <b>Decon/Remed.</b>    |      |        |         |         |         |           |          |
| <b>Final Survey</b>    | 0.5  | 1      | 4       |         |         |           | 0.5      |

  

**# Lab Samples to be collected**

|   |  |   |                                 |                                   |                |                |  |
|---|--|---|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>   | 217  | <b>Room or Area</b>   | D101                            |                                   |                |                |  |
| <b>Use</b>  | Surface and Microanalysis, Sealed Fe-55 only |   |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b><br><b>Area Classification</b><br><b># Floors above Basement</b><br><b># Floors below Roof</b> |  | Sealed Fe-55 only, RSIMS Authorized source<br>use location for HEU(U-235), Unat, DU |                                 |                                   |                |                |  |
|   |  | 3   |                                 |                                   |                |                |  |
|   |  |   |                                 |                                   |                |                |  |
|   | <b>Total</b>                                 | <b>Class 1</b>  | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| Floor Area, ft <sup>2</sup>   | 394  |   |                                 |                                   |                | 394            |  |
| Wall Area, ft <sup>2</sup>  | 1160   |   |                                 |                                   |                | 1160           |  |
| Ceiling Area, ft <sup>2</sup>   | 394  |   |                                 |                                   |                | 394            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50        |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 5         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

|                 | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|------|--------|---------|---------|---------|-----------|----------|
| Characterize    | 0.5  | 1      | 4       |         |         |           | 0.5      |
| Equip. Release  | 1    | 2      | 8       |         |         |           | 1        |
| Pack/Load waste | 0.25 | 0.5    |         | 2       | 2       | 2         | 0.25     |
| Decon/Remed.    |      |        |         |         |         |           |          |
| Final Survey    | 0.5  | 1      | 4       |         |         |           | 0.5      |

  

# Lab Samples to be collected

|   |                              |                       |      |  |  |  |  |
|---|------------------------------|-----------------------|------|--|--|--|--|
| <b>Building</b>                               | 217                          | <b>Room or Area</b>   | F122 |  |  |  |  |
| <b>Use</b>                                    | Selected Low Risk Source Use |                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              | Low level sealed only |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                            |                       |      |  |  |  |  |
| <b># Floors above Basement</b>                |                              |                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                              |                       |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 537   |         |                        |                          |         | 537     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1344  |         |                        |                          |         | 1344    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 537   |         |                        |                          |         | 537     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   | 2.0       |                |                 |                   |                  |                      |
| Ventilation Drops        | 5.0       |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |  |
|--------------------------|-----|---|-----------|----|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 10 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>   | 217  | <b>Room or Area</b> | C121 |  |  |  |  |
| <b>Use</b>  | Particle Metrology   |                     |      |  |  |  |  |
| <b>Radionuclides,<br/>Extent of<br/>Contamination<br/>Area Classification</b> | Particle Metrology, Sealed beta sources only<br>(inc. Kr-85 & H-3) RSIMS - authorized source<br>use loc. for LEU (U-235 pwdr. on filter) |                     |      |  |  |  |  |
| <b># Floors above Basement</b>  | 3  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>  |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 300   |         |                        |                          |         | 300     |
| <b>Wall Area, ft<sup>2</sup></b>    | 840   |         |                        |                          |         | 840     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 300   |         |                        |                          |         | 300     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 300       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 5         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                              |      |  |  |  |  |
|---|-----|------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 217 | <b>Room or Area</b>          | F118 |  |  |  |  |
| <b>Use</b>                                    |     |                              |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Selected Low Risk Source Use |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                              |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                              |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                              |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 506   |         |                        |                                      |         | 506     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1328  |         |                        |                                      |         | 1328    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 506   |         |                        |                                      |         | 506     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 400                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 600                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                              |                     |      |  |  |  |  |
|---|------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 217                          | <b>Room or Area</b> | F112 |  |  |  |  |
| <b>Use</b>                                    | Selected Low Risk Source Use |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                            |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                              |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                              |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 506   |         |                        |                                      |         | 506     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1328  |         |                        |                                      |         | 1328    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 506   |         |                        |                                      |         | 506     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 250                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 100                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |                              |                     |      |  |  |  |  |
|---|------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 217                          | <b>Room or Area</b> | F111 |  |  |  |  |
| <b>Use</b>                                    | Selected Low Risk Source Use |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                            |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                              |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                              |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 506   |         |                        |                                      |         | 506     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1328  |         |                        |                                      |         | 1328    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 506   |         |                        |                                      |         | 506     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 350                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 75                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 150                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 5                     |                |                 |                   |                  |                      |
| Drains                   | 2.0                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 5.0                   |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 217   | <b>Room or Area</b> | F109 |  |  |  |  |
|   |   |                     |      |  |  |  |  |
| <b>Use</b>                                    | Selected Low Risk Source Use, Currently no more sources |                     |      |  |  |  |  |
|   |   |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 506   |         |                        |                          |         | 506     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1328  |         |                        |                          |         | 1328    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 506   |         |                        |                          |         | 506     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   | 2.0       |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 217   | <b>Room or Area</b> | F106 |  |  |  |  |
| <b>Use</b>                                    | Selected Low Risk Source Use, Currently no more sources |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Low level alpha     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 506   |         |                        |                          |         | 506     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1328  |         |                        |                          |         | 1328    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 506   |         |                        |                          |         | 506     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 400       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   | 2.0       |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |  |      |  |  |  |  |
|---|-----|--|------|--|--|--|--|
| <b>Building</b>                               | 217 | <b>Room or Area</b>                      | F101 |  |  |  |  |
| <b>Use</b>                                    |     | Microscopy, Selected Low Risk source use |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | historical (LEU, Mixed Byproduct)        |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 259   |         |                        |                                      |         | 259     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1003  |         |                        |                                      |         | 1003    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 259   |         |                        |                                      |         | 259     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 217          | <b>Room or Area</b> | D115 (aka D117)                 |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">N/A, Selected Low Risk Source Use historical</div> <div style="border: 1px solid black; padding: 2px;">Use SEM Room, low level</div> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     | Ni-63 sealed                    |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 396          |                     |                                 |                                   |                | 396            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 1180         |                     |                                 |                                   |                | 1180           |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 396          |                     |                                 |                                   |                | 396            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other,                   |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   | 2.0       |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |   |   |      |  |  |  |  |
|---|---|---|------|--|--|--|--|
| <b>Building</b>                               | 217   | <b>Room or Area</b>                         | D105 |  |  |  |  |
| <b>Use</b>                                    | low activity: sealed/unsealed - Pu-239, HEU, U-nat, GD-148, Pu-238, DU, Cs- |   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Pu-239, HEU, U-nat, GD-148, Pu-238, DU, Cs- |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |   |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 234   |         |                        |                                      |         | 234     |
| <b>Wall Area, ft<sup>2</sup></b>    | 980   |         |                        |                                      |         | 980     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 234   |         |                        |                                      |         | 234     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 150                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50                    |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other, lead shield safe  | 8                     |                |                 |                   |                  |                      |
| Sinks                    | 5                     |                |                 |                   |                  |                      |
| Drains                   | 2.0                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 15.0                  |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |  |
|--------------------------|-----|---|-----------|----|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 12 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |  |  |      |  |  |  |  |
|---|--|--|------|--|--|--|--|
| <b>Building</b>                               | 217  | <b>Room or Area</b>                        | C105 |  |  |  |  |
| <b>Use</b>                                    | Alpha and beta natural background (environmental levels) |  |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Very Low Level, Ni-63 sealed source/device |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |  |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 638   |         |                        |                                      |         | 638     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1428  |         |                        |                                      |         | 1428    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 638   |         |                        |                                      |         | 638     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 300                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 400                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |  |
|--------------------------|-----|---|-----------|----|-----------------------|--|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 4 | Inch Dia. | 10 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 5513  | 400     |                        | 40                                   |         | 5113    |
| <b>Wall Area, ft<sup>2</sup></b>    | 22514 | 1800    |                        |                                      |         | 20714   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 5513  | 400     |                        |                                      |         | 5113    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    | 100                   |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 500                   |    |                     |                       |                      |                 |
| Casework/Cabinets        | 1750                  |    |                     |                       |                      |                 |
| Reefers, Large Equipment |                       |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 300                   |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    | 50                    |    |                     |                       |                      |                 |
| Drains                   | 0.6                   |    |                     |                       |                      |                 |
| Ventilation Drops        | 47.6                  |    |                     |                       |                      |                 |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 18  | 36     | 72      |         |         |           | 18       |
| <b>Equip. Release</b>  | 21  | 42     | 84      |         |         |           | 21       |
| <b>Pack/Load waste</b> | 0.6 | 1.25   | 0.5     | 1       | 6       | 6         | 0.6      |
| <b>Decon/Remed.</b>    | 0.5 | 1      | 1       |         | 2       | 2         | 0.5      |
| <b>Final Survey</b>    | 18  | 36     | 72      |         |         |           | 18       |

**# Lab Samples to be collected**

2

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220  | <b>Room or Area</b> | A226 |  |  |  |  |
| <b>Use</b>                                    | Office, Previously Micro and Nano analysis |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Unsealed U, Th      |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 750   |         |                        |                                      |         | 750     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1320  |         |                        |                                      |         | 1320    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 750   |         |                        |                                      |         | 750     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 350                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 20                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 2   | 4      | 8       |         |         |           | 2        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> | 0.5 | 1      |         |         | 2       | 2         | 0.5      |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

**# Lab Samples to be collected**

|   |                                     |                     |      |  |  |  |  |
|---|-------------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220                                 | <b>Room or Area</b> | A266 |  |  |  |  |
| <b>Use</b>                                    | Micro and Nano Analysis Sample Prep |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                     | Unsealed U, Th      |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                                   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 2                                   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                                   |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 400   | 400     | 0.1                    | 40                                   |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1800  | 1800    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 400   | 400     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 100                   | 0.5            |                 | 1                 |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 300                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200                   | 0.1            | 0.2             | 0.8               |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 30                    |                |                 |                   |                  |                      |
| Drains                   | 0.6                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 47.6                  |                |                 |                   |                  |                      |

  

|                          |     |   |           |    |                       |      |
|--------------------------|-----|---|-----------|----|-----------------------|------|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2  | Total ft <sup>3</sup> | 0.6  |
| <b>Ventilation Drops</b> | No. | 7 | Inch Dia. | 14 | Total ft <sup>3</sup> | 47.6 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 0.1 | 0.25   | 0.5     | 1       | 4       | 4         | 0.1      |
| <b>Decon/Remed.</b>    | 0.5 | 1      | 1       |         | 2       | 2         | 0.5      |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |              |  |                                 |                                   |                |                |  |
|---|--------------|--|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>                               | 220          | <b>Room or Area</b>  | A122                            |                                   |                |                |  |
| <b>Use</b>                                    | Office       |  |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b> |              | Ni 63. Solid or powder- Ni-63,H-3,Th-nat,U-nat. HEU, LEU, DU, Th-232, MBYP. Gas GL device - Kr-85. Liquid - LEU, HEU |                                 |                                   |                |                |  |
| <b>Area Classification</b>                    |              | 3  |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>                |              |  |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>                    |              |  |                                 |                                   |                |                |  |
|   | <b>Total</b> | <b>Class 1</b>   | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>             | 240          |  |                                 |                                   |                | 240            |  |
| <b>Wall Area, ft<sup>2</sup></b>              | 840          |  |                                 |                                   |                | 840            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>           | 240          |  |                                 |                                   |                | 240            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                      |   |                                 |                                   |                             |                              |                 |
|---|----------------------|---|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>   | 220                  | <b>Room or Area</b>   | A32                             |                                   |                             |                              |                 |
| <b>Use</b>  | RAM material storage |   |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b><br><b>Area Classification</b><br><b># Floors above Basement</b><br><b># Floors below Roof</b> |                      | Solid sealed GL device - Ni 63. Solid or powder- Ni-63, H-3, Th-nat, U-nat., HEU, LEU, DU, Th-232, MBYP. Gas GL device - Kr-85. Liquid - LEU, HEU |                                 |                                   |                             |                              |                 |
|   |                      | 3   |                                 |                                   |                             |                              |                 |
|   |                      |   |                                 |                                   |                             |                              |                 |
|   |                      |   |                                 |                                   |                             |                              |                 |
|   | <b>Total</b>         | <b>Class 1</b>  | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>   | 400                  |   |                                 |                                   |                             | 400                          |                 |
| <b>Wall Area, ft<sup>2</sup></b>  | 1800                 |   |                                 |                                   |                             | 1800                         |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 400                  |   |                                 |                                   |                             | 400                          |                 |
| <b>Components</b>   | <b>Total ft3</b>     | <b>Fraction<br/>RW</b>  | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes   |                      |   |                                 |                                   |                             |                              |                 |
| Hoods   |                      |   |                                 |                                   |                             |                              |                 |
| Benches/Tables/Desks  |                      |   |                                 |                                   |                             |                              |                 |
| Casework/Cabinets   | 100                  |   |                                 |                                   |                             |                              |                 |
| Reefers, Large Equipment  |                      |   |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware  |                      |   |                                 |                                   |                             |                              |                 |
| Hot Cells   |                      |   |                                 |                                   |                             |                              |                 |
| Storage Tanks   |                      |   |                                 |                                   |                             |                              |                 |
| Other   |                      |   |                                 |                                   |                             |                              |                 |
| Sinks   |                      |   |                                 |                                   |                             |                              |                 |
| Drains  |                      |   |                                 |                                   |                             |                              |                 |
| Ventilation Drops   |                      |   |                                 |                                   |                             |                              |                 |
| <b>Drains</b>   | <b>No.</b>           |   | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Ventilation Drops</b>  | <b>No.</b>           |   | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Person-hours</b>   | <b>Mgr</b>           | <b>Supvsr</b>   | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>   | 1                    | 2   | 4                               |                                   |                             |                              | 1               |
| <b>Equip. Release</b>   | 1                    | 2   | 4                               |                                   |                             |                              | 1               |
| <b>Pack/Load waste</b>  |                      |   |                                 |                                   |                             |                              |                 |
| <b>Decon/Remed.</b>   |                      |   |                                 |                                   |                             |                              |                 |
| <b>Final Survey</b>   | 1                    | 2   | 4                               |                                   |                             |                              | 1               |
| <b># Lab Samples to be collected</b>  |                      |   |                                 |                                   |                             |                              |                 |

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220  | <b>Room or Area</b> | A264 |  |  |  |  |
| <b>Use</b>                                    | Sample receipt room for other rooms in 220 - all low level |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | various             |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 400   |         |                        |                                      |         | 400     |
| Wall Area, ft <sup>2</sup>    | 1800  |         |                        |                                      |         | 1800    |
| Ceiling Area, ft <sup>2</sup> | 400   |         |                        |                                      |         | 400     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |   |   |      |  |  |  |  |
|---|---|---|------|--|--|--|--|
| <b>Building</b>                               | 220   | <b>Room or Area</b>                             | A218 |  |  |  |  |
| <b>Use</b>                                    | Solid Sealed - Na-22, Ra-226, Ni-63, H-3. Gas - Kr-85 |   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Sealed - Na-22, Ra-226, Ni-63, H-3. Gas - Kr-85 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |   |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 400   |         |                        |                                      |         | 400     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1800  |         |                        |                                      |         | 1800    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 400   |         |                        |                                      |         | 400     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |           |                       |
|--------------------------|-----|-----------|-----------------------|
| <b>Drains</b>            | No. | Inch Dia. | Total ft <sup>3</sup> |
| <b>Ventilation Drops</b> | No. | Inch Dia. | Total ft <sup>3</sup> |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |     |  |  |  |  |
|---|-----|---------------------|-----|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | A05 |  |  |  |  |
| <b>Use</b>                                    |     |                     |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | liquid - I -129     |     |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |     |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |     |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 368   |         |                        |                          |         | 368     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1656  |         |                        |                          |         | 1656    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 368   |         |                        |                          |         | 368     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                             |      |  |  |  |  |
|---|-----|-----------------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b>         | A251 |  |  |  |  |
| <b>Use</b>                                    |     |                             |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | solid- Ag-108m (bare metal) |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                             |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                             |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                             |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 177   |         |                        |                          |         | 177     |
| <b>Wall Area, ft<sup>2</sup></b>    | 796.5 |         |                        |                          |         | 796.5   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 177   |         |                        |                          |         | 177     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | A321 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed GAS - H-3    |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 176   |         |                        |                          |         | 176     |
| <b>Wall Area, ft<sup>2</sup></b>    | 792   |         |                        |                          |         | 792     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 176   |         |                        |                          |         | 176     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | A324 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Solid Sealed- H-3   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 528   |         |                        |                          |         | 528     |
| <b>Wall Area, ft<sup>2</sup></b>    | 2376  |         |                        |                          |         | 2376    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 528   |         |                        |                          |         | 528     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | A340 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed GAS - H-3    |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 528   |         |                        |                                      |         | 528     |
| <b>Wall Area, ft<sup>2</sup></b>    | 2376  |         |                        |                                      |         | 2376    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 528   |         |                        |                                      |         | 528     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | B118 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Solid - HEU         |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 177   |         |                        |                                      |         | 177     |
| <b>Wall Area, ft<sup>2</sup></b>    | 796.5 |         |                        |                                      |         | 796.5   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 177   |         |                        |                                      |         | 177     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |           |                       |
|--------------------------|-----|-----------|-----------------------|
| <b>Drains</b>            | No. | Inch Dia. | Total ft <sup>3</sup> |
| <b>Ventilation Drops</b> | No. | Inch Dia. | Total ft <sup>3</sup> |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | B122 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Solid - HEU         |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 177   |         |                        |                                      |         | 177     |
| <b>Wall Area, ft<sup>2</sup></b>    | 796.5 |         |                        |                                      |         | 796.5   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 177   |         |                        |                                      |         | 177     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |      |  |  |  |  |
|---|-----|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 220 | <b>Room or Area</b> | B329 |  |  |  |  |
| <b>Use</b>                                    |     |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Solid Sealed - H-3  |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 792   |         |                        |                                      |         | 792     |
| <b>Wall Area, ft<sup>2</sup></b>    | 3564  |         |                        |                                      |         | 3564    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 792   |         |                        |                                      |         | 792     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 221 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
|   |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 4568  |         |                        |                                      |         | 4568    |
| <b>Wall Area, ft<sup>2</sup></b>    | 9335  |         |                        |                                      |         | 9335    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 4568  |         |                        |                                      |         | 4568    |

  

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    | 60                    |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 350                   |    |                     |                       |                      |                 |
| Casework/Cabinets        | 1400                  |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 1000                  |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 900                   |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            | 60                    |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    | 40                    |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 9   | 18     | 36      |         |         |           | 9        |
| Equip. Release  | 9   | 18     | 36      |         |         |           | 9        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 9   | 18     | 36      |         |         |           | 9        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                                 |  |     |  |  |  |  |
|---|---------------------------------|--|-----|--|--|--|--|
| <b>Building</b>                               | 221                             | <b>Room or Area</b>  | C11 |  |  |  |  |
| <b>Use</b>                                    | Solid Sealed Fe-55, Am-241, HEU |  |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                 | Solid Sealed Fe-55, Am-241, HEU<br>SE4, Low Risk Source use only |     |  |  |  |  |
| <b>Area Classification</b>                    | 3                               |  |     |  |  |  |  |
| <b># Floors above Basement</b>                |                                 |  |     |  |  |  |  |
| <b># Floors below Roof</b>                    |                                 |  |     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 392   |         |                        |                          |         | 392     |
| <b>Wall Area, ft<sup>2</sup></b>    | 871   |         |                        |                          |         | 871     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 392   |         |                        |                          |         | 392     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |   |  |     |  |  |  |  |
|---|---|--|-----|--|--|--|--|
| <b>Building</b>                               | 221   | <b>Room or Area</b>                          | B49 |  |  |  |  |
| <b>Use</b>                                    | Multimodal microscopy (door also connects to B51) |  |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Solid Mat. Unat, powder Unat, sealed Liq. DU |     |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |     |  |  |  |  |
| <b># Floors above Basement</b>                |   |  |     |  |  |  |  |
| <b># Floors below Roof</b>                    |   |  |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 792   |         |                        |                          |         | 792     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1576  |         |                        |                          |         | 1576    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 792   |         |                        |                          |         | 792     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 300       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 20        |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |  |   |     |  |  |  |  |
|---|--|---|-----|--|--|--|--|
| <b>Building</b>                               | 221  | <b>Room or Area</b>   | B43 |  |  |  |  |
| <b>Use</b>                                    | Preparing of samples to be analyzed in B49 |   |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Solid material Unat, powder Unat, Liquid DU, (sealed Unat, DU, & Fe-55) |     |  |  |  |  |
| <b>Area Classification</b>                    | 3  |   |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |   |     |  |  |  |  |
| <b># Floors below Roof</b>                    |  |   |     |  |  |  |  |

|                                     | Total | Class 1 | % needing Remed. | ft2 needing Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------|--------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 392   |         |                  |                    |         | 392     |
| <b>Wall Area, ft<sup>2</sup></b>    | 871   |         |                  |                    |         | 871     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 392   |         |                  |                    |         | 392     |

| Components               | Total ft3 | Fraction RW | Fraction DAW | Fraction Metal | Fraction Lead | Fraction Concrete |
|--------------------------|-----------|-------------|--------------|----------------|---------------|-------------------|
| Glove Boxes              |           |             |              |                |               |                   |
| Hoods                    |           |             |              |                |               |                   |
| Benches/Tables/Desks     | 200       |             |              |                |               |                   |
| Casework/Cabinets        |           |             |              |                |               |                   |
| Reefers, Large Equipment |           |             |              |                |               |                   |
| Misc. Equip./Labware     | 100       |             |              |                |               |                   |
| Hot Cells                |           |             |              |                |               |                   |
| Storage Tanks            |           |             |              |                |               |                   |
| Other                    |           |             |              |                |               |                   |
| Sinks                    |           |             |              |                |               |                   |
| Drains                   |           |             |              |                |               |                   |
| Ventilation Drops        |           |             |              |                |               |                   |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |     |  |      |  |  |  |  |
|---|-----|--|------|--|--|--|--|
| <b>Building</b>                               | 221 | <b>Room or Area</b>                    | B367 |  |  |  |  |
| <b>Use</b>                                    |     |  |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed solid or gases, H-3, liquid H-3 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 264   |         |                        |                          |         | 264     |
| <b>Wall Area, ft<sup>2</sup></b>    | 650   |         |                        |                          |         | 650     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 264   |         |                        |                          |         | 264     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |                                       |                                       |      |  |  |  |  |
|---|---------------------------------------|---------------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 221                                   | <b>Room or Area</b>                   | B355 |  |  |  |  |
| <b>Use</b>                                    | Sealed gas Kr-85, solid sealed Am-241 |                                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                       | Sealed gas Kr-85, solid sealed Am-241 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                                     |                                       |      |  |  |  |  |
| <b># Floors above Basement</b>                |                                       |                                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                                       |                                       |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                          |         | 200     |
| <b>Wall Area, ft<sup>2</sup></b>    | 600   |         |                        |                          |         | 600     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                          |         | 200     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |  |             |  |  |  |  |
|---|-----|--|-------------|--|--|--|--|
| <b>Building</b>                               | 221 | <b>Room or Area</b>                                      | B333 & B331 |  |  |  |  |
| <b>Use</b>                                    |     | B333 same facility as B331 (cleared of RAM use)          |             |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed solid Po-210, Pd-103, & sealed liquid H-3, Am-241 |             |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |             |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |             |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |             |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 900   |         |                        |                          |         | 900     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1440  |         |                        |                          |         | 1440    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 900   |         |                        |                          |         | 900     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |     |           |     |                       |     |
|-------------------|-----|-----|-----------|-----|-----------------------|-----|
| Drains            | No. | [ ] | Inch Dia. | [ ] | Total ft <sup>3</sup> | [ ] |
| Ventilation Drops | No. | [ ] | Inch Dia. | [ ] | Total ft <sup>3</sup> | [ ] |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**      [ ]

|   |  |  |     |  |  |  |  |
|---|--|--|-----|--|--|--|--|
| <b>Building</b>                               | 221  | <b>Room or Area</b>                          | B21 |  |  |  |  |
| <b>Use</b>                                    | This room includes room B23 on previous DCE. |  |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Sealed solid or gas, Ni-63, Po-210, & Kr-85. |     |  |  |  |  |
| <b>Area Classification</b>                    | 3  |  |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |  |     |  |  |  |  |
| <b># Floors below Roof</b>                    |  |  |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 900   |         |                        |                          |         | 900     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1440  |         |                        |                          |         | 1440    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 900   |         |                        |                          |         | 900     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 60        |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 300       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 700       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            | 60        |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 20        |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |  |                     |     |  |  |  |  |
|---|--|---------------------|-----|--|--|--|--|
| <b>Building</b>                               | 221  | <b>Room or Area</b> | A58 |  |  |  |  |
| <b>Use</b>                                    | Sealed gas Kr-85; solid sealed Am-241, Eu-155, & Cs-137; Gd-158, Pu-238;<br>Liquid C-14 sealed |                     |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | Various sealed (see above)   |                     |     |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |     |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                                      |         | 200     |
| <b>Wall Area, ft<sup>2</sup></b>    | 600   |         |                        |                                      |         | 600     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                                      |         | 200     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                        |                     |     |  |  |  |  |
|---|------------------------|---------------------|-----|--|--|--|--|
| <b>Building</b>                               | 221                    | <b>Room or Area</b> | A12 |  |  |  |  |
| <b>Use</b>                                    | Absorption Measurement |                     |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                        | Solid sealed Am-241 |     |  |  |  |  |
| <b>Area Classification</b>                    | 3                      |                     |     |  |  |  |  |
| <b># Floors above Basement</b>                |                        |                     |     |  |  |  |  |
| <b># Floors below Roof</b>                    |                        |                     |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 528   |         |                        |                          |         | 528     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1287  |         |                        |                          |         | 1287    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 528   |         |                        |                          |         | 528     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |           |                       |  |
|-------------------|-----|-----------|-----------------------|--|
| Drains            | No. | Inch Dia. | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | Inch Dia. | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 223 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 4814  |         |                        |                                      |         | 4814    |
| <b>Wall Area, ft<sup>2</sup></b>    | 9484  |         |                        |                                      |         | 9484    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 4814  |         |                        |                                      |         | 4814    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    | 140                   |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 1485                  |    |                     |                       |                      |                 |
| Casework/Cabinets        | 555                   |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 2985                  |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 1360                  |    |                     |                       |                      |                 |
| Hot Cells                | 50                    |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    |                       |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 11  | 22     | 44      |         |         |           | 11       |
| Equip. Release  | 11  | 22     | 44      |         |         |           | 11       |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 11  | 22     | 44      |         |         |           | 11       |

**# Lab Samples to be collected**

1

|   |     |                         |      |  |  |  |  |
|---|-----|-------------------------|------|--|--|--|--|
| <b>Building</b>                               | 223 | <b>Room or Area</b>     | B321 |  |  |  |  |
| <b>Use</b>                                    |     |                         |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed: DU glass, Ni-63 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                         |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                         |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                         |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 395   |         |                        |                          |         | 395     |
| <b>Wall Area, ft<sup>2</sup></b>    | 874   |         |                        |                          |         | 874     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 395   |         |                        |                          |         | 395     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 500       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 600       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**



|   |     |  |      |  |  |  |  |
|---|-----|--|------|--|--|--|--|
| <b>Building</b>                               | 223 | <b>Room or Area</b>                        | B313 |  |  |  |  |
| <b>Use</b>                                    |     |  |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Sealed Unat glass, licensed for unsealed U |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 900   |         |                        |                          |         | 900     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1500  |         |                        |                          |         | 1500    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 900   |         |                        |                          |         | 900     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                         |                             |      |  |  |  |  |
|---|-------------------------|-----------------------------|------|--|--|--|--|
| <b>Building</b>                               | 223                     | <b>Room or Area</b>         | B167 |  |  |  |  |
| <b>Use</b>                                    | SEM Specimin prep. Lab. |                             |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                         | U-nat sealed solid low risk |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                       |                             |      |  |  |  |  |
| <b># Floors above Basement</b>                |                         |                             |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                         |                             |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 264   |         |                        |                          |         | 264     |
| <b>Wall Area, ft<sup>2</sup></b>    | 715   |         |                        |                          |         | 715     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 264   |         |                        |                          |         | 264     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50        |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                | 50        |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

**Note: Open doorway inside to room B165**

|   |  |                             |      |  |  |  |  |
|---|--|-----------------------------|------|--|--|--|--|
| <b>Building</b>                               | 223                                      | <b>Room or Area</b>         | B139 |  |  |  |  |
| <b>Use</b>                                    | S4700 Field Emission Electron Microscope |                             |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | U-nat sealed solid low risk |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                             |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                             |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                             |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 88    |         |                        |                          |         | 88      |
| <b>Wall Area, ft<sup>2</sup></b>    | 300   |         |                        |                          |         | 300     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 88    |         |                        |                          |         | 88      |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 15        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 5         |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 10        |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 5         |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 3 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

1

|   |     |                     |                             |  |  |  |  |
|---|-----|---------------------|-----------------------------|--|--|--|--|
| <b>Building</b>   | 223 | <b>Room or Area</b> | B133                        |  |  |  |  |
| <b>Use</b> JSM7100 FT/LV Field Emission Scanning w/ Electron Microscope |     |                     |                             |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>                           |     |                     | U-nat sealed solid low risk |  |  |  |  |
| <b>Area Classification</b>  | 3   |                     |                             |  |  |  |  |
| <b># Floors above Basement</b>  |     |                     |                             |  |  |  |  |
| <b># Floors below Roof</b>  |     |                     |                             |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 264   |         |                        |                          |         | 264     |
| <b>Wall Area, ft<sup>2</sup></b>    | 520   |         |                        |                          |         | 520     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 264   |         |                        |                          |         | 264     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 125       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                    |                     |      |  |  |  |  |
|---|--------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 223                | <b>Room or Area</b> | B125 |  |  |  |  |
| <b>Use</b>                                    | Co-57 solid sealed |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | Co-57               |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                    |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                    |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 88    |         |                        |                          |         | 88      |
| <b>Wall Area, ft<sup>2</sup></b>    | 413   |         |                        |                          |         | 413     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 88    |         |                        |                          |         | 88      |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 750       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

|                        | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                      |                     |      |  |  |  |  |
|---|----------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 223                  | <b>Room or Area</b> | A234 |  |  |  |  |
| <b>Use</b>                                    | Sealed Co-57, Sn-119 |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                      | Co-57, Sn-119       |      |  |  |  |  |
| <b>Area Classification</b>                    |                      |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                      |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                      |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 87    |         |                        |                                      |         | 87      |
| <b>Wall Area, ft<sup>2</sup></b>    | 410   |         |                        |                                      |         | 410     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 87    |         |                        |                                      |         | 87      |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |  |                                 |      |  |  |  |  |
|---|--|---------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 223  | <b>Room or Area</b>             | B151 |  |  |  |  |
| <b>Use</b>                                    | Transverse Susceptability / Magnetic Field |                                 |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Previously Sealed Co-57, Sn-119 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                                 |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                                 |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                                 |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 500   |         |                        |                          |         | 500     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1100  |         |                        |                          |         | 1100    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 500   |         |                        |                          |         | 500     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 60        |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 150       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 300       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |  |
|--------------------------|-----|---|-----------|----|-----------------------|--|
| <b>Drains</b>            | No. | 5 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 12 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                 |                     |      |  |  |  |  |
|---|-----------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 223             | <b>Room or Area</b> | A132 |  |  |  |  |
| <b>Use</b>                                    | MSEL Microscopy |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                 | Sealed Fe-55        |      |  |  |  |  |
| <b>Area Classification</b>                    | 3               |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                 |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                 |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 800   |         |                        |                          |         | 800     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1200  |         |                        |                          |         | 1200    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 800   |         |                        |                          |         | 800     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 120       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 80        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected



|   |                               |                       |      |  |  |  |  |
|---|-------------------------------|-----------------------|------|--|--|--|--|
| <b>Building</b>                               | 223                           | <b>Room or Area</b>   | A150 |  |  |  |  |
| <b>Use</b>                                    | Structure Destruction Methods |                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                               | Formerly Sealed Co-57 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                             |                       |      |  |  |  |  |
| <b># Floors above Basement</b>                |                               |                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                               |                       |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 528   |         |                        |                          |         | 528     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1011  |         |                        |                          |         | 1011    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 528   |         |                        |                          |         | 528     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 80        |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 75        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |   |           |    |                       |  |
|-------------------|-----|---|-----------|----|-----------------------|--|
| Drains            | No. | 3 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | 1 | Inch Dia. | 12 | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                   |                     |      |  |  |  |  |
|---|-------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 223               | <b>Room or Area</b> | A232 |  |  |  |  |
| <b>Use</b>                                    | X-ray Diffraction |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                   | Sealed Fe-55        |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                 |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 900   |         |                        |                          |         | 900     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1440  |         |                        |                          |         | 1440    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 900   |         |                        |                          |         | 900     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 750       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|--|
| <b>Building</b>                               | 224 | <b>Room or Area</b> |  |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1665  |         |                        |                                      |         | 1665    |
| <b>Wall Area, ft<sup>2</sup></b>    | 3300  |         |                        |                                      |         | 3300    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1665  |         |                        |                                      |         | 1665    |

| Components               | Fraction              |    |                     |                       |                      |                          |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|--------------------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | ft <sup>3</sup> Concrete |
| Glove Boxes              |                       |    |                     |                       |                      |                          |
| Hoods                    | 80                    |    |                     |                       |                      |                          |
| Benches/Tables/Desks     | 420                   |    |                     |                       |                      |                          |
| Casework/Cabinets        | 400                   |    |                     |                       |                      |                          |
| Reefers, Large Equipment | 400                   |    |                     |                       |                      |                          |
| Misc. Equip./Labware     | 175                   |    |                     |                       |                      |                          |
| Hot Cells                |                       |    |                     |                       |                      |                          |
| Storage Tanks            | 4                     |    |                     |                       |                      |                          |
| Other                    |                       |    |                     |                       |                      |                          |
| Sinks                    | 30                    |    |                     |                       |                      |                          |
| Drains                   |                       |    |                     |                       |                      |                          |
| Ventilation Drops        |                       |    |                     |                       |                      |                          |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 3   | 6      | 12      |         |         |           | 3        |
| Equip. Release  | 3   | 6      | 12      |         |         |           | 3        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 3   | 6      | 12      |         |         |           | 3        |

**# Lab Samples to be collected**

|   |                                       |                      |      |  |  |  |  |
|---|---------------------------------------|----------------------|------|--|--|--|--|
| <b>Building</b>                               | 224                                   | <b>Room or Area</b>  | A306 |  |  |  |  |
| <b>Use</b>                                    | Cellulose nano material handling lab. |                      |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                       | C-14 liquid unsealed |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                                     |                      |      |  |  |  |  |
| <b># Floors above Basement</b>                |                                       |                      |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                                       |                      |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 625   |         |                        |                          |         | 625     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1200  |         |                        |                          |         | 1200    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 625   |         |                        |                          |         | 625     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 300       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 400       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 75        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            | 4         |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 20        |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |   |   |             |  |  |  |  |
|---|---|---|-------------|--|--|--|--|
| <b>Building</b>                               | 224   | <b>Room or Area</b>   | A264 / A262 |  |  |  |  |
| <b>Use</b>                                    | Aerosol Measurement Lab, Multi-angle Smoke Characterization |   |             |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Isotope Ratio Gas Chromatography, sealed<br>Kr-85, Am-241, Po-210 |             |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |             |  |  |  |  |
| <b># Floors above Basement</b>                |   |   |             |  |  |  |  |
| <b># Floors below Roof</b>                    |   |   |             |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                          |         | 200     |
| <b>Wall Area, ft<sup>2</sup></b>    | 600   |         |                        |                          |         | 600     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                          |         | 200     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 80        |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 120       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 10        |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |  |
|--------------------------|-----|---|-----------|----|-----------------------|--|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 12 | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                                  |                               |      |  |  |  |  |
|---|----------------------------------|-------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 224                              | <b>Room or Area</b>           | B154 |  |  |  |  |
| <b>Use</b>                                    | Biosensors Fabrication & Testing |                               |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                  | Previously powder-Unat, Thnat |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                                |                               |      |  |  |  |  |
| <b># Floors above Basement</b>                |                                  |                               |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                                  |                               |      |  |  |  |  |

|                                     | Total<br>(ft <sup>3</sup> ) | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-----------------------------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 840                         |         |                        |                                      |         | 840     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1500                        |         |                        |                                      |         | 1500    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 840                         |         |                        |                                      |         | 840     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 226 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 368   |         |                        |                                      |         | 368     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1144  |         |                        |                                      |         | 1144    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 368   |         |                        |                                      |         | 368     |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    |                       |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 180                   |    |                     |                       |                      |                 |
| Casework/Cabinets        | 180                   |    |                     |                       |                      |                 |
| Reefers, Large Equipment |                       |    |                     |                       |                      |                 |
| Misc. Equip./Labware     |                       |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    |                       |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 2   | 4      | 8       |         |         |           | 2        |
| <b>Equip. Release</b>  | 2   | 4      | 8       |         |         |           | 2        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

**# Lab Samples to be collected**

|   |                                |                     |      |  |  |  |  |
|---|--------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 226                            | <b>Room or Area</b> | B325 |  |  |  |  |
| <b>Use</b>                                    | Co-57 solid sealed source only |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                | Sealed Co-57 only   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                              |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                                |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                                |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 176   |         |                        |                                      |         | 176     |
| <b>Wall Area, ft<sup>2</sup></b>    | 584   |         |                        |                                      |         | 584     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 176   |         |                        |                                      |         | 176     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |  |                                   |      |  |  |  |  |
|---|--|-----------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 226  | <b>Room or Area</b>               | B159 |  |  |  |  |
| <b>Use</b>                                    | Mixed by product solid material storage only |                                   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | solid storage only (Cs-137/Co-60) |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                                   |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                                   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                                   |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 192   |         |                        |                                      |         | 192     |
| <b>Wall Area, ft<sup>2</sup></b>    | 560   |         |                        |                                      |         | 560     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 192   |         |                        |                                      |         | 192     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 80                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 80                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |     |                     |  |  |  |  |  |
|---|-----|---------------------|--|--|--|--|--|
| <b>Building</b>                               | 227 | <b>Room or Area</b> |  |  |  |  |  |
| <b>Use</b>                                    |     |                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |  |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 7749  | 1265    |                        |                                      |         | 6484    |
| <b>Wall Area, ft<sup>2</sup></b>    | 15665 | 2996    |                        |                                      |         | 12669   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 7749  | 1265    |                        |                                      |         | 6484    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    | 750                   |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 2380                  |    |                     |                       |                      |                 |
| Casework/Cabinets        | 4980                  |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 3775                  |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 1475                  |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            | 20                    |    |                     |                       |                      |                 |
| Other                    | 12                    |    |                     |                       |                      |                 |
| Sinks                    | 129                   |    |                     |                       |                      |                 |
| Drains                   | 2.6                   |    |                     |                       |                      |                 |
| Ventilation Drops        | 13.9                  |    |                     |                       |                      |                 |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 24  | 48     | 96      |         |         |           | 24       |
| <b>Equip. Release</b>  | 36  | 72     | 144     |         |         |           | 36       |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 24  | 48     | 96      |         |         |           | 24       |

**# Lab Samples to be collected**

5

|   |   |                              |      |  |  |  |  |
|---|---|------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227   | <b>Room or Area</b>          | A126 |  |  |  |  |
| <b>Use</b>                                    | Gas Chromatography, GLD, solid sealed: Ni-63. Also solid HEU source authorized (15 Bq low risk) |                              |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Sealed Ni-63 only, solid HEU |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                              |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                              |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                              |      |  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 1200  |         |                        |                                      |         | 1200    |
| Wall Area, ft <sup>2</sup>    | 2000  |         |                        |                                      |         | 2000    |
| Ceiling Area, ft <sup>2</sup> | 1200  |         |                        |                                      |         | 1200    |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 120                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 2000                  |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 700                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            | 20                    |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 30                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                        |                     |      |  |  |  |  |
|---|------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 227                    | <b>Room or Area</b> | B147 |  |  |  |  |
| <b>Use</b>                                    | Instrument Development |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                        | Sealed H-3 only     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                      |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                        |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                        |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 375   |         |                        |                                      |         | 375     |
| <b>Wall Area, ft<sup>2</sup></b>    | 900   |         |                        |                                      |         | 900     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 375   |         |                        |                                      |         | 375     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 600                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |  |                        |      |  |  |  |  |
|---|--|------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227  | <b>Room or Area</b>    | B326 |  |  |  |  |
| <b>Use</b>                                    | Office, U-233 liquid source found in room in 2004, so quarterly surveys performed until 2006, then decommissioned. |                        |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Formerly unsealed U233 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                        |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                        |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                        |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 400   |         |                        |                          |         | 400     |
| <b>Wall Area, ft<sup>2</sup></b>    | 800   |         |                        |                          |         | 800     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 400   |         |                        |                          |         | 400     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 400       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 227  | <b>Room or Area</b> | B141 |  |  |  |  |
| <b>Use</b>                                    | Sample Prep., Radioactive Waste Storage, Solid: C-14 Liquid: C-14, H-3 |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | H-3, C-14  |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                                      |         | 200     |
| <b>Wall Area, ft<sup>2</sup></b>    | 720   |         |                        |                                      |         | 720     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                                      |         | 200     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 100                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 80                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 150                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 80                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   | 0.1                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.1 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |   |   |                                 |                                   |                             |                              |                 |
|---|---|---|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>                               | 227   | <b>Room or Area</b>   | B143                            |                                   |                             |                              |                 |
| <b>Use</b>                                    | Analytical Instrumentation, Solid sealed: Ba-133, Po-210. Liq. LSC cal sources: C-14. H-3 |   |                                 |                                   |                             |                              |                 |
|   |   | Solid sealed: Ba-133, Po-210. Liq. LSC cal sources: C-14. H-3 |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b> |   |   |                                 |                                   |                             |                              |                 |
| <b>Area Classification</b>                    | 3   |   |                                 |                                   |                             |                              |                 |
| <b># Floors above Basement</b>                |   |   |                                 |                                   |                             |                              |                 |
| <b># Floors below Roof</b>                    |   |   |                                 |                                   |                             |                              |                 |
|   | <b>Total</b>  | <b>Class 1</b>  | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| Floor Area, ft <sup>2</sup>                   | 150   |   |                                 |                                   |                             | 150                          |                 |
| Wall Area, ft <sup>2</sup>                    | 600   |   |                                 |                                   |                             | 600                          |                 |
| Ceiling Area, ft <sup>2</sup>                 | 150   |   |                                 |                                   |                             | 150                          |                 |
| <b>Components</b>                             | <b>Total ft3</b>  | <b>Fraction<br/>RW</b>  | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes                                   |   |   |                                 |                                   |                             |                              |                 |
| Hoods   |   |   |                                 |                                   |                             |                              |                 |
| Benches/Tables/Desks                          | 80  |   |                                 |                                   |                             |                              |                 |
| Casework/Cabinets                             | 80  |   |                                 |                                   |                             |                              |                 |
| Reefers, Large Equipment                      | 200   |   |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware                          | 20  |   |                                 |                                   |                             |                              |                 |
| Hot Cells                                     |   |   |                                 |                                   |                             |                              |                 |
| Storage Tanks                                 |   |   |                                 |                                   |                             |                              |                 |
| Other   |   |   |                                 |                                   |                             |                              |                 |
| Sinks   | 20  |   |                                 |                                   |                             |                              |                 |
| Drains  |   |   |                                 |                                   |                             |                              |                 |
| Ventilation Drops                             |   |   |                                 |                                   |                             |                              |                 |
| <b>Drains</b>                                 | <b>No.</b>  |   | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Ventilation Drops</b>                      | <b>No.</b>  |   | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Person-hours</b>                           | <b>Mgr</b>  | <b>Supvsr</b>   | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| Characterize                                  | 1   | 2   | 4                               |                                   |                             |                              | 1               |
| Equip. Release                                | 1   | 2   | 4                               |                                   |                             |                              | 1               |
| Pack/Load waste                               |   |   |                                 |                                   |                             |                              |                 |
| Decon/Remed.                                  |   |   |                                 |                                   |                             |                              |                 |
| Final Survey                                  | 1   | 2   | 4                               |                                   |                             |                              | 1               |
| <b># Lab Samples to be collected</b>          |   |   |                                 |                                   |                             |                              |                 |

|   |  |  |      |  |  |  |  |
|---|--|--|------|--|--|--|--|
| <b>Building</b>                               | 227  | <b>Room or Area</b>  | B243 |  |  |  |  |
| <b>Use</b>                                    | Engineered Soft Nanomaterials, Radioactive Waste Storage |  |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Solid- H-3. Liquid Sealed: P-32. Liquid: C-14, P-32, H-3, S-35 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |  |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1  |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |  |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1200  |         |                        |                                      |         | 1200    |
| <b>Wall Area, ft<sup>2</sup></b>    | 1600  |         |                        |                                      |         | 1600    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1200  |         |                        |                                      |         | 1200    |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 80                    | 0.1            |                 | 1                 |                  |                      |
| Benches/Tables/Desks     | 300                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 250                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 600                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 300                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   | 0.1                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.1 |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 6 | Total ft <sup>3</sup> |     |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**



|   |                             |                     |      |  |  |  |  |
|---|-----------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 227                         | <b>Room or Area</b> | B333 |  |  |  |  |
| <b>Use</b>                                    | Thermo Gravimetric Analysis |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                             | U-233 liquid        |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                           |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                             |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                             |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 288   |         |                        |                                      |         | 288     |
| <b>Wall Area, ft<sup>2</sup></b>    | 900   |         |                        |                                      |         | 900     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 288   |         |                        |                                      |         | 288     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 100                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 75                    |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |  |                          |      |  |  |  |  |
|---|--|--------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227  | <b>Room or Area</b>      | A316 |  |  |  |  |
| <b>Use</b>                                    | Spectrophotometric certifications, previously H-3 solid sealed |                          |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Formerly sealed H-3 only |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                          |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                          |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                          |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1200  |         |                        |                                      |         | 1200    |
| <b>Wall Area, ft<sup>2</sup></b>    | 1800  |         |                        |                                      |         | 1800    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1200  |         |                        |                                      |         | 1200    |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 500                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 400                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                              |                               |      |  |  |  |  |
|---|------------------------------|-------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227                          | <b>Room or Area</b>           | B353 |  |  |  |  |
| <b>Use</b>                                    | Inorganic Chemical Metrology |                               |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              | Solid: Pb-210. Liquid: Pb-210 |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                            |                               |      |  |  |  |  |
| <b># Floors above Basement</b>                | 3                            |                               |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                            |                               |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 559   | 559     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 899   | 899     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 559   | 559     |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 50                    |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 300                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 100                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 7                     |                |                 |                   |                  |                      |
| Sinks                    | 4                     |                |                 |                   |                  |                      |
| Drains                   | 0.9                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 3 | Total ft <sup>3</sup> | 0.9 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

**Note: Elevated activity found on hood, countertop, equipment & floor during 2023 scoping survey**

|   |                             |   |      |  |  |  |  |
|---|-----------------------------|---|------|--|--|--|--|
| <b>Building</b>                               | 227                         | <b>Room or Area</b>                               | B345 |  |  |  |  |
| <b>Use</b>                                    | High Resolution Mass. Spec. |   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                             | Solid: Pb-210, liquid: I-129 authorized not used. |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                           |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |                             |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                             |   |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 288   | 288     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 900   | 900     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 288   | 288     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 100       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 120       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 10        |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |                              |        |  |  |  |  |
|---|-----|------------------------------|--------|--|--|--|--|
| <b>Building</b>                                     | 227 | <b>Room or Area</b>          | B343-1 |  |  |  |  |
| <b>Use</b> Clean Room, liquid: I-129. Solid: Pb-210 |     |                              |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>       |     | liquid: I-129. Solid: Pb-210 |        |  |  |  |  |
| <b>Area Classification</b>                          | 3   |                              |        |  |  |  |  |
| <b># Floors above Basement</b>                      | 2   |                              |        |  |  |  |  |
| <b># Floors below Roof</b>                          | 2   |                              |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 150   |         |                        |                          |         | 150     |
| <b>Wall Area, ft<sup>2</sup></b>    | 450   |         |                        |                          |         | 450     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 150   |         |                        |                          |         | 150     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 40        |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 25        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 5         |                |                 |                   |                  |                      |
| Sinks                    | 5         |                |                 |                   |                  |                      |
| Drains                   | 0.3       |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |   |           |   |                       |     |
|-------------------|-----|---|-----------|---|-----------------------|-----|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.3 |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

Note: detectable activity slightly above background in hood from 2023 scoping survey.

|   |                       |                           |      |  |  |  |  |
|---|-----------------------|---------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227                   | <b>Room or Area</b>       | B225 |  |  |  |  |
| <b>Use</b>                                    | Quantitative Genetics |                           |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                       | P-32 only, short 1/2 life |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                     |                           |      |  |  |  |  |
| <b># Floors above Basement</b>                | 2                     |                           |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                     |                           |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 564   |         |                        |                                      |         | 564     |
| <b>Wall Area, ft<sup>2</sup></b>    | 903   |         |                        |                                      |         | 903     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 564   |         |                        |                                      |         | 564     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 60                    |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 600                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 150                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 10                    |                |                 |                   |                  |                      |
| Drains                   | 0.6                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 6.9                   |                |                 |                   |                  |                      |

|                          |     |   |           |    |                       |     |
|--------------------------|-----|---|-----------|----|-----------------------|-----|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2  | Total ft <sup>3</sup> | 0.6 |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 10 | Total ft <sup>3</sup> | 6.9 |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                    |                             |      |  |  |  |  |
|---|--------------------|-----------------------------|------|--|--|--|--|
| <b>Building</b>                               | 227                | <b>Room or Area</b>         | A230 |  |  |  |  |
| <b>Use</b>                                    | Antibody Metrology |                             |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | U-nat liquid Uranyl Nitrate |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                  |                             |      |  |  |  |  |
| <b># Floors above Basement</b>                |                    |                             |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                    |                             |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 273   |         |                        |                                      |         | 273     |
| <b>Wall Area, ft<sup>2</sup></b>    | 676   |         |                        |                                      |         | 676     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 273   |         |                        |                                      |         | 273     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 250                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 150                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 227  | <b>Room or Area</b> | B151 |  |  |  |  |
| <b>Use</b>                                    | Liquid Sealed: H-3. Solid Sealed: H-3, DU. Gas sealed: H-3 |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | DU, H-3  |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 484   |         |                        |                                      |         | 484     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1320  |         |                        |                                      |         | 1320    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 484   |         |                        |                                      |         | 484     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 227   | <b>Room or Area</b> | A334 |  |  |  |  |
| <b>Use</b>                                    | Standards storage lab., Solid sealed: Pb-210. Solid: Pb-210, U-238, HEU, Th-nat. Powder - U-nat. Liquid: HEU,Pb-210,U-233, Th-230 |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | various (see above) |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 2   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2   |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 418   | 418     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1197  | 1197    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 418   | 418     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 100       | 0.05           | 0.2             | 0.8               |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 700       | 0.005          | 1               |                   |                  |                      |
| Reefers, Large Equipment | 500       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 10        | 0.1            |                 | 1                 |                  |                      |
| Drains                   | 0.6       |                |                 |                   |                  |                      |
| Ventilation Drops        | 6.9       |                |                 |                   |                  |                      |

  

|                          |            |   |                  |    |                             |     |
|--------------------------|------------|---|------------------|----|-----------------------------|-----|
| <b>Drains</b>            | <b>No.</b> | 2 | <b>Inch Dia.</b> | 2  | <b>Total ft<sup>3</sup></b> | 0.6 |
| <b>Ventilation Drops</b> | <b>No.</b> | 1 | <b>Inch Dia.</b> | 10 | <b>Total ft<sup>3</sup></b> | 6.9 |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

**# Lab Samples to be collected** 1

Note: Elevated activity found in hood during 2023 scoping survey.

|   |     |                     |                |  |  |  |  |
|---|-----|---------------------|----------------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b> | A Wing Roll-up |  |  |  |  |
| <b>Use</b>                                    |     |                     |                |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |                |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |                |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |                |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |                |  |  |  |  |

|                                     | Total | Class 1  | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|----------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 7477  | 5643     |                        | 169.6                                | 350     | 1484    |
| <b>Wall Area, ft<sup>2</sup></b>    | 15650 | 10897.68 |                        |                                      | 800     | 3953    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 7477  | 5643     |                        |                                      | 350     | 1484    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup><br>Concrete |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead |                             |
| Glove Boxes              | 75                    |    | 25                  |                       |                      |                             |
| Hoods                    |                       |    |                     |                       |                      |                             |
| Benches/Tables/Desks     | 1166                  |    |                     |                       |                      |                             |
| Casework/Cabinets        | 1370                  |    |                     |                       |                      |                             |
| Reefers, Large Equipment | 14080                 |    |                     |                       |                      |                             |
| Misc. Equip./Labware     | 1420                  |    |                     |                       |                      |                             |
| Hot Cells                |                       |    |                     |                       |                      |                             |
| Storage Tanks            |                       |    |                     |                       |                      |                             |
| Other                    | 2210                  |    |                     |                       |                      |                             |
| Sinks                    | 22                    |    |                     |                       |                      |                             |
| Drains                   |                       |    |                     |                       |                      |                             |
| Ventilation Drops        |                       |    |                     |                       |                      |                             |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 42  | 84     | 168     |         |         |           | 42       |
| <b>Equip. Release</b>  | 52  | 104    | 208     |         |         |           | 52       |
| <b>Pack/Load waste</b> | 2.5 | 5      |         | 2       | 8       | 8         | 2.5      |
| <b>Decon/Remed.</b>    | 1   | 2      |         |         | 4       | 4         | 1        |
| <b>Final Survey</b>    | 30  | 60     | 120     |         |         |           | 30       |

|                                      |    |
|--------------------------------------|----|
| <b># Lab Samples to be collected</b> | 10 |
|--------------------------------------|----|

|  |     |                       |      |  |  |  |  |
|--|-----|-----------------------|------|--|--|--|--|
| <b>Building</b>  | 245 | <b>Room or Area</b>   | A004 |  |  |  |  |
| <b>Use</b> MIRF, High-energy Electron Beam Irradiator. |     |                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>          |     | I-125, Cs-137, Am-241 |      |  |  |  |  |
| <b>Area Classification</b>                             | 3   |                       |      |  |  |  |  |
| <b># Floors above Basement</b>                         |     |                       |      |  |  |  |  |
| <b># Floors below Roof</b>                             |     |                       |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 384   |         |                        |                                      |         | 384     |
| <b>Wall Area, ft<sup>2</sup></b>    | 901   |         |                        |                                      |         | 901     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 384   |         |                        |                                      |         | 384     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |  |
|--------------------------------------|--|
| <b># Lab Samples to be collected</b> |  |
|--------------------------------------|--|

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | A005 |  |  |  |  |
| <b>Use</b>                                    | MIRF, High-energy Electron Beam Irradiator. |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | TRU, U, Beta        |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 6   |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1536  | 1536    | 0.1                    | 153.6                                |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 3606  | 3606    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1536  | 1536    |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 180                   | 0.1            | 0.2             | 0.8               |                  |                      |
| Casework/Cabinets        | 250                   | 0.1            | 0.2             | 0.8               |                  |                      |
| Reefers, Large Equipment | 6000                  | 0.2            | 0.05            | 0.95              |                  |                      |
| Misc. Equip./Labware     | 400                   | 0.2            | 0.2             | 0.8               |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 2200                  | 0.1            |                 |                   |                  | 1                    |
| Sinks                    | 20                    | 0.1            |                 | 1                 |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 1   | 2      |         | 2       | 2       | 2         | 1        |
| <b>Decon/Remed.</b>    | 1   | 2      |         |         | 4       | 4         | 1        |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | A006 |  |  |  |  |
| <b>Use</b>                                    | MIRF Set-Up Lab, Staging area for MIRF experiments. Note: This is same room as A006-1. Sealed Sr-90 |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Sealed Sr-90        |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 3   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1100  |         |                        |                          |         | 1100    |
| <b>Wall Area, ft<sup>2</sup></b>    | 3051  |         |                        |                          |         | 3051    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1100  |         |                        |                          |         | 1100    |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 10        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 70        |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 2         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                   |                     |      |  |  |  |  |
|---|-------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245               | <b>Room or Area</b> | A010 |  |  |  |  |
| <b>Use</b>                                    | RAM Waste Storage |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                   | Beta-gamma, Sr-90   |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                 |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                 |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1860  | 1860    |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 3900  | 3900    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1860  | 1860    |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              | 50        |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 216       |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 3000      |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> | 0.5 | 1      |         |         | 2       | 2         | 0.5      |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

**# Lab Samples to be collected**

|   |                              |                      |      |  |  |  |  |
|---|------------------------------|----------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                          | <b>Room or Area</b>  | A012 |  |  |  |  |
| <b>Use</b>                                    | Radioactive Material Storage |                      |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              | Cs-137, Ra-Be, I-125 |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                            |                      |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                            |                      |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                            |                      |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 160   | 160     | 0.1                    | 16                                   |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 560   | 560     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 160   | 160     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              | 25                    | 1              |                 | 1                 |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |         |                     |      |  |  |  |  |
|---|---------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245     | <b>Room or Area</b> | A013 |  |  |  |  |
| <b>Use</b>                                    | Storage |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |         | various             |      |  |  |  |  |
| <b>Area Classification</b>                    | 1       |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1       |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2       |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 317   | 317     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 819   | 819     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 317   | 317     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |         |                     |      |  |  |  |  |
|---|---------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245     | <b>Room or Area</b> | A014 |  |  |  |  |
| <b>Use</b>                                    | Storage |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |         | various             |      |  |  |  |  |
| <b>Area Classification</b>                    | 1       |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |         |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2       |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 38    | 38      |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 99    | 99      |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 38    | 38      |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       | 0.5            | 0.9             | 0.1               |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 50                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

**# Lab Samples to be collected**

1

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | A018 |  |  |  |  |
| <b>Use</b>                                    | Californium, 2.5 MeV, and 14 MeV Neutron Irradiations<br>Californium Neutron Irradiation Facility (CNIF) |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | U, Sr-90   |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 1  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1732  | 1732    |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1914  | 1914    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1732  | 1732    |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 500       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 800       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 5000      |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 1000      |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 16  | 32     | 64      |         |         |           | 16       |
| <b>Equip. Release</b>  | 10  | 20     | 40      |         |         |           | 10       |
| <b>Pack/Load waste</b> | 1   | 2      |         |         | 4       | 4         | 1        |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 8   | 16     | 32      |         |         |           | 8        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                    |                     |                   |  |  |  |  |
|---|--------------------|---------------------|-------------------|--|--|--|--|
| <b>Building</b>                               | 245                | <b>Room or Area</b> | A10 East Basement |  |  |  |  |
| <b>Use</b>                                    | Ionizing Dosimetry |                     |                   |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    |                     | Sealed Sources    |  |  |  |  |
| <b>Area Classification</b>                    | 2                  |                     |                   |  |  |  |  |
| <b># Floors above Basement</b>                | 3                  |                     |                   |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                  |                     |                   |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 350   |         |                        |                                      | 350     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 800   |         |                        |                                      | 800     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 350   |         |                        |                                      | 350     |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 10                    |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 80                    |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 20                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 10                    |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |                     |                              |  |  |  |  |
|---|-----|---------------------|------------------------------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b> | B Wing - Below Grade Roll-up |  |  |  |  |
| <b>Use</b>                                    |     |                     |                              |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |                              |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |                              |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |                              |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |                              |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 12805 | 4861    |                        | 33.6                                 |         | 8384    |
| <b>Wall Area, ft<sup>2</sup></b>    | 42493 | 13492   |                        | 67.2                                 |         | 30301   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 13585 | 4861    |                        |                                      |         | 9164    |

  

| Components               | Total ft <sup>3</sup> | Fraction |                     |                       |                      | Concrete |
|--------------------------|-----------------------|----------|---------------------|-----------------------|----------------------|----------|
|                          |                       | RW       | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead |          |
| Glove Boxes              | 90                    |          | 31.5                | 13.5                  |                      |          |
| Hoods                    | 410                   |          |                     | 215                   |                      |          |
| Benches/Tables/Desks     | 2425                  |          | 2.5                 | 7.5                   |                      |          |
| Casework/Cabinets        | 4007                  |          | 24.6                | 40.4                  |                      |          |
| Reefers, Large Equipment | 4440                  |          |                     |                       |                      |          |
| Misc. Equip./Labware     | 2405                  |          | 33                  | 7                     |                      |          |
| Hot Cells                |                       |          |                     |                       |                      |          |
| Storage Tanks            | 1300                  |          | 260                 |                       |                      |          |
| Other                    | 1952                  |          |                     |                       | 2.4                  |          |
| Sinks                    | 96                    |          |                     | 25.2                  |                      |          |
| Drains                   | 1.9                   |          | 0.007               | 0.007                 |                      |          |
| Ventilation Drops        | 299.2                 |          | 6.25                | 6.25                  |                      |          |

  

|               |                          |     |           |    |                       |     |
|---------------|--------------------------|-----|-----------|----|-----------------------|-----|
| <b>Drains</b> | No.                      | 19  | Inch Dia. |    | Total ft <sup>3</sup> | 2.2 |
|               | <b>Ventilation Drops</b> | No. |           | 17 |                       |     |

  

| Person-hours    | Mgr   | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-------|--------|---------|---------|---------|-----------|----------|
| Characterize    | 77    | 154    | 308     |         |         |           | 77       |
| Equip. Release  | 100   | 200    | 400     | 4       | 9       | 9         | 100      |
| Pack/Load waste | 12.75 | 25.5   | 42      | 34      | 53      | 53        | 12.75    |
| Decon/Remed.    | 16.5  | 33     | 66      | 18      | 70      | 70        | 16.5     |
| Final Survey    | 67.5  | 135    | 270     |         |         |           | 67.5     |

  

|                                      |    |
|--------------------------------------|----|
| <b># Lab Samples to be collected</b> | 16 |
|--------------------------------------|----|

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | B002 |  |  |  |  |
| <b>Use</b>                                    | He3 Cell Lab for He3 cell preparation and optical pumping<br>This lab was Decommissioned by ATL (previously B006, B008. Then rebuilt as B002) |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 3   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1000  |         |                        |                          |         | 1000    |
| <b>Wall Area, ft<sup>2</sup></b>    | 3400  |         |                        |                          |         | 3400    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1000  |         |                        |                          |         | 1000    |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 150       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 130       |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.3 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | B003 |  |  |  |  |
| <b>Use</b>                                    | Beta Particle Calibration Lab (inside old B002) |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Beta                |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 3   |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 220   |         |                        |                                      |         | 220     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  |         |                        |                                      |         | 1000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 220   |         |                        |                                      |         | 220     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|  |     |                     |           |  |  |  |  |
|--|-----|---------------------|-----------|--|--|--|--|
| <b>Building</b>  | 245 | <b>Room or Area</b> | B009      |  |  |  |  |
| Fabrication Setup Lab, room bare (guttered)<br>Former use of Sr-90, Pm-147, Tl-204, DU, U-238, Cs-137, Ru-106, & P-32.<br><b>Use</b> (Note: 420 kV XRM is located in 245/B013) |     |                     |           |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>  |     |                     | see above |  |  |  |  |
| <b>Area Classification</b>   | 3   |                     |           |  |  |  |  |
| <b># Floors above Basement</b>   |     |                     |           |  |  |  |  |
| <b># Floors below Roof</b>   | 3   |                     |           |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 220   |         |                        |                                      |         | 220     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  |         |                        |                                      |         | 1000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 220   |         |                        |                                      |         | 220     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                   |                           |                       |  |  |  |  |
|---|-------------------|---------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245               | <b>Room or Area</b>       | B0014 (formerly B014) |  |  |  |  |
| <b>Use</b>                                    | Gamma Calibration |                           |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                   | Sealed Cs-137 source only |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                 |                           |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                   |                           |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                   |                           |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 800   |         |                        |                                      |         | 800     |
| <b>Wall Area, ft<sup>2</sup></b>    | 3060  |         |                        |                                      |         | 3060    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 800   |         |                        |                                      |         | 800     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50                    |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 40                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 207                   |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | 2 | Inch Dia. | 4 | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste | 0.5 | 1      |         |         | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 0.5 | 1      | 2       |         |         |           | 0.5      |

  

**# Lab Samples to be collected**

**Note: Other waste includes 200 ft<sup>3</sup> concrete & 7 ft<sup>3</sup> lead)**



|   |  |  |                     |  |  |  |  |
|---|--|--|---------------------|--|--|--|--|
| <b>Building</b>                               | 245                                      | <b>Room or Area</b>                        | B015 (formerly B11) |  |  |  |  |
| <b>Use</b>                                    | TES Lab (formerly gamma ray measurement) |  |                     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Very low RAM, <10 Bq foil wrapped sources) |                     |  |  |  |  |
| <b>Area Classification</b>                    | 3  |  |                     |  |  |  |  |
| <b># Floors above Basement</b>                |  |  |                     |  |  |  |  |
| <b># Floors below Roof</b>                    |  |  |                     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 420   |         |                        |                                      |         | 420     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1200  |         |                        |                                      |         | 1200    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 420   |         |                        |                                      |         | 420     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 140                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 195                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 325                   |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

**NOTE: Lead lined walls 1/4" thick. Lead brick shield 5ft3 in room**

|   |                          |   |                     |  |  |  |  |
|---|--------------------------|---|---------------------|--|--|--|--|
| <b>Building</b>                               | 245                      | <b>Room or Area</b>                     | B017( formerly B15) |  |  |  |  |
| <b>Use</b>                                    | High Level Counting Room |   |                     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                          | currently empty formerly sealed sources |                     |  |  |  |  |
| <b>Area Classification</b>                    | 3                        |   |                     |  |  |  |  |
| <b># Floors above Basement</b>                |                          |   |                     |  |  |  |  |
| <b># Floors below Roof</b>                    |                          |   |                     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 260   |         |                        |                          |         | 500     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  |         |                        |                          |         | 2000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 260   |         |                        |                          |         | 500     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                              |                     |                       |  |  |  |  |
|---|------------------------------|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                          | <b>Room or Area</b> | B0019 (formerly B019) |  |  |  |  |
| <b>Use</b>                                    | Horizontal Beam Control Area |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                              | Sealed Cs-137       |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                            |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                              |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                              |                     |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 240   |         |                        |                                      |         | 240     |
| <b>Wall Area, ft<sup>2</sup></b>    | 806   |         |                        |                                      |         | 806     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 240   |         |                        |                                      |         | 240     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 100                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 40                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste | 0.5 | 1      |         |         | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 0.5 | 1      | 2       |         |         |           | 0.5      |

  

**# Lab Samples to be collected**

|   |                |                             |                       |  |  |  |  |
|---|----------------|-----------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245            | <b>Room or Area</b>         | B0021 (formerly B021) |  |  |  |  |
| <b>Use</b>                                    | Sealed sources |                             |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                | Sealed Co-60, Cs-137, Sr-90 |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3              |                             |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                |                             |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                |                             |                       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 240   |         |                        |                                      |         | 240     |
| <b>Wall Area, ft<sup>2</sup></b>    | 806   |         |                        |                                      |         | 806     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 240   |         |                        |                                      |         | 240     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 40                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 100                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 406                   |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

**Note:** Other waste 400ft<sup>3</sup> 1/4" thick lead wall, 1ft<sup>3</sup> lead bricks, 5ft<sup>3</sup> misc.

|   |           |                             |                       |  |  |  |  |
|---|-----------|-----------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245       | <b>Room or Area</b>         | B0023 (formerly B023) |  |  |  |  |
| <b>Use</b>                                    | Setup Lab |                             |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |           | TRU, Beta-gamma, low energy |                       |  |  |  |  |
| <b>Area Classification</b>                    | 1         |                             |                       |  |  |  |  |
| <b># Floors above Basement</b>                |           |                             |                       |  |  |  |  |
| <b># Floors below Roof</b>                    | 2         |                             |                       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 220   | 220     | 0.1                    | 22                       |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  | 1000    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 220   | 220     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       | 0.05           | 0.25            | 0.75              |                  |                      |
| Casework/Cabinets        | 80        | 0.05           |                 | 1                 |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 300       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other (lead bricks)      | 4         | 0.1            |                 |                   | 1                |                      |
| Sinks                    | 2         | 0.1            |                 | 1                 |                  |                      |
| Drains                   |           | 0.1            |                 | 1                 |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 8   | 16     | 32      |         |         |           | 8        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

**Note: Other waste includes 190 ft3 concrete & 10 ft3 lead**

|   |                   |                           |                       |  |  |  |  |
|---|-------------------|---------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245               | <b>Room or Area</b>       | B0014 (formerly B014) |  |  |  |  |
| <b>Use</b>                                    | Gamma Calibration |                           |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                   | Sealed Cs-137 source only |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                 |                           |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                   |                           |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                   |                           |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 800   |         |                        |                                      |         | 800     |
| <b>Wall Area, ft<sup>2</sup></b>    | 3060  |         |                        |                                      |         | 3060    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 800   |         |                        |                                      |         | 800     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50                    |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 40                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 207                   |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | 2 | Inch Dia. | 4 | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste | 0.5 | 1      |         |         | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 0.5 | 1      | 2       |         |         |           | 0.5      |

  

**# Lab Samples to be collected**

**Note: Other waste includes 200 ft<sup>3</sup> concrete & 7 ft<sup>3</sup> lead)**

|   |                             |                                     |                       |  |  |  |  |
|---|-----------------------------|-------------------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                         | <b>Room or Area</b>                 | B0015 (formerly B015) |  |  |  |  |
| <b>Use</b>                                    | Horizontal Beam calibration |                                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                             | Sealed Co-60&Cs-137, unsealed Co-57 |                       |  |  |  |  |
| <b>Area Classification</b>                    | 1                           |                                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                             |                                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                             |                                     |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 420   | 420     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1204  | 1204    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 420   | 420     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 50        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 325       |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      | 4       | 8       | 8         | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

Note: Other waste includes: 250 ft3 concrete, 5ft3 lead brick, 70ft3 of 1/4" lead wall)

|   |                  |                        |                                 |                                   |                             |                              |                 |
|---|------------------|------------------------|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>   | 245              | <b>Room or Area</b>    | B025 (prev. was room B25)       |                                   |                             |                              |                 |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> X Ray Spectrometry Swing Space<br/> Measurement of low-energy photon emitting sources using Si (Li) detectors </div> <b>Use</b> This room was previously B25, RSD surveyed, then recommissioned for Rad. |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b>   |                  |                        | Sealed sources mainly           |                                   |                             |                              |                 |
| <b>Area Classification</b>  | 3                |                        |                                 |                                   |                             |                              |                 |
| <b># Floors above Basement</b>  | 1                |                        |                                 |                                   |                             |                              |                 |
| <b># Floors below Roof</b>  | 3                |                        |                                 |                                   |                             |                              |                 |
|   | <b>Total</b>     | <b>Class 1</b>         | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>   | 660              |                        |                                 |                                   |                             | 660                          |                 |
| <b>Wall Area, ft<sup>2</sup></b>  | 3000             |                        |                                 |                                   |                             | 3000                         |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 660              |                        |                                 |                                   |                             | 660                          |                 |
| <b>Components</b>   | <b>Total ft3</b> | <b>Fraction<br/>RW</b> | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes   |                  |                        |                                 |                                   |                             |                              |                 |
| Hoods   |                  |                        |                                 |                                   |                             |                              |                 |
| Benches/Tables/Desks  | 100              |                        |                                 |                                   |                             |                              |                 |
| Casework/Cabinets   | 50               |                        |                                 |                                   |                             |                              |                 |
| Reefers, Large Equipment  | 200              |                        |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware  | 200              |                        |                                 |                                   |                             |                              |                 |
| Hot Cells   |                  |                        |                                 |                                   |                             |                              |                 |
| Storage Tanks   |                  |                        |                                 |                                   |                             |                              |                 |
| Other (Lead glass shields)  | 5                |                        |                                 |                                   |                             |                              |                 |
| Sinks   | 4                |                        |                                 |                                   |                             |                              |                 |
| Drains  | 0.6              |                        |                                 |                                   |                             |                              |                 |
| Ventilation Drops   |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Drains</b>   | <b>No.</b>       | 4                      | <b>Inch Dia.</b>                | 2                                 | <b>Total ft<sup>3</sup></b> | 0.6                          |                 |
| <b>Ventilation Drops</b>  | <b>No.</b>       |                        | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Person-hours</b>   | <b>Mgr</b>       | <b>Supvsr</b>          | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>   | 1                | 2                      | 4                               |                                   |                             |                              | 1               |
| <b>Equip. Release</b>   | 1                | 2                      | 4                               |                                   |                             |                              | 1               |
| <b>Pack/Load waste</b>  |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Decon/Remed.</b>   |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Final Survey</b>   | 1                | 2                      | 4                               |                                   |                             |                              | 1               |
| <b># Lab Samples to be collected</b>  |                  |                        |                                 |                                   |                             |                              |                 |



|   |   |                     |                       |  |  |  |  |
|---|---|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | B0029 (formerly B029) |  |  |  |  |
| <b>Use</b>                                    | Accelerator Support, x-ray generating device on mezzanine |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | Sealed sources      |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                | 1   |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    | 1   |                     |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 400   |         |                        |                                      |         | 400     |
| <b>Wall Area, ft<sup>2</sup></b>    | 2000  |         |                        |                                      |         | 2000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 400   |         |                        |                                      |         | 400     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 15                    |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 300                   |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 75                    |                |                 |                   |                  |                      |
| Sinks                    | 5                     |                |                 |                   |                  |                      |
| Drains                   | 0.1                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 22.5                  |                |                 |                   |                  |                      |

  

|                   |     |   |           |    |                       |      |
|-------------------|-----|---|-----------|----|-----------------------|------|
| Drains            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> | 0.1  |
| Ventilation Drops | No. | 2 | Inch Dia. | 18 | Total ft <sup>3</sup> | 22.5 |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 3   | 6      | 12      |         |         |           | 3        |
| Equip. Release  | 2   | 4      | 8       |         |         |           | 2        |
| Pack/Load waste | 1   | 2      |         |         | 2       | 2         | 1        |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                                 |                     |                       |  |  |  |  |
|---|---------------------------------|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                             | <b>Room or Area</b> | B0034 (formerly B034) |  |  |  |  |
| <b>Use</b>                                    | C0-60 vertical calibration room |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                 | C0-60 sealed source |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                               |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                                 |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    | 3                               |                     |                       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 266   |         |                        |                                      |         | 266     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1500  |         |                        |                                      |         | 1500    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 266   |         |                        |                                      |         | 266     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 50                    |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

**Note:** Other waste 400ft<sup>3</sup> 1/4" thick lead wall, 1ft<sup>3</sup> lead bricks, 5ft<sup>3</sup> misc.

|   |                           |                     |                       |  |  |  |  |
|---|---------------------------|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                       | <b>Room or Area</b> | B0035 (formerly B035) |  |  |  |  |
| <b>Use</b>                                    | Vertical beam calibration |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                           | None                |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                         |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |                           |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |                           |                     |                       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 300   |         |                        |                                      |         | 300     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  |         |                        |                                      |         | 1000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 300   |         |                        |                                      |         | 300     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 80                    |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 100                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 80                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                            |                              |                       |  |  |  |  |
|---|----------------------------|------------------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                        | <b>Room or Area</b>          | B0036 (formerly B036) |  |  |  |  |
| <b>Use</b>                                    | Co/Cs Vertical Calibration |                              |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                            | Co-60, Cs-137 sealed sources |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3                          |                              |                       |  |  |  |  |
| <b># Floors above Basement</b>                | 1                          |                              |                       |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                          |                              |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 266   |         |                        |                                      |         | 266     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1360  |         |                        |                                      |         | 1360    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 266   |         |                        |                                      |         | 266     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 10                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 16                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 1000                  |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 15                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 200                   |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |           |                       |  |
|-------------------|-----|-----------|-----------------------|--|
| Drains            | No. | Inch Dia. | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | Inch Dia. | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste | 0.5 | 1      |         | 2       | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |  |                     |                  |  |  |  |
|---|--|---------------------|------------------|--|--|--|
| <b>Building</b>                               |  | <b>Room or Area</b> | ignore this page |  |  |  |
| <b>Use</b>                                    |  |                     |                  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  |                     |                  |  |  |  |
| <b>Area Classification</b>                    |  |                     |                  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |                  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |                  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   |       |         |                        |                                      |         |         |
| Wall Area, ft <sup>2</sup>    |       |         |                        |                                      |         |         |
| Ceiling Area, ft <sup>2</sup> |       |         |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (lead brick)       |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

# Lab Samples to be collected

|   |  |                     |                       |  |  |  |  |
|---|--|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245                                      | <b>Room or Area</b> | B0044 (formerly B044) |  |  |  |  |
| <b>Use</b>                                    | dosimetry records (formerly RAM Storage) |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | U, TRU, Beta-gamma                       |                     |                       |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |                       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1000  |         |                        |                          |         | 1000    |
| <b>Wall Area, ft<sup>2</sup></b>    | 1950  |         |                        |                          |         | 1950    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1000  |         |                        |                          |         | 1000    |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 400       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 50        |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |  |                    |  |                     |  |                       |  |
|---|--|--------------------|--|---------------------|--|-----------------------|--|
| <b>Building</b>                               |  | 245                |  | <b>Room or Area</b> |  | B0045 (formerly B045) |  |
| <b>Use</b>                                    |  | Liquid waste tanks |  |                     |  |                       |  |
| <b>Radionuclides, Extent of Contamination</b> |  |                    |  | All                 |  |                       |  |
| <b>Area Classification</b>                    |  | 1                  |  |                     |  |                       |  |
| <b># Floors above Basement</b>                |  | 3                  |  |                     |  |                       |  |
| <b># Floors below Roof</b>                    |  | 1                  |  |                     |  |                       |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 1000  | 1000    |                        |                                      |         |         |
| Wall Area, ft <sup>2</sup>    | 3250  | 3250    |                        |                                      |         |         |
| Ceiling Area, ft <sup>2</sup> | 1000  | 1000    |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            | 1300                  | 0.2            | 1               |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   | 0.8                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |   |           |   |                       |     |
|-------------------|-----|---|-----------|---|-----------------------|-----|
| Drains            | No. | 2 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.8 |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 4   | 8      | 16      |         | 1       | 1         | 4        |
| Pack/Load waste | 5   | 10     | 20      | 10      | 20      | 20        | 5        |
| Decon/Remed.    | 10  | 20     | 40      | 10      | 40      | 40        | 10       |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

**# Lab Samples to be collected**

2

Note: Liquid waste tank assumed to be used prior to decommissioning and sized to 20% of current volume.

Tanks must be cut up prior to removal from room.

One tank curren

|   |             |                     |                       |  |  |  |  |
|---|-------------|---------------------|-----------------------|--|--|--|--|
| <b>Building</b>                               | 245         | <b>Room or Area</b> | B0041 (formerly B041) |  |  |  |  |
| <b>Use</b>                                    | RAM Storage |                     |                       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |             | TRU, U              |                       |  |  |  |  |
| <b>Area Classification</b>                    | 1           |                     |                       |  |  |  |  |
| <b># Floors above Basement</b>                |             |                     |                       |  |  |  |  |
| <b># Floors below Roof</b>                    | 2           |                     |                       |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 12    | 12      |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 280   | 280     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 12    | 12      |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 10                    | 0.1            |                 | 1                 |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (lead brick)       | 5                     |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |  |                                      |     |  |  |  |  |
|---|--|--------------------------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245                                      | <b>Room or Area</b>                  | B21 |  |  |  |  |
| <b>Use</b>                                    | Neutron calibration and detector testing |                                      |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Sealed beta-gamma; unsealed U, Sr-90 |     |  |  |  |  |
| <b>Area Classification</b>                    | 1  |                                      |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |                                      |     |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                                      |     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 375   | 375     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1440  | 1440    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 375   | 375     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 300       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 120       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |                     |                     |  |  |  |  |
|---|-----|---------------------|---------------------|--|--|--|--|
| <b>Building</b>   | 245 | <b>Room or Area</b> | B23                 |  |  |  |  |
| <div style="border: 1px solid black; padding: 2px;"> Calibration &amp; Radiation Detector Testing<br/> Mixed lab - experimental testing (682.03 only) and detector calibration (neutron &amp; gamma) </div> |     |                     |                     |  |  |  |  |
| <b>Use</b>  |     |                     |                     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>   |     |                     | Unsealed beta-gamma |  |  |  |  |
| <b>Area Classification</b>  | 1   |                     |                     |  |  |  |  |
| <b># Floors above Basement</b>  | 3   |                     |                     |  |  |  |  |
| <b># Floors below Roof</b>  | 1   |                     |                     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1434  | 1434    |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1666  | 1666    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1434  | 1434    |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 50                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 80                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 1000                  |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 70                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    | 2                     |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 8   | 16     | 32      |         |         |           | 8        |
| Equip. Release  | 4   | 8      | 16      |         |         |           | 4        |
| Pack/Load waste | 1   | 2      | 4       | 4       | 4       | 4         | 1        |
| Decon/Remed.    | 1   | 2      | 4       |         | 8       | 8         | 1        |
| Final Survey    | 6   | 12     | 24      |         |         |           | 6        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 2 |
|--------------------------------------|---|

3 drums with sources including Cf-252 sources, see specialty waste)  
Other waste is lead bricks in room 2ft<sup>3</sup>

|   |                                  |                                     |  |  |  |  |  |
|---|----------------------------------|-------------------------------------|--|--|--|--|--|
| <b>Building</b>                               | <input type="text" value="245"/> | <b>Room or Area</b>                 | <input type="text" value="B25 delete this page see B025 delete as appropriate"/> |  |  |  |  |
| <b>Use</b>                                    | <input type="text"/>             |                                     |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                  | <input type="text" value="TRU, U"/> |  |  |  |  |  |
| <b>Area Classification</b>                    | <input type="text" value="1"/>   |                                     |  |  |  |  |  |
| <b># Floors above Basement</b>                | <input type="text" value="1"/>   |                                     |  |  |  |  |  |
| <b># Floors below Roof</b>                    | <input type="text" value="3"/>   |                                     |  |  |  |  |  |

|                               | Total                | Class 1              | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2              | Class 3              |
|-------------------------------|----------------------|----------------------|------------------------|--------------------------------------|----------------------|----------------------|
| Floor Area, ft <sup>2</sup>   | <input type="text"/> | <input type="text"/> | <input type="text"/>   | <input type="text"/>                 | <input type="text"/> | <input type="text"/> |
| Wall Area, ft <sup>2</sup>    | <input type="text"/> | <input type="text"/> | <input type="text"/>   | <input type="text"/>                 | <input type="text"/> | <input type="text"/> |
| Ceiling Area, ft <sup>2</sup> | <input type="text"/> | <input type="text"/> | <input type="text"/>   | <input type="text"/>                 | <input type="text"/> | <input type="text"/> |

| Components                 | Total ft <sup>3</sup> | Fraction<br>RW       | Fraction<br>DAW      | Fraction<br>Metal    | Fraction<br>Lead     | Fraction<br>Concrete |
|----------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Glove Boxes                | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Hoods                      | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Benches/Tables/Desks       | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Casework/Cabinets          | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Reefers, Large Equipment   | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Misc. Equip./Labware       | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Hot Cells                  | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Storage Tanks              | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Other (Lead glass shields) | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Sinks                      | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Drains                     | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Ventilation Drops          | <input type="text"/>  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

|                   |                          |                                |  |
|-------------------|--------------------------|--------------------------------|--|
| Drains            | No. <input type="text"/> | Inch Dia. <input type="text"/> | Total ft <sup>3</sup> <input type="text"/> |
| Ventilation Drops | No. <input type="text"/> | Inch Dia. <input type="text"/> | Total ft <sup>3</sup> <input type="text"/> |

| Person-hours    | Mgr                  | Supvsr               | HP Tech              | Shipper              | Skilled              | Unskilled            | Clerical             |
|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Characterize    | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Equip. Release  | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Pack/Load waste | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Decon/Remed.    | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Final Survey    | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

# Lab Samples to be collected

|   |                    |                      |     |  |  |  |  |
|---|--------------------|----------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245                | <b>Room or Area</b>  | B26 |  |  |  |  |
| <b>Use</b>                                    | 1.5 MV Dynamitron, |                      |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | HEU, Am-241, & Co-60 |     |  |  |  |  |
| <b>Area Classification</b>                    | 3                  |                      |     |  |  |  |  |
| <b># Floors above Basement</b>                |                    |                      |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                  |                      |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 220   |         |                        |                                      |         | 220     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1000  |         |                        |                                      |         | 1000    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 220   |         |                        |                                      |         | 220     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 80                    |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (lead bricks)      |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                      |   |     |  |  |  |  |
|---|----------------------|---|-----|--|--|--|--|
| <b>Building</b>                               | 245                  | <b>Room or Area</b>                           | B37 |  |  |  |  |
| <b>Use</b>                                    | Vacuum Systems Setup |   |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                      | Co-60, Sr-90 sealed sources (used in 1960-80) |     |  |  |  |  |
| <b>Area Classification</b>                    | 3                    |   |     |  |  |  |  |
| <b># Floors above Basement</b>                |                      |   |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3                    |   |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                                      |         | 200     |
| <b>Wall Area, ft<sup>2</sup></b>    | 840   |         |                        |                                      |         | 840     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                                      |         | 200     |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 80                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 120                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 20                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |  |
|-------------------|-----|---|-----------|---|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|------|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1    | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1    | 2      | 4       |         |         |           | 1        |
| Pack/Load waste | 0.25 | 0.5    |         |         | 1       | 1         | 0.25     |
| Decon/Remed.    |      |        |         |         |         |           |          |
| Final Survey    | 1    | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

NOTE: ~2 ft<sup>3</sup> Bioassay waste in fridge assumed to be removed prior to decommissioning.

|   |  |                     |     |  |  |  |  |
|---|--|---------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245                                    | <b>Room or Area</b> | B44 |  |  |  |  |
| <b>Use</b>                                    | HPLC Validation & Radioactive labeling |                     |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | TRU, U, Beta-gamma  |     |  |  |  |  |
| <b>Area Classification</b>                    | 1                                      |                     |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3                                      |                     |     |  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 100   | 100     | 0.1                    | 10                                   |         |         |
| Wall Area, ft <sup>2</sup>    | 480   | 480     |                        |                                      |         |         |
| Ceiling Area, ft <sup>2</sup> | 100   | 100     |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 60                    | 0.5            |                 | 1                 |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 210                   | 0.2            | 0.5             | 0.5               |                  |                      |
| Reefers, Large Equipment | 40                    |                |                 | 1                 |                  |                      |
| Misc. Equip./Labware     | 60                    | 0.5            | 0.8             | 0.2               |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 4                     |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        | 26.7                  |                |                 |                   |                  |                      |

|                   |     |   |           |    |                       |      |
|-------------------|-----|---|-----------|----|-----------------------|------|
| Drains            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |      |
| Ventilation Drops | No. | 1 | Inch Dia. | 16 | Total ft <sup>3</sup> | 26.7 |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 4   | 8      | 16      |         |         |           | 4        |
| Pack/Load waste | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| Decon/Remed.    | 1   | 2      | 4       |         | 4       | 4         | 1        |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

**# Lab Samples to be collected**

1

Note: fixed contamination area on floor.

|   |                       |                                       |     |  |  |  |  |
|---|-----------------------|---------------------------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245                   | <b>Room or Area</b>                   | B46 |  |  |  |  |
| <b>Use</b>                                    | Currently cleaned out |                                       |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                       | TRU, U, Sr-90, beta-gamma, low energy |     |  |  |  |  |
| <b>Area Classification</b>                    | 1                     |                                       |     |  |  |  |  |
| <b># Floors above Basement</b>                | 1                     |                                       |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3                     |                                       |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 300   | 300     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 700   | 700     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 300   | 300     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 50        | 0.1            |                 | 1                 |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 20        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 10        | 0.1            |                 | 1                 |                  |                      |
| Drains                   | 0.1       | 0.1            | 0.5             | 0.5               |                  |                      |
| Ventilation Drops        | 125.0     | 0.1            | 0.5             | 0.5               |                  |                      |

  

|                          |     |   |           |    |                       |       |
|--------------------------|-----|---|-----------|----|-----------------------|-------|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> | 0.1   |
| <b>Ventilation Drops</b> | No. | 3 | Inch Dia. | 20 | Total ft <sup>3</sup> | 125.0 |

  

|                     | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|---------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Person-hours</b> |     |        |         |         |         |           |          |
| Characterize        | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release      | 4   | 8      | 16      |         |         |           | 4        |
| Pack/Load waste     | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| Decon/Remed.        | 0.5 | 1      | 2       |         | 2       | 2         | 0.5      |
| Final Survey        | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |  |                                       |     |  |  |  |  |
|---|--|---------------------------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b>                   | B47 |  |  |  |  |
| <b>Use</b>                                    | Machine Shop (formerly lon chamber measurements) |                                       |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | TRU, U, Sr-90, beta-gamma, low energy |     |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                                       |     |  |  |  |  |
| <b># Floors above Basement</b>                |  |                                       |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3  |                                       |     |  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 232   |         |                        |                          |         | 232     |
| Wall Area, ft <sup>2</sup>    | 900   |         |                        |                          |         | 900     |
| Ceiling Area, ft <sup>2</sup> | 232   |         |                        |                          |         | 232     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 196       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 300       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 200       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |           |                       |  |
|-------------------|-----|-----------|-----------------------|--|
| Drains            | No. | Inch Dia. | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | Inch Dia. | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

Note: Norm sample taken in room B41.



|   |                    |  |     |  |  |  |  |
|---|--------------------|--|-----|--|--|--|--|
| <b>Building</b>                               | 245                | <b>Room or Area</b>                    | B48 |  |  |  |  |
| <b>Use</b>                                    | Radiochemistry Lab |  |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | All radionuclides inc. mixed Plutonium |     |  |  |  |  |
| <b>Area Classification</b>                    | 1                  |  |     |  |  |  |  |
| <b># Floors above Basement</b>                |                    |  |     |  |  |  |  |
| <b># Floors below Roof</b>                    |                    |  |     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 240   | 240     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 700   | 700     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 240   | 240     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              | 90        | 0.5            | 0.7             | 0.3               |                  |                      |
| Hoods                    | 150       | 1              |                 | 1                 |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 360       | 0.05           | 0.2             | 0.8               |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       | 0.1            | 0.9             | 0.1               |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 1         | 1              |                 |                   |                  |                      |
| Sinks                    | 24        | 1              |                 | 1                 |                  |                      |
| Drains                   |           | 1              | 0.5             | 0.5               |                  |                      |
| Ventilation Drops        |           | 0.1            |                 | 1                 |                  |                      |

|                   |     |   |           |    |                       |  |
|-------------------|-----|---|-----------|----|-----------------------|--|
| Drains            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. | 4 | Inch Dia. | 10 | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

**# Lab Samples to be collected**

1

NOTE: 1ft3 of contaminated lead bricks, see speciality waste TAB.

|   |             |                     |     |  |  |  |  |
|---|-------------|---------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245         | <b>Room or Area</b> | B49 |  |  |  |  |
| <b>Use</b>                                    | SRM Storage |                     |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |             | All Radionuclides   |     |  |  |  |  |
| <b>Area Classification</b>                    | 1           |                     |     |  |  |  |  |
| <b># Floors above Basement</b>                |             |                     |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3           |                     |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 160   | 160     | 0.01                   | 1.6                                  |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 672   | 672     | 0.1                    | 67.2                                 |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 160   | 160     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 60                    | 0.5            |                 | 1                 |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (lead bricks)      | 10                    | 0.2            |                 |                   | 1                |                      |
| Sinks                    | 24                    |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        | 41.7                  |                |                 |                   |                  |                      |

  

|                   |     |   |           |    |                       |      |
|-------------------|-----|---|-----------|----|-----------------------|------|
| Drains            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |      |
| Ventilation Drops | No. | 1 | Inch Dia. | 20 | Total ft <sup>3</sup> | 41.7 |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste | 0.5 | 1      | 6       | 6       | 6       | 6         | 0.5      |
| Decon/Remed.    | 4   | 8      | 16      | 8       | 16      | 16        | 4        |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 2 |
|--------------------------------------|---|

Note: ~4ft<sup>2</sup> & 67 ft<sup>3</sup> of free standing wall needs remediation for fixed contamination.

|   |     |   |     |  |  |  |  |
|---|-----|---|-----|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>                           | B50 |  |  |  |  |
| <b>Use</b>                                    |     | Document Storage Room (Previous Counting lab) |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | All radionuclides                             |     |  |  |  |  |
| <b>Area Classification</b>                    | 1   |   |     |  |  |  |  |
| <b># Floors above Basement</b>                |     |   |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3   |   |     |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 400   | 400     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1200  | 1200    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 400   | 400     |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 90                    |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 50                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 150                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 250                   |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 40                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 3                     |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        | 83.3                  |                |                 |                   |                  |                      |

|                   |     |   |           |    |                       |      |
|-------------------|-----|---|-----------|----|-----------------------|------|
| Drains            | No. | 1 | Inch Dia. | 2  | Total ft <sup>3</sup> |      |
| Ventilation Drops | No. | 2 | Inch Dia. | 20 | Total ft <sup>3</sup> | 83.3 |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                     |                                  |     |  |  |  |  |
|---|---------------------|----------------------------------|-----|--|--|--|--|
| <b>Building</b>                               | 245                 | <b>Room or Area</b>              | B51 |  |  |  |  |
| <b>Use</b>                                    | Equipment setup lab |                                  |     |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                     | Unsealed U; Sealed U, TRU, Co-60 |     |  |  |  |  |
| <b>Area Classification</b>                    | 1                   |                                  |     |  |  |  |  |
| <b># Floors above Basement</b>                | 1                   |                                  |     |  |  |  |  |
| <b># Floors below Roof</b>                    | 3                   |                                  |     |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   | 200     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 900   | 900     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   | 200     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 50                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 600                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   | 0.3                   |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.3 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 0.5 | 1      | 2       | 2       | 2       | 2         | 0.5      |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

**Note:** room not used in past ~12 years

|  |     |                     |           |  |  |  |
|--|-----|---------------------|-----------|--|--|--|
| <b>Building</b>  | 245 | <b>Room or Area</b> | B53       |  |  |  |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Interim Waste/Source Storage</div> <b>Use</b> Prescreening of laboratory radiological waste. |     |                     |           |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>  |     |                     | see above |  |  |  |
| <b>Area Classification</b>   | 3   |                     |           |  |  |  |
| <b># Floors above Basement</b>   |     |                     |           |  |  |  |
| <b># Floors below Roof</b>   |     |                     |           |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 200   |         |                        |                          |         | 400     |
| <b>Wall Area, ft<sup>2</sup></b>    | 900   |         |                        |                          |         | 1200    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 200   |         |                        |                          |         | 400     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |                     |                              |  |  |  |  |
|---|-----|---------------------|------------------------------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b> | B Wing - Above Grade Roll-up |  |  |  |  |
| <b>Use</b>                                    |     |                     |                              |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |                              |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |                              |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |                              |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |                              |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 7492  | 5272    |                        | 684.55                               | 630     | 2990    |
| <b>Wall Area, ft<sup>2</sup></b>    | 17567 | 11607   |                        | 112                                  | 2000    | 6760    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 7492  | 5272    |                        | 94.55                                | 630     | 2990    |

  

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup><br>Concrete |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead |                             |
| Glove Boxes              | 30                    |    | 30                  |                       |                      |                             |
| Hoods                    | 950                   |    |                     |                       |                      |                             |
| Benches/Tables/Desks     | 829                   |    |                     |                       |                      |                             |
| Casework/Cabinets        | 2747                  |    |                     |                       |                      |                             |
| Reefers, Large Equipment | 6010                  |    |                     |                       |                      |                             |
| Misc. Equip./Labware     | 409                   |    |                     |                       |                      |                             |
| Hot Cells                | 12                    |    |                     |                       |                      |                             |
| Storage Tanks            |                       |    |                     |                       |                      |                             |
| Other                    | 531                   |    |                     |                       |                      |                             |
| Sinks                    | 32                    |    |                     |                       |                      |                             |
| Drains                   | 17.1                  |    |                     |                       |                      |                             |
| Ventilation Drops        | 88.1                  |    |                     |                       |                      |                             |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|------|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 57   | 114    | 228     |         |         |           | 57       |
| <b>Equip. Release</b>  | 67   | 134    | 268     |         |         |           | 66       |
| <b>Pack/Load waste</b> | 37.2 | 74.5   | 150.5   | 70      | 157     | 157       | 37.2     |
| <b>Decon/Remed.</b>    | 8.5  | 20.75  | 58      | 12      | 64      | 64        | 8.3      |
| <b>Final Survey</b>    | 51.5 | 104    | 206     |         |         |           | 51.5     |

  

|                                      |    |
|--------------------------------------|----|
| <b># Lab Samples to be collected</b> | 20 |
|--------------------------------------|----|

|   |           |                       |      |  |  |  |  |
|---|-----------|-----------------------|------|--|--|--|--|
| <b>Building</b>                               | 245       | <b>Room or Area</b>   | B125 |  |  |  |  |
| <b>Use</b>                                    | Setup Lab |                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |           | Formerly Sealed Ra-Be |      |  |  |  |  |
| <b>Area Classification</b>                    | 3         |                       |      |  |  |  |  |
| <b># Floors above Basement</b>                |           |                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    |           |                       |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 120   |         |                        |                          |         | 120     |
| <b>Wall Area, ft<sup>2</sup></b>    | 880   |         |                        |                          |         | 880     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 120   |         |                        |                          |         | 120     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 20        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 45        |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 0.5 | 2      | 2       |         |         |           | 0.5      |

  

**# Lab Samples to be collected**

|  |              |                     |                                 |                                    |                |                |  |
|--|--------------|---------------------|---------------------------------|------------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | B127                            |                                    |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>Use</b> Well Counters, Counting sealed sources in re-entrant ionization chambers (dose calibrators) and the Wallac Wizard 2480 NaI gamma well counter         </div> |              |                     |                                 |                                    |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     |                                 | Medical Isotopes (Short half-life) |                |                |  |
| <b>Area Classification</b>   | 2            |                     |                                 |                                    |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                    |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                    |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b>  | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                    | 150            |                |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 600          |                     |                                 |                                    | 600            |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                    | 150            |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 120       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 500       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 2   | 4      | 8       |         |         |           | 2        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |               |                              |      |  |  |  |  |
|---|---------------|------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245           | <b>Room or Area</b>          | B131 |  |  |  |  |
| <b>Use</b>                                    | RAM Receiving |                              |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |               | Th, Beta-gamma, & low energy |      |  |  |  |  |
| <b>Area Classification</b>                    | 2             |                              |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1             |                              |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2             |                              |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 480   |         |                        |                          | 480     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1400  |         |                        |                          | 1400    |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 480   |         |                        |                          | 480     |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 100       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 70        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 4         |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 150       | 1              |                 |                   |                  | 1                    |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other (HEPA filters)     | 10        | 1              | 1               |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        | 20.8      |                |                 |                   |                  |                      |

  

|                          |     |   |           |    |                       |      |
|--------------------------|-----|---|-----------|----|-----------------------|------|
| <b>Drains</b>            | No. |   | Inch Dia. |    | Total ft <sup>3</sup> |      |
| <b>Ventilation Drops</b> | No. | 3 | Inch Dia. | 10 | Total ft <sup>3</sup> | 20.8 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

|                                      |   |                                   |
|--------------------------------------|---|-----------------------------------|
| <b># Lab Samples to be collected</b> | 1 | Sample of HEPA at decommissioning |
|--------------------------------------|---|-----------------------------------|

**Note:** bagged HEPA filters and equip. in room.

|   |             |                                       |      |  |  |  |  |
|---|-------------|---------------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245         | <b>Room or Area</b>                   | B132 |  |  |  |  |
| <b>Use</b>                                    | RAM Storage |                                       |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |             | All: TRU, U, Beta-gamma, Low E, Sr-90 |      |  |  |  |  |
| <b>Area Classification</b>                    | 1           |                                       |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1           |                                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2           |                                       |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 280   | 280     | 1                      | 280                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1050  | 1050    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 280   | 280     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 250       |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        | 0.3       | 1              |                 | 1                 |                  |                      |

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |     |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.3 |

| Person-hours           | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|------|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4    | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8    | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 0.25 | 0.5    | 1       | 1       | 1       | 1         | 0.25     |
| <b>Decon/Remed.</b>    | 0.25 | 0.5    | 1       | 4       | 4       | 4         | 0.25     |
| <b>Final Survey</b>    | 4    | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

Note: Other waste above is concrete barrier walls.

|   |                                 |                     |      |  |  |  |  |
|---|---------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                             | <b>Room or Area</b> | B133 |  |  |  |  |
| <b>Use</b>                                    | RAM Receiving (currently empty) |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                 | Beta-gamma, U, Th   |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                               |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                               |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                               |                     |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 160   | 160     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 952   | 952     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 160   | 160     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 100       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 200       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 40        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 5         |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   | 0.3       |                |                 |                   |                  |                      |
| Ventilation Drops        | 5.0       |                |                 |                   |                  |                      |

  

|                          |     |   |           |    |                       |     |
|--------------------------|-----|---|-----------|----|-----------------------|-----|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 2  | Total ft <sup>3</sup> | 0.3 |
| <b>Ventilation Drops</b> | No. | 1 | Inch Dia. | 12 | Total ft <sup>3</sup> | 5.0 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                           |                          |      |  |  |  |  |
|---|---------------------------|--------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                       | <b>Room or Area</b>      | B140 |  |  |  |  |
| <b>Use</b>                                    | High Dose Calibration Lab |                          |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                           | Sealed Co-60 source only |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                         |                          |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                         |                          |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                         |                          |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1400  |         |                        |                          |         | 1400    |
| <b>Wall Area, ft<sup>2</sup></b>    | 2800  |         |                        |                          |         | 2800    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1400  |         |                        |                          |         | 1400    |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 500       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 400       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 500       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 3         |                |                 |                   |                  |                      |
| Drains                   | 0.1       |                |                 |                   |                  |                      |
| Ventilation Drops        | 1.9       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.1 |
| <b>Ventilation Drops</b> | No. | 7 | Inch Dia. | 2 | Total ft <sup>3</sup> | 1.9 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                         |                                 |      |  |  |  |  |
|---|-------------------------|---------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                     | <b>Room or Area</b>             | B141 |  |  |  |  |
| <b>Use</b>                                    | Neutron Calibration Lab |                                 |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                         | Sealed AmBe, PuBe, RaBe, Cf-252 |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                       |                                 |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                       |                                 |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 2                       |                                 |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 250   | 250     | 0.1                    | 25                       |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1120  | 1120    | 0.1                    | 112                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 250   | 250     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 3         | 0.25           | 0.5             | 0.5               |                  |                      |
| Casework/Cabinets        | 100       | 0.05           | 0.5             | 0.5               |                  |                      |
| Reefers, Large Equipment | 10        |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 4         |                |                 |                   |                  |                      |
| Hot Cells                | 12        | 1              | 0.75            | 0.25              |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other (lead bricks)      | 30        |                |                 |                   |                  |                      |
| Sinks                    | 3         |                |                 |                   |                  |                      |
| Drains                   | 0.1       |                |                 |                   |                  |                      |
| Ventilation Drops        | 0.8       |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |     |
|--------------------------|-----|---|-----------|---|-----------------------|-----|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.1 |
| <b>Ventilation Drops</b> | No. | 3 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.8 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 0.5 | 1      | 2       | 2       | 4       | 4         | 0.5      |
| <b>Decon/Remed.</b>    | 0.5 | 1      | 2       |         | 4       | 4         | 0.5      |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 2 |
|--------------------------------------|---|

|  |                  |                        |                                 |                                   |                             |                              |                 |
|--|------------------|------------------------|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>  | 245              | <b>Room or Area</b>    | B142 & B143                     |                                   |                             |                              |                 |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <b>Use</b> Neutron Source Strength Calibration Facility<br/> The neutron calibration facility consists of three areas: control room B141; Mg Bath source storage room B143; and the caged Radium storage area B142. </div> |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b>  |                  |                        | see above                       |                                   |                             |                              |                 |
| <b>Area Classification</b>   | 1                |                        |                                 |                                   |                             |                              |                 |
| <b># Floors above Basement</b>   | 1                |                        |                                 |                                   |                             |                              |                 |
| <b># Floors below Roof</b>   | 2                |                        |                                 |                                   |                             |                              |                 |
|  | <b>Total</b>     | <b>Class 1</b>         | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>  | 720              | 720                    |                                 |                                   |                             |                              |                 |
| <b>Wall Area, ft<sup>2</sup></b>   | 1400             | 1400                   |                                 |                                   |                             |                              |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 720              | 720                    |                                 |                                   |                             |                              |                 |
| <b>Components</b>  | <b>Total ft3</b> | <b>Fraction<br/>RW</b> | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes  |                  |                        |                                 |                                   |                             |                              |                 |
| Hoods  |                  |                        |                                 |                                   |                             |                              |                 |
| Benches/Tables/Desks   | 50               | 0.5                    |                                 | 1                                 |                             |                              |                 |
| Casework/Cabinets  | 40               |                        |                                 |                                   |                             |                              |                 |
| Reefers, Large Equipment   | 150              |                        |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware   | 100              |                        |                                 |                                   |                             |                              |                 |
| Hot Cells  |                  |                        |                                 |                                   |                             |                              |                 |
| Storage Tanks  |                  |                        |                                 |                                   |                             |                              |                 |
| Other (source drums)   | 30               |                        |                                 |                                   |                             |                              |                 |
| Sinks  |                  |                        |                                 |                                   |                             |                              |                 |
| Drains   |                  |                        |                                 |                                   |                             |                              |                 |
| Ventilation Drops  | 0.8              |                        |                                 |                                   |                             |                              |                 |
| <b>Drains</b>  | <b>No.</b>       |                        | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Ventilation Drops</b>   | <b>No.</b>       | 3                      | <b>Inch Dia.</b>                | 2                                 | <b>Total ft<sup>3</sup></b> | 0.8                          |                 |
| <b>Person-hours</b>  | <b>Mgr</b>       | <b>Supvsr</b>          | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>  | 4                | 8                      | 16                              |                                   |                             |                              | 4               |
| <b>Equip. Release</b>  | 8                | 16                     | 32                              |                                   |                             |                              | 8               |
| <b>Pack/Load waste</b>   | 0.5              | 1                      | 2                               | 4                                 | 4                           | 4                            | 0.5             |
| <b>Decon/Remed.</b>  | 2                |                        | 8                               |                                   | 8                           | 8                            | 2               |
| <b>Final Survey</b>  | 4                | 8                      | 16                              |                                   |                             |                              | 4               |
| <b># Lab Samples to be collected</b>   |                  |                        | 1                               |                                   |                             |                              |                 |

**Note:** known contamination on benchtop.

|   |     |                     |                                   |  |  |  |  |
|---|-----|---------------------|-----------------------------------|--|--|--|--|
| <b>Building</b>   | 245 | <b>Room or Area</b> | B145                              |  |  |  |  |
| <b>Use</b> High Level Radwaste Storage, Former source calibration |     |                     |                                   |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>                     |     |                     | TRU, Ra, Beta-gamma, Sr-90, Low E |  |  |  |  |
| <b>Area Classification</b>  | 1   |                     |                                   |  |  |  |  |
| <b># Floors above Basement</b>                                    | 1   |                     |                                   |  |  |  |  |
| <b># Floors below Roof</b>  | 2   |                     |                                   |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 288   | 288     | 0.5                    | 144                                  |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1120  | 1120    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 288   | 288     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 3                     |                |                 |                   |                  |                      |
| Casework/Cabinets        | 2                     | 0.5            | 0.5             | 0.5               |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 10                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (lead bricks/pigs) | 15                    | 0.5            |                 |                   | 1                |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        | 0.6                   |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |     |
|-------------------|-----|---|-----------|---|-----------------------|-----|
| Drains            | No. | 1 | Inch Dia. | 1 | Total ft <sup>3</sup> | 0.6 |
| Ventilation Drops | No. | 2 | Inch Dia. | 2 | Total ft <sup>3</sup> | 0.6 |

  

| Person-hours           | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|------|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 6    | 12     | 24      |         |         |           | 6        |
| <b>Equip. Release</b>  | 1    | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> | 0.25 | 0.5    | 1       | 1       | 2       | 2         | 0.25     |
| <b>Decon/Remed.</b>    | 0.5  | 1      | 2       |         | 2       | 2         | 0.5      |
| <b>Final Survey</b>    | 4    | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                      |                                   |      |  |  |  |  |
|---|----------------------|-----------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                  | <b>Room or Area</b>               | B146 |  |  |  |  |
| <b>Use</b>                                    | RAM Waste Processing |                                   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                      | TRU, Ra, Beta-gamma, Sr-90, Low E |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                    |                                   |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                    |                                   |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                    |                                   |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 273   | 273     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1100  | 1100    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 273   | 273     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 30        |                |                 |                   |                  |                      |
| Casework/Cabinets        | 150       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 50        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |   |  |      |  |  |  |  |
|---|---|--|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b>                        | B152 |  |  |  |  |
| <b>Use</b>                                    | Current Solid Radwaste Storage, Previous radiochemistry |  |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   | TRU, Ra, Beta-gamma, Sr-90, Low Ener. Beta |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |  |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1   |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1   |  |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 480   | 480     | 0.1                    | 48                                   |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1100  | 1100    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 480   | 480     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    | 300                   | 0.25           |                 | 1                 |                  |                      |
| Benches/Tables/Desks     | 20                    |                |                 |                   |                  |                      |
| Casework/Cabinets        | 700                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 30                    |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other (RW storage)       | 100                   | 1              |                 |                   |                  |                      |
| Sinks                    | 8                     | 0.1            |                 |                   |                  |                      |
| Drains                   | 1.1                   |                |                 |                   |                  |                      |
| Ventilation Drops        | 27.8                  | 0.1            |                 | 1                 |                  |                      |

  

|                          |            |   |                  |    |                             |      |
|--------------------------|------------|---|------------------|----|-----------------------------|------|
| <b>Drains</b>            | <b>No.</b> | 8 | <b>Inch Dia.</b> | 2  | <b>Total ft<sup>3</sup></b> | 1.1  |
| <b>Ventilation Drops</b> | <b>No.</b> | 8 | <b>Inch Dia.</b> | 10 | <b>Total ft<sup>3</sup></b> | 27.8 |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> | 0.1 | 0.25   | 2       | 0.5     | 2       | 2         | 0.1      |
| <b>Decon/Remed.</b>    | 0.5 | 1      | 2       |         | 2       | 2         | 0.5      |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                                   |                     |      |  |  |  |  |
|---|-----------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                               | <b>Room or Area</b> | B155 |  |  |  |  |
| <b>Use</b>                                    | Storage Closet used for RAM waste |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                   | None                |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                                 |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 1                                 |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1                                 |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 70    |         |                        |                          |         | 70      |
| <b>Wall Area, ft<sup>2</sup></b>    | 280   |         |                        |                          |         | 280     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 70    |         |                        |                          |         | 70      |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 6         |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 8         |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |   |                                   |                                 |                                   |                             |                              |                 |
|---|---|-----------------------------------|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>                               | 245   | <b>Room or Area</b>               | B156                            |                                   |                             |                              |                 |
| <b>Use</b>                                    | formerly Radiochemistry, currently Storing Liq/Gas Waste (Listed on Speciality Waste Tab) |                                   |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b> |   | TRU, Ra, Beta-gamma, Sr-90, Low E |                                 |                                   |                             |                              |                 |
| <b>Area Classification</b>                    | 1   |                                   |                                 |                                   |                             |                              |                 |
| <b># Floors above Basement</b>                | 1   |                                   |                                 |                                   |                             |                              |                 |
| <b># Floors below Roof</b>                    | 1   |                                   |                                 |                                   |                             |                              |                 |
|   | <b>Total</b>  | <b>Class 1</b>                    | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>             | 480   | 480                               | 0.1                             | 48                                |                             |                              |                 |
| <b>Wall Area, ft<sup>2</sup></b>              | 1100  | 1100                              |                                 |                                   |                             |                              |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>           | 480   | 480                               |                                 |                                   |                             |                              |                 |
| <b>Components</b>                             | <b>Total ft3</b>  | <b>Fraction<br/>RW</b>            | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes                                   |   |                                   |                                 |                                   |                             |                              |                 |
| Hoods   | 300   | 0.1                               |                                 | 1                                 |                             |                              |                 |
| Benches/Tables/Desks                          | 10  |                                   |                                 |                                   |                             |                              |                 |
| Casework/Cabinets                             | 700   | 0.1                               |                                 | 1                                 |                             |                              |                 |
| Reefers, Large Equipment                      |   |                                   |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware                          | 25  |                                   |                                 |                                   |                             |                              |                 |
| Hot Cells                                     |   |                                   |                                 |                                   |                             |                              |                 |
| Storage Tanks                                 |   |                                   |                                 |                                   |                             |                              |                 |
| Other (waste)                                 | 75  | 1                                 | 1                               |                                   |                             |                              |                 |
| Sinks   | 10  |                                   |                                 |                                   |                             |                              |                 |
| Drains  | 1.0   |                                   |                                 |                                   |                             |                              |                 |
| Ventilation Drops                             | 20.0  | 0.1                               |                                 | 1                                 |                             |                              |                 |
| <b>Drains</b>                                 | <b>No.</b>  | 7                                 | <b>Inch Dia.</b>                | 2                                 | <b>Total ft<sup>3</sup></b> | 1.0                          |                 |
| <b>Ventilation Drops</b>                      | <b>No.</b>  | 4                                 | <b>Inch Dia.</b>                | 12                                | <b>Total ft<sup>3</sup></b> | 20.0                         |                 |
| <b>Person-hours</b>                           | <b>Mgr</b>  | <b>Supvsr</b>                     | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| Characterize                                  | 8   | 16                                | 32                              |                                   |                             |                              | 8               |
| Equip. Release                                | 2   | 4                                 | 8                               |                                   |                             |                              | 1               |
| Pack/Load waste                               | 0.1   | 0.25                              | 0.5                             | 0.5                               | 2                           | 2                            | 0.1             |
| Decon/Remed.                                  | 0.25  | 0.5                               | 1                               |                                   | 2                           | 2                            | 0.05            |
| Final Survey                                  | 6   | 12                                | 24                              |                                   |                             |                              | 6               |
| <b># Lab Samples to be collected</b>          |   | 1                                 |                                 |                                   |                             |                              |                 |

|  |                  |                        |                                   |                                   |                             |                              |                 |
|--|------------------|------------------------|-----------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>  | 245              | <b>Room or Area</b>    | B157                              |                                   |                             |                              |                 |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Historical: SRM Production </div> <b>Use</b> <span style="border: 1px solid black; padding: 2px;">Currently Waste Storage, Note: Liquid Waste added to specialty waste tab</span> |                  |                        |                                   |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b>  |                  |                        | TRU, Ra, Beta-gamma, Sr-90, Low E |                                   |                             |                              |                 |
| <b>Area Classification</b>   | 1                |                        |                                   |                                   |                             |                              |                 |
| <b># Floors above Basement</b>   | 1                |                        |                                   |                                   |                             |                              |                 |
| <b># Floors below Roof</b>   | 1                |                        |                                   |                                   |                             |                              |                 |
|  | <b>Total</b>     | <b>Class 1</b>         | <b>%<br/>needing<br/>Remed.</b>   | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>  | 450              | 450                    | 0.1                               | 45                                |                             |                              |                 |
| <b>Wall Area, ft<sup>2</sup></b>   | 1100             | 1100                   |                                   |                                   |                             |                              |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 450              | 450                    |                                   |                                   |                             |                              |                 |
| <b>Components</b>  | <b>Total ft3</b> | <b>Fraction<br/>RW</b> | <b>Fraction<br/>DAW</b>           | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes  | 30               | 1                      |                                   | 1                                 |                             |                              |                 |
| Hoods  | 150              | 1                      |                                   | 1                                 |                             |                              |                 |
| Benches/Tables/Desks   | 3                | 0.1                    | 0.5                               | 0.5                               |                             |                              |                 |
| Casework/Cabinets  | 300              | 0.1                    | 0.5                               | 0.5                               |                             |                              |                 |
| Reefers, Large Equipment   |                  |                        |                                   |                                   |                             |                              |                 |
| Misc. Equip./Labware   |                  |                        |                                   |                                   |                             |                              |                 |
| Hot Cells  |                  |                        |                                   |                                   |                             |                              |                 |
| Storage Tanks  |                  |                        |                                   |                                   |                             |                              |                 |
| Other Solid Waste  | 8                | 0.5                    | 1                                 |                                   |                             |                              |                 |
| Sinks  | 4                | 0.1                    |                                   | 1                                 |                             |                              |                 |
| Drains   | 1.1              | 0.1                    |                                   | 1                                 |                             |                              |                 |
| Ventilation Drops  | 10.0             | 0.1                    |                                   | 1                                 |                             |                              |                 |
| <b>Drains</b>  | <b>No.</b>       | <b>2</b>               | <b>Inch Dia.</b>                  | <b>4</b>                          | <b>Total ft<sup>3</sup></b> | <b>1.1</b>                   |                 |
| <b>Ventilation Drops</b>   | <b>No.</b>       | <b>2</b>               | <b>Inch Dia.</b>                  | <b>12</b>                         | <b>Total ft<sup>3</sup></b> | <b>10.0</b>                  |                 |
| <b>Person-hours</b>  | <b>Mgr</b>       | <b>Supvsr</b>          | <b>HP Tech</b>                    | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>  | 6                | 12                     | 24                                |                                   |                             |                              | 6               |
| <b>Equip. Release</b>  | 4                | 8                      | 16                                |                                   |                             |                              | 4               |
| <b>Pack/Load waste</b>   | 0.5              | 1                      | 2                                 | 1                                 | 2                           | 2                            | 0.5             |
| <b>Decon/Remed.</b>  | 0.5              | 1                      | 2                                 |                                   | 2                           | 2                            | 0.5             |
| <b>Final Survey</b>  | 4                | 8                      | 16                                |                                   |                             |                              | 4               |
| <b># Lab Samples to be collected</b>   |                  |                        | 1                                 |                                   |                             |                              |                 |

**Note:** Liquid radwaste stored in room is accounted for in tab 3.14

|   |   |                     |      |  |  |  |  |
|---|---|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | B200 |  |  |  |  |
| <b>Use</b>                                    | Mechanical Equip, fans, exhaust, HEPA filters |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> | various                                       |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                | 3   |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 1891  | 1891    | 0.05                   | 95                                   |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1565  | 1565    |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 1891  | 1891    | 0.05                   | 95                                   |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 4500                  | 0.8            |                 | 1                 |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   | 13.3                  |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |      |
|--------------------------|-----|---|-----------|---|-----------------------|------|
| <b>Drains</b>            | No. | 2 | Inch Dia. | 8 | Total ft <sup>3</sup> | 13.3 |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |      |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> | 35  | 70     | 140     | 60      | 140     | 140       | 35       |
| <b>Decon/Remed.</b>    | 4   | 16     | 40      | 8       | 40      | 40        | 4        |
| <b>Final Survey</b>    | 8   | 16     | 32      |         |         |           | 8        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 4 |
|--------------------------------------|---|

**Note:** Large equipment above is: Ductwork (2000ft<sup>3</sup>) and HEPA banks (2500ft<sup>3</sup>).  
Floor remediation is concrete bases.  
Ceiling remediation is posted fixed contamination area on ceiling.

|   |     |                     |        |  |  |  |  |
|---|-----|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b> | C Wing |  |  |  |  |
| <b>Use</b>                                    |     |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |        |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |        |  |  |  |  |

|                               | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 1200  |         |                        |                                      |         | 1200    |
| Wall Area, ft <sup>2</sup>    | 3135  |         |                        |                                      |         | 3135    |
| Ceiling Area, ft <sup>2</sup> | 1200  |         |                        |                                      |         | 1200    |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    |                       |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 800                   |    |                     |                       |                      |                 |
| Casework/Cabinets        | 800                   |    |                     |                       |                      |                 |
| Reefers, Large Equipment |                       |    |                     |                       |                      |                 |
| Misc. Equip./Labware     |                       |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    |                       |    |                     |                       |                      |                 |
| Sinks                    |                       |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

# Lab Samples to be collected

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | C003 |  |  |  |  |
| <b>Use</b>                                    | Gas Counting Development of radioactive gas standards and calibrations |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Gamma               |      |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 150   |         |                        |                                      |         | 150     |
| <b>Wall Area, ft<sup>2</sup></b>    | 392   |         |                        |                                      |         | 392     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 150   |         |                        |                                      |         | 150     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100                   |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100                   |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    |     |        |         |         |         |           |          |
| <b>Equip. Release</b>  |     |        |         |         |         |           |          |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    |     |        |         |         |         |           |          |

**# Lab Samples to be collected**

**Note:** Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | C005                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> Low Level Counting - Beta<br/> <b>Use</b> Beta source measurements using gas-flow proportional counters </div> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     | Gamma                           |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 392          |                     |                                 |                                   |                | 392            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

  

**# Lab Samples to be collected**

**Note:** Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan



|  |   |   |                                 |                                   |                |                |  |
|--|---|---|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245   | <b>Room or Area</b>   | C007                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Low Level Counting- Alpha</div> <b>Use</b> <div style="border: 1px solid black; padding: 2px;">Alpha Spectroscopy measurements</div> |   |   |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |   | <div style="border: 1px solid black; padding: 2px;">Gamma</div> |                                 |                                   |                |                |  |
| <b>Area Classification</b>   | <div style="border: 1px solid black; text-align: center;">3</div> |   |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   | <div style="border: 1px solid black; height: 20px;"></div>        |   |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   | <div style="border: 1px solid black; height: 20px;"></div>        |   |                                 |                                   |                |                |  |
|  | <b>Total</b>  | <b>Class 1</b>  | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 150   |   |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 392   |   |                                 |                                   |                | 392            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 150   |   |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |   |           |   |                       |   |
|--------------------------|-----|---|-----------|---|-----------------------|---|
| <b>Drains</b>            | No. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Inch Dia. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Total ft <sup>3</sup> | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> |
| <b>Ventilation Drops</b> | No. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Inch Dia. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Total ft <sup>3</sup> | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    |     |        |         |         |         |           |          |
| <b>Equip. Release</b>  |     |        |         |         |         |           |          |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    |     |        |         |         |         |           |          |

  

**# Lab Samples to be collected**

**Note: Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan**

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | C009                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Activity Measurements</div> <b>Use</b> <span style="border: 1px solid black; padding: 2px;">Source measurements using a NaI(ti) detectors</span> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              | Gamma               |                                 |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 392          |                     |                                 |                                   |                | 392            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    |     |        |         |         |         |           |          |
| <b>Equip. Release</b>  |     |        |         |         |         |           |          |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    |     |        |         |         |         |           |          |

  

**# Lab Samples to be collected**

**Note:** Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan

|   |                             |                        |                                 |  |                             |                              |                 |
|---|-----------------------------|------------------------|---------------------------------|--|-----------------------------|------------------------------|-----------------|
| <b>Building</b>   | 245                         | <b>Room or Area</b>    | C011                            |  |                             |                              |                 |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> Low Level Counting - Gamma<br/> Measurement of radioactive sources with gamma ray spectrometers to<br/> <b>Use</b> determine radionuclide activities </div> |                             |                        |                                 |  |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b>   |                             | Gamma                  |                                 |  |                             |                              |                 |
| <b>Area Classification</b>  | 3                           |                        |                                 |  |                             |                              |                 |
| <b># Floors above Basement</b>  |                             |                        |                                 |  |                             |                              |                 |
| <b># Floors below Roof</b>  |                             |                        |                                 |  |                             |                              |                 |
|   | <b>Total</b>                | <b>Class 1</b>         | <b>%<br/>needing<br/>Remed.</b> | <b>ft<sup>2</sup><br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>   | 150                         |                        |                                 |  |                             | 150                          |                 |
| <b>Wall Area, ft<sup>2</sup></b>  | 392                         |                        |                                 |  |                             | 392                          |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 150                         |                        |                                 |  |                             | 150                          |                 |
| <b>Components</b>   | <b>Total ft<sup>3</sup></b> | <b>Fraction<br/>RW</b> | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>                    | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes   |                             |                        |                                 |  |                             |                              |                 |
| Hoods   |                             |                        |                                 |  |                             |                              |                 |
| Benches/Tables/Desks  | 100                         |                        |                                 |  |                             |                              |                 |
| Casework/Cabinets   | 100                         |                        |                                 |  |                             |                              |                 |
| Reefers, Large Equipment  |                             |                        |                                 |  |                             |                              |                 |
| Misc. Equip./Labware  |                             |                        |                                 |  |                             |                              |                 |
| Hot Cells   |                             |                        |                                 |  |                             |                              |                 |
| Storage Tanks   |                             |                        |                                 |  |                             |                              |                 |
| Other   |                             |                        |                                 |  |                             |                              |                 |
| Sinks   |                             |                        |                                 |  |                             |                              |                 |
| Drains  |                             |                        |                                 |  |                             |                              |                 |
| Ventilation Drops   |                             |                        |                                 |  |                             |                              |                 |
| <b>Drains</b>   | <b>No.</b>                  |                        | <b>Inch Dia.</b>                |  | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Ventilation Drops</b>  | <b>No.</b>                  |                        | <b>Inch Dia.</b>                |  | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Person-hours</b>   | <b>Mgr</b>                  | <b>Supvsr</b>          | <b>HP Tech</b>                  | <b>Shipper</b>                               | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| Characterize  |                             |                        |                                 |  |                             |                              |                 |
| Equip. Release  |                             |                        |                                 |  |                             |                              |                 |
| Pack/Load waste   |                             |                        |                                 |  |                             |                              |                 |
| Decon/Remed.  |                             |                        |                                 |  |                             |                              |                 |
| Final Survey  |                             |                        |                                 |  |                             |                              |                 |
| <b># Lab Samples to be collected</b>  |                             |                        |                                 |  |                             |                              |                 |

**Note: Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan**

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | C013                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Microcalorimetry</div> <b>Use</b> Process sources for TES DES measurements |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     | Gamma                           |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 392          |                     |                                 |                                   |                | 392            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 150          |                     |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

  

**# Lab Samples to be collected**

Note: Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan

|   |              |                     |                                 |                                   |                |                |  |
|---|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>   | 245          | <b>Room or Area</b> | C015                            |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Gamma Ray Spectrometry</div> <b>Use</b> Gamma-Ray spectrometry measurements |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>   |              | Gamma               |                                 |                                   |                |                |  |
| <b>Area Classification</b>  | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>  |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>  |              |                     |                                 |                                   |                |                |  |
|   | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>   | 150          |                     |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>  | 392          |                     |                                 |                                   |                | 392            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 150          |                     |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

  

**# Lab Samples to be collected**

**Note:** Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan

|   |     |   |      |  |  |  |  |
|---|-----|---|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>   | C019 |  |  |  |  |
| <b>Use</b>                                    |     | Gamma Spectrometry Source Storage<br>Storage of radioactive sources |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Gamma   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |   |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 150   |         |                        |                          |         | 150     |
| <b>Wall Area, ft<sup>2</sup></b>    | 392   |         |                        |                          |         | 392     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 150   |         |                        |                          |         | 150     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 100       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    |     |        |         |         |         |           |          |
| Equip. Release  |     |        |         |         |         |           |          |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    |     |        |         |         |         |           |          |

**# Lab Samples to be collected**

Note: Room assumed to have 200 ft<sup>3</sup> of Benches and Casework for Decom. Plan

|   |     |                     |                    |  |  |  |  |
|---|-----|---------------------|--------------------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b> | F & G Wing Roll-up |  |  |  |  |
| <b>Use</b>                                    |     |                     |                    |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                     |                    |  |  |  |  |
| <b>Area Classification</b>                    |     |                     |                    |  |  |  |  |
| <b># Floors above Basement</b>                |     |                     |                    |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                     |                    |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 5290  | 1800    |                        | 90                                   | 4620    | 440     |
| <b>Wall Area, ft<sup>2</sup></b>    | 5725  | 2380    |                        | 119                                  | 3263    | 1007    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 5290  | 1800    |                        |                                      | 4620    | 440     |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup> |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | Concrete        |
| Glove Boxes              |                       |    |                     |                       |                      |                 |
| Hoods                    |                       |    |                     |                       |                      |                 |
| Benches/Tables/Desks     | 160                   |    |                     |                       |                      |                 |
| Casework/Cabinets        | 50                    |    |                     |                       |                      |                 |
| Reefers, Large Equipment | 15                    |    |                     |                       |                      |                 |
| Misc. Equip./Labware     | 150                   |    |                     |                       |                      |                 |
| Hot Cells                |                       |    |                     |                       |                      |                 |
| Storage Tanks            |                       |    |                     |                       |                      |                 |
| Other                    | 20                    |    |                     |                       |                      |                 |
| Sinks                    |                       |    |                     |                       |                      |                 |
| Drains                   |                       |    |                     |                       |                      |                 |
| Ventilation Drops        |                       |    |                     |                       |                      |                 |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 9   | 18     | 36      |         |         |           | 9        |
| Equip. Release  | 7   | 14     | 28      |         |         |           | 7        |
| Pack/Load waste | 2   | 4      | 8       | 4       | 8       | 8         | 2        |
| Decon/Remed.    | 30  | 60     | 120     | 24      | 120     | 120       | 30       |
| Final Survey    | 7   | 14     | 28      |         |         |           | 7        |

**# Lab Samples to be collected**

16

|   |              |                     |                                    |                                   |                |                |  |
|---|--------------|---------------------|------------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>   | 245          | <b>Room or Area</b> | G104                               |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> G-104, Horizontal Smokestack Simulator (This room surrounds G-105) </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 15%;"> <b>Use</b> Accelerator Storage </div> <div style="width: 60%;"></div> </div> |              |                     |                                    |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>   |              |                     | see G-105 located inside this room |                                   |                |                |  |
| <b>Area Classification</b>  | 2            |                     |                                    |                                   |                |                |  |
| <b># Floors above Basement</b>  | 2            |                     |                                    |                                   |                |                |  |
| <b># Floors below Roof</b>  | 1            |                     |                                    |                                   |                |                |  |
|   | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b>    | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>   | 4620         |                     |                                    |                                   | 4620           |                |  |
| <b>Wall Area, ft<sup>2</sup></b>  | 3263         |                     |                                    |                                   | 3263           |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 4620         |                     |                                    |                                   | 4620           |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 150       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 50        |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 150       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

**# Lab Samples to be collected**

4



|  |              |                     |                                       |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | G105                                  |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Horizontal smokestack simulator</div> <b>Use</b> G-105 has known activation from linear Accelerator. |              |                     |                                       |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     | activation product for concrete/metal |                                   |                |                |  |
| <b>Area Classification</b>   | 1            |                     |                                       |                                   |                |                |  |
| <b># Floors above Basement</b>   | 2            |                     |                                       |                                   |                |                |  |
| <b># Floors below Roof</b>   | 1            |                     |                                       |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b>       | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 230          | 1800                | 0.05                                  | 90                                |                |                |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 1456         | 2380                | 0.05                                  | 119                               |                |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 230          | 1800                |                                       |                                   |                |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 10        | 1              |                 | 1                 |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 15        | 1              |                 | 1                 |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    | 20        | 1              |                 |                   | 1                |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |            |  |                  |  |                             |  |
|--------------------------|------------|--|------------------|--|-----------------------------|--|
| <b>Drains</b>            | <b>No.</b> |  | <b>Inch Dia.</b> |  | <b>Total ft<sup>3</sup></b> |  |
| <b>Ventilation Drops</b> | <b>No.</b> |  | <b>Inch Dia.</b> |  | <b>Total ft<sup>3</sup></b> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 2   | 4      | 8       |         |         |           | 2        |
| <b>Pack/Load waste</b> | 2   | 4      | 8       | 4       | 8       | 8         | 2        |
| <b>Decon/Remed.</b>    | 30  | 60     | 120     | 24      | 120     | 120       | 30       |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |    |
|--------------------------------------|----|
| <b># Lab Samples to be collected</b> | 12 |
|--------------------------------------|----|

|   |     |                                       |      |  |  |  |  |
|---|-----|---------------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>                   | F101 |  |  |  |  |
| <b>Use</b>                                    |     | Co-60- Pool Irradiator, Cs-137 sealed |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     | Co-60,Cs-137 sealed                   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                                       |      |  |  |  |  |
| <b># Floors above Basement</b>                | 2   |                                       |      |  |  |  |  |
| <b># Floors below Roof</b>                    | 1   |                                       |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 440   |         |                        |                          |         | 440     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1007  |         |                        |                          |         | 1007    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 440   |         |                        |                          |         | 440     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |              |                     |        |  |  |  |  |
|---|--------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245          | <b>Room or Area</b> | H Wing |  |  |  |  |
| <b>Use</b>                                    | N/A - Rollup |                     |        |  |  |  |  |
|   |              |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |              |                     |        |  |  |  |  |
| <b>Area Classification</b>                    |              |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |              |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |              |                     |        |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3  |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|----------|
| <b>Floor Area, ft<sup>2</sup></b>   | 30368 | 17572   |                        | 597                                  | 3869    | 8680.725 |
| <b>Wall Area, ft<sup>2</sup></b>    | 41502 | 19676   |                        |                                      | 7840    | 13484    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 30368 | 17572   |                        |                                      | 3869    | 8680.725 |

  

| Components               | Total ft <sup>3</sup> | Fraction |                     |                       |                      | ft <sup>3</sup><br>Concrete |
|--------------------------|-----------------------|----------|---------------------|-----------------------|----------------------|-----------------------------|
|                          |                       | RW       | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead |                             |
| Glove Boxes              | 175                   |          |                     |                       |                      |                             |
| Hoods                    | 2005                  |          |                     |                       |                      |                             |
| Benches/Tables/Desks     | 2100                  |          |                     |                       |                      |                             |
| Casework/Cabinets        | 1700                  |          |                     |                       |                      |                             |
| Reefers, Large Equipment | 200                   |          |                     |                       |                      |                             |
| Misc. Equip./Labware     | 220                   |          |                     |                       |                      |                             |
| Hot Cells                | 31                    |          |                     |                       |                      |                             |
| Storage Tanks            | 1334.6                |          |                     |                       |                      |                             |
| Other                    | 80                    |          |                     |                       |                      |                             |
| Sinks                    | 16                    |          |                     |                       |                      |                             |
| Drains                   | 62.2                  |          |                     |                       |                      |                             |
| Ventilation Drops        | 4300.0                |          |                     |                       |                      |                             |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 103 | 206    | 412     |         |         |           | 103      |
| <b>Equip. Release</b>  | 173 | 346    | 692     |         | 120     | 120       | 173      |
| <b>Pack/Load waste</b> | 37  | 75     | 150     | 70      | 150     | 150       | 37       |
| <b>Decon/Remed.</b>    | 11  | 31     | 70      | 18      | 70      | 70        | 11       |
| <b>Final Survey</b>    | 89  | 178    | 356     |         |         |           | 89       |

  

|                                      |    |
|--------------------------------------|----|
| <b># Lab Samples to be collected</b> | 30 |
|--------------------------------------|----|

|   |  |                     |        |  |  |  |  |
|---|--|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | H007-1 |  |  |  |  |
| <b>Use</b>                                    | Gamma Irradiation Facility, Calibration of gamma-ray measuring instruments |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 730   |         |                        |                                      |         | 730     |
| <b>Wall Area, ft<sup>2</sup></b>    | 865   |         |                        |                                      |         | 865     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 730   |         |                        |                                      |         | 730     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |                    |                      |      |  |  |  |  |
|---|--------------------|----------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                | <b>Room or Area</b>  | H015 |  |  |  |  |
| <b>Use</b>                                    | Beta Particle Room |                      |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | Pm-147, Kr-85, Sr-90 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                  |                      |      |  |  |  |  |
| <b># Floors above Basement</b>                |                    |                      |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                    |                      |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 378   |         |                        |                                      |         | 378     |
| <b>Wall Area, ft<sup>2</sup></b>    | 930   |         |                        |                                      |         | 930     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 378   |         |                        |                                      |         | 378     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |     |   |      |  |  |  |  |
|---|-----|---|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>                                 | H018 |  |  |  |  |
| <b>Use</b>                                    |     | GR 420 Irradiation Facility, High Dose Irradiations |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |   |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 246   |         |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 502   |         |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 246   |         |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                             |                     |        |  |  |  |  |
|---|-----------------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245                         | <b>Room or Area</b> | H031-1 |  |  |  |  |
| <b>Use</b>                                    | Radioactive Waste Tank Room |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                             |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 1                           |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                             |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                             |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 598   |         |                        |                          |         | 598     |
| <b>Wall Area, ft<sup>2</sup></b>    | 1446  |         |                        |                          |         | 1446    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 598   |         |                        |                          |         | 598     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            | 1334.6    | 0.2            |                 | 1                 |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> | 2   | 5      | 10      | 10      | 10      | 10        | 2        |
| <b>Decon/Remed.</b>    | 7   | 15     | 30      | 10      | 30      | 30        | 7        |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 2 |
|--------------------------------------|---|

|   |  |                     |      |  |  |  |  |
|---|--|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | H104 |  |  |  |  |
| <b>Use</b>                                    | Health Physics Sample Preparation Lab. Processing and preparation of RAM |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 1  |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 511   | 511     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 723   | 723     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 511   | 511     |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|  |     |                     |        |  |  |  |  |
|--|-----|---------------------|--------|--|--|--|--|
| <b>Building</b>  | 245 | <b>Room or Area</b> | H108-1 |  |  |  |  |
| <b>Use</b> IDR Brachytherapy Lab - Experiment, Calibration of high dose rate brach. source |     |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b>  |     |                     |        |  |  |  |  |
| <b>Area Classification</b>   | 3   |                     |        |  |  |  |  |
| <b># Floors above Basement</b>   |     |                     |        |  |  |  |  |
| <b># Floors below Roof</b>   |     |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 459   |         |                        |                                      |         | 459     |
| <b>Wall Area, ft<sup>2</sup></b>    | 686   |         |                        |                                      |         | 686     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 459   |         |                        |                                      |         | 459     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |  |                     |        |  |  |  |  |
|---|--|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | H108-2 |  |  |  |  |
| <b>Use</b>                                    | HDR Storage Closet, Source storage prior to use in experimental side |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3  |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |  |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 20    |         |                        |                                      |         | 20      |
| <b>Wall Area, ft<sup>2</sup></b>    | 143   |         |                        |                                      |         | 143     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 20    |         |                        |                                      |         | 20      |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |     |   |      |  |  |  |  |
|---|-----|---|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>   | H113 |  |  |  |  |
| <b>Use</b>                                    |     | Source Receiving Facility for manipulation of large items and incoming sample c |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |   |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |   |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 629   |         |                        |                          |         | 629     |
| <b>Wall Area, ft<sup>2</sup></b>    | 803   |         |                        |                          |         | 803     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 629   |         |                        |                          |         | 629     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |   |                     |        |  |  |  |  |
|---|---|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | H113-1 |  |  |  |  |
| <b>Use</b>                                    | Temp. Holding Vault. Temp.storage location for incoming and outgoing RAM packages |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 128   |         |                        |                          |         | 128     |
| <b>Wall Area, ft<sup>2</sup></b>    | 362   |         |                        |                          |         | 362     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 128   |         |                        |                          |         | 128     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |                             |                     |       |  |  |  |  |
|---|-----------------------------|---------------------|-------|--|--|--|--|
| <b>Building</b>                               | 245                         | <b>Room or Area</b> | 113-2 |  |  |  |  |
| <b>Use</b>                                    | Source Storage - High Level |                     |       |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                             |                     |       |  |  |  |  |
| <b>Area Classification</b>                    | 3                           |                     |       |  |  |  |  |
| <b># Floors above Basement</b>                |                             |                     |       |  |  |  |  |
| <b># Floors below Roof</b>                    |                             |                     |       |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 459   |         |                        |                                      |         | 459     |
| <b>Wall Area, ft<sup>2</sup></b>    | 686   |         |                        |                                      |         | 686     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 459   |         |                        |                                      |         | 459     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                            |                     |        |  |  |  |  |
|---|----------------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245                        | <b>Room or Area</b> | H113-3 |  |  |  |  |
| <b>Use</b>                                    | Source Storage - Low Level |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                            |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3                          |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                            |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                            |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 326   |         |                        |                                      |         | 326     |
| <b>Wall Area, ft<sup>2</sup></b>    | 578   |         |                        |                                      |         | 578     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 326   |         |                        |                                      |         | 326     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|   |   |                     |        |  |  |  |  |
|---|---|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245   | <b>Room or Area</b> | H113-4 |  |  |  |  |
| <b>Use</b>                                    | Source Receiving and Processing of incoming and outgoing packages |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |   |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3   |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |   |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |   |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 280   |         |                        |                                      |         | 280     |
| <b>Wall Area, ft<sup>2</sup></b>    | 690   |         |                        |                                      |         | 690     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 280   |         |                        |                                      |         | 280     |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | H115 Suite                      |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">H115 Calibration of low dose brachytherapy sources</div> <b>Use</b> <div style="border: 1px solid black; padding: 2px;">H115-1 brachytherapy caps seeds cal and HPGe specturm measurements</div> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     |                                 |                                   |                |                |  |
| <b>Area Classification</b>   | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 1049         |                     |                                 |                                   |                | 1049           |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 1884         |                     |                                 |                                   |                | 1884           |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 1049         |                     |                                 |                                   |                | 1049           |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |            |  |                  |  |                             |  |
|--------------------------|------------|--|------------------|--|-----------------------------|--|
| <b>Drains</b>            | <b>No.</b> |  | <b>Inch Dia.</b> |  | <b>Total ft<sup>3</sup></b> |  |
| <b>Ventilation Drops</b> | <b>No.</b> |  | <b>Inch Dia.</b> |  | <b>Total ft<sup>3</sup></b> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**



|   |                            |                     |        |  |  |  |  |
|---|----------------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245                        | <b>Room or Area</b> | H119-2 |  |  |  |  |
| <b>Use</b>                                    | Detector Testing Storage 2 |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                            |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3                          |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                            |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                            |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 54    |         |                        |                          |         | 54      |
| <b>Wall Area, ft<sup>2</sup></b>    | 235   |         |                        |                          |         | 235     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 54    |         |                        |                          |         | 54      |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                  |                     |        |  |  |  |  |
|---|------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245              | <b>Room or Area</b> | H119-3 |  |  |  |  |
| <b>Use</b>                                    | Detector Testing |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                  |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3                |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                  |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                  |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 2418  |         |                        |                                      |         | 2418    |
| <b>Wall Area, ft<sup>2</sup></b>    | 1574  |         |                        |                                      |         | 1574    |
| <b>Ceiling Area, ft<sup>2</sup></b> | 2418  |         |                        |                                      |         | 2418    |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

# Lab Samples to be collected

|                 |  |                     |      |  |  |  |  |
|-----------------|--|---------------------|------|--|--|--|--|
| <b>Building</b> | 245                                    | <b>Room or Area</b> | H120 |  |  |  |  |
|                 | Health Physics sample measurement lab. |                     |      |  |  |  |  |
| <b>Use</b>      | Measurement of RAM samples             |                     |      |  |  |  |  |

  

**Radionuclides, Extent of Contamination**

**Area Classification** 1

**# Floors above Basement**

**# Floors below Roof**

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 472   | 472     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 870   | 870     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 472   | 472     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |   |           |   |                       |   |
|-------------------|-----|---|-----------|---|-----------------------|---|
| Drains            | No. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Inch Dia. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Total ft <sup>3</sup> | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> |
| Ventilation Drops | No. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Inch Dia. | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> | Total ft <sup>3</sup> | <div style="border: 1px solid black; width: 50px; height: 20px;"></div> |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

  

**# Lab Samples to be collected**

1

|   |                  |  |                                 |                                   |                          |                              |                 |
|---|------------------|--|---------------------------------|-----------------------------------|--------------------------|------------------------------|-----------------|
| <b>Building</b>                               | 245              | <b>Room or Area</b>  | H204                            |                                   |                          |                              |                 |
|   |                  |  |                                 |                                   |                          |                              |                 |
| <b>Use</b>                                    |                  | Medium level chemical general<br>Source preparation, minor chemical operations |                                 |                                   |                          |                              |                 |
|   |                  |  |                                 |                                   |                          |                              |                 |
| <b>Radionuclides, Extent of Contamination</b> |                  |  |                                 |                                   |                          |                              |                 |
| <b>Area Classification</b>                    |                  | 1  |                                 |                                   |                          |                              |                 |
| <b># Floors above Basement</b>                |                  |  |                                 |                                   |                          |                              |                 |
| <b># Floors below Roof</b>                    |                  |  |                                 |                                   |                          |                              |                 |
|   | <b>Total</b>     | <b>Class 1</b>   | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>           | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>             | 410              | 410  |                                 |                                   |                          |                              |                 |
| <b>Wall Area, ft<sup>2</sup></b>              | 810              | 810  |                                 |                                   |                          |                              |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>           | 410              | 410  |                                 |                                   |                          |                              |                 |
|   |                  |  |                                 |                                   |                          |                              |                 |
| <b>Components</b>                             | <b>Total ft3</b> | <b>Fraction<br/>RW</b>   | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b> | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes                                   |                  |  |                                 |                                   |                          |                              |                 |
| Hoods   | 3                |  |                                 |                                   |                          |                              |                 |
| Benches/Tables/Desks                          |                  |  |                                 |                                   |                          |                              |                 |
| Casework/Cabinets                             |                  |  |                                 |                                   |                          |                              |                 |
| Reefers, Large Equipment                      |                  |  |                                 |                                   |                          |                              |                 |
| Misc. Equip./Labware                          |                  |  |                                 |                                   |                          |                              |                 |
| Hot Cells                                     |                  |  |                                 |                                   |                          |                              |                 |
| Storage Tanks                                 |                  |  |                                 |                                   |                          |                              |                 |
| Other   |                  |  |                                 |                                   |                          |                              |                 |
| Sinks   |                  |  |                                 |                                   |                          |                              |                 |
| Drains  |                  |  |                                 |                                   |                          |                              |                 |
| Ventilation Drops                             |                  |  |                                 |                                   |                          |                              |                 |
| <b>Drains</b>                                 | <b>No.</b>       | <b>Inch Dia.</b>   | <b>Total ft<sup>3</sup></b>     |                                   |                          |                              |                 |
| <b>Ventilation Drops</b>                      | <b>No.</b>       | <b>Inch Dia.</b>   | <b>Total ft<sup>3</sup></b>     |                                   |                          |                              |                 |
|   |                  |  |                                 |                                   |                          |                              |                 |
| <b>Person-hours</b>                           | <b>Mgr</b>       | <b>Supvsr</b>  | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>           | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>                           | 4                | 8  | 16                              |                                   |                          |                              | 4               |
| <b>Equip. Release</b>                         | 8                | 16   | 32                              |                                   |                          |                              | 8               |
| <b>Pack/Load waste</b>                        |                  |  |                                 |                                   |                          |                              |                 |
| <b>Decon/Remed.</b>                           |                  |  |                                 |                                   |                          |                              |                 |
| <b>Final Survey</b>                           | 4                | 8  | 16                              |                                   |                          |                              | 4               |
|   |                  |  |                                 |                                   |                          |                              |                 |
| <b># Lab Samples to be collected</b>          |                  | 1  |                                 |                                   |                          |                              |                 |

|   |                                      |                       |                                 |                                   |                |                |  |
|---|--------------------------------------|-----------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>                               | 245                                  | <b>Room or Area</b>   | H208                            |                                   |                |                |  |
| <b>Use</b>                                    | Medium level environmental chemistry |                       |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b> |                                      | Unsealed source usage |                                 |                                   |                |                |  |
| <b>Area Classification</b>                    | 1                                    |                       |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>                |                                      |                       |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>                    |                                      |                       |                                 |                                   |                |                |  |
|   | <b>Total</b>                         | <b>Class 1</b>        | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>             | 441                                  | 441                   |                                 |                                   |                |                |  |
| <b>Wall Area, ft<sup>2</sup></b>              | 840                                  | 840                   |                                 |                                   |                |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>           | 441                                  | 441                   |                                 |                                   |                |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              | 75        |                |                 |                   |                  |                      |
| Hoods                    | 600       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        | 400       |                |                 |                   |                  |                      |
| Reefers, Large Equipment | 200       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                | 30        |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                                |                     |      |  |  |  |  |
|---|--------------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                            | <b>Room or Area</b> | H210 |  |  |  |  |
| <b>Use</b>                                    | Medium level source production |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                | Various             |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                              |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                                |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                                |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 215   | 215     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 625   | 625     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 215   | 215     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 2         |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

**# Lab Samples to be collected**

1

|   |  |                                 |      |  |  |  |  |
|---|--|---------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b>             | H214 |  |  |  |  |
| <b>Use</b>                                    | High level radiochemistry, source prep., dilution, dispensing, & storage |                                 |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Various unsealed Liquid Sources |      |  |  |  |  |
| <b>Area Classification</b>                    | 1  |                                 |      |  |  |  |  |
| <b># Floors above Basement</b>                |  |                                 |      |  |  |  |  |
| <b># Floors below Roof</b>                    |  |                                 |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 625   | 625     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1015  | 1015    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 625   | 625     |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    | 800       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 1400      |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                | 1         |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other (Lead Pigs)        | 20        |                |                 |                   |                  |                      |
| Sinks                    | 2         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                            |   |      |  |  |  |  |
|---|----------------------------|---|------|--|--|--|--|
| <b>Building</b>                               | 245                        | <b>Room or Area</b>                               | H215 |  |  |  |  |
| <b>Use</b>                                    | Scintillation spectrometry |   |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                            | Various LowE Beta (H-3, C-14, etc.), Eu-152, Cs-1 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                          |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |                            |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                            |   |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 563   |         |                        |                          |         | 563     |
| <b>Wall Area, ft<sup>2</sup></b>    | 955   |         |                        |                          |         | 955     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 563   |         |                        |                          |         | 563     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 1         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**



|   |                |                     |      |  |  |  |  |
|---|----------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245            | <b>Room or Area</b> | H217 |  |  |  |  |
| <b>Use</b>                                    | Packaging Room |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 2              |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 281   |         |                        |                                      | 281     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 675   |         |                        |                                      | 675     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 281   |         |                        |                                      | 281     |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |  |            |  |  |  |  |  |
|---|-----|--|------------|--|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>  | H218 Suite |  |  |  |  |  |
| <b>Use</b>                                    |     | H218-1 high level nuclear medical research (NMC) , H218-2 medium level NMC |            |  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |  |            |  |  |  |  |  |
| <b>Area Classification</b>                    | 1   |  |            |  |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |            |  |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |            |  |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 499   | 499     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1160  | 1160    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 499   | 499     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 250       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 600       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                      |                     |      |  |  |  |  |
|---|----------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                  | <b>Room or Area</b> | H219 |  |  |  |  |
| <b>Use</b>                                    | Personel Decon. Room |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                      | N/A                 |      |  |  |  |  |
| <b>Area Classification</b>                    | 3                    |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                      |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                      |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 180   |         |                        |                          |         | 180     |
| <b>Wall Area, ft<sup>2</sup></b>    | 429   |         |                        |                          |         | 429     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 180   |         |                        |                          |         | 180     |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |   |           |   |                       |  |
|--------------------------|-----|---|-----------|---|-----------------------|--|
| <b>Drains</b>            | No. | 1 | Inch Dia. | 3 | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |   | Inch Dia. |   | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                         |                             |      |  |  |  |  |
|---|-------------------------|-----------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                     | <b>Room or Area</b>         | H220 |  |  |  |  |
| <b>Use</b>                                    | Alpha Beta Measurements |                             |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                         | Sealed and Unsealed Sources |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                       |                             |      |  |  |  |  |
| <b># Floors above Basement</b>                |                         |                             |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                         |                             |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 473   | 473     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 870   | 870     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 473   | 473     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 250       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 600       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 100       |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    | 4         |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |  |      |  |  |  |  |
|---|-----|--|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>                          | H221 |  |  |  |  |
| <b>Use</b>                                    |     | User contamination Check Room, counting lab. |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |  |      |  |  |  |  |
| <b>Area Classification</b>                    | 3   |  |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 169   |         |                        |                          | 169     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 530   |         |                        |                          | 530     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 169   |         |                        |                          | 169     |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     | 200       |                |                 |                   |                  |                      |
| Casework/Cabinets        | 100       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     | 20        |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

**# Lab Samples to be collected**

|   |                     |                     |      |  |  |  |  |
|---|---------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                 | <b>Room or Area</b> | H223 |  |  |  |  |
| <b>Use</b>                                    | Ionization Chambers |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                     |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 2                   |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                     |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                     |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 141   |         |                        |                          | 141     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 1180  |         |                        |                          | 1180    |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 141   |         |                        |                          | 141     |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                |                               |      |  |  |  |  |
|---|----------------|-------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245            | <b>Room or Area</b>           | H225 |  |  |  |  |
| <b>Use</b>                                    | Source storage |                               |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                | Various for Long term storage |      |  |  |  |  |
| <b>Area Classification</b>                    | 2              |                               |      |  |  |  |  |
| <b># Floors above Basement</b>                |                |                               |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                |                               |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 273   |         |                        |                          | 273     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 680   |         |                        |                          | 680     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 273   |         |                        |                          | 273     |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 4   | 8      | 16      |         |         |           | 4        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |   |      |  |  |  |  |
|---|-----|---|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>   | H227 |  |  |  |  |
| <b>Use</b>                                    |     | High-Medium level nuclear medicine research - delete this page from PDF |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |   |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |   |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |   |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |   |      |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 270   | 270     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 675   | 675     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 270   | 270     |                        |                                      |         |         |

  

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              | 100                   |                |                 |                   |                  |                      |
| Hoods                    | 600                   |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    | 1                     |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |     |                                  |      |  |  |  |  |
|---|-----|----------------------------------|------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>              | H229 |  |  |  |  |
| <b>Use</b>                                    |     | High-Medium Level SRM production |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |                                  |      |  |  |  |  |
| <b>Area Classification</b>                    | 1   |                                  |      |  |  |  |  |
| <b># Floors above Basement</b>                |     |                                  |      |  |  |  |  |
| <b># Floors below Roof</b>                    |     |                                  |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 441   | 441     |                        |                          |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 840   | 840     |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 441   | 441     |                        |                          |         |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 8   | 16     | 32      |         |         |           | 8        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                          |                     |      |  |  |  |  |
|---|--------------------------|---------------------|------|--|--|--|--|
| <b>Building</b>                               | 245                      | <b>Room or Area</b> | H233 |  |  |  |  |
| <b>Use</b>                                    | Low Level Radiochemistry |                     |      |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                          |                     |      |  |  |  |  |
| <b>Area Classification</b>                    | 1                        |                     |      |  |  |  |  |
| <b># Floors above Basement</b>                |                          |                     |      |  |  |  |  |
| <b># Floors below Roof</b>                    |                          |                     |      |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 602   | 602     |                        |                                      |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 995   | 995     |                        |                                      |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 602   | 602     |                        |                                      |         |         |

| Components               | Total ft <sup>3</sup> | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------------------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |                       |                |                 |                   |                  |                      |
| Hoods                    |                       |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |                       |                |                 |                   |                  |                      |
| Casework/Cabinets        |                       |                |                 |                   |                  |                      |
| Reefers, Large Equipment |                       |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |                       |                |                 |                   |                  |                      |
| Hot Cells                |                       |                |                 |                   |                  |                      |
| Storage Tanks            |                       |                |                 |                   |                  |                      |
| Other                    |                       |                |                 |                   |                  |                      |
| Sinks                    |                       |                |                 |                   |                  |                      |
| Drains                   |                       |                |                 |                   |                  |                      |
| Ventilation Drops        |                       |                |                 |                   |                  |                      |

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 4   | 8      | 16      |         |         |           | 4        |
| Equip. Release  | 8   | 16     | 32      |         |         |           | 8        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 4   | 8      | 16      |         |         |           | 4        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|  |              |                     |                                    |                                   |                |                |  |
|--|--------------|---------------------|------------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | H237-1 (Operations moved from C10) |                                   |                |                |  |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 20%;">Use</div> <div style="width: 80%;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Mass Spectrometry</div> <div style="border: 1px solid black; padding: 2px;">Samples prepared elsewhere</div> </div> </div> |              |                     |                                    |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     |                                    |                                   |                |                |  |
| <b>Area Classification</b>   | 2            |                     |                                    |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                    |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                    |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b>    | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 1262         |                     |                                    |                                   | 1262           |                |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 1740         |                     |                                    |                                   | 1740           |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 1262         |                     |                                    |                                   | 1262           |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |                  |                        |                                 |                                   |                             |                              |                 |
|---|------------------|------------------------|---------------------------------|-----------------------------------|-----------------------------|------------------------------|-----------------|
| <b>Building</b>   | 245              | <b>Room or Area</b>    | H237-3                          |                                   |                             |                              |                 |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Mass. Spec. Class 10,000 clean room</div> <b>Use</b> <span style="border: 1px solid black; padding: 2px;">Sample Prep. Including dilution, dissolution, &amp; purification/chem separations.</span> |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Radionuclides, Extent of Contamination</b>   |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Area Classification</b>  | 1                |                        |                                 |                                   |                             |                              |                 |
| <b># Floors above Basement</b>  |                  |                        |                                 |                                   |                             |                              |                 |
| <b># Floors below Roof</b>  |                  |                        |                                 |                                   |                             |                              |                 |
|   | <b>Total</b>     | <b>Class 1</b>         | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>               |                 |
| <b>Floor Area, ft<sup>2</sup></b>   | 667              | 667                    |                                 |                                   |                             |                              |                 |
| <b>Wall Area, ft<sup>2</sup></b>  | 1055             | 1055                   |                                 |                                   |                             |                              |                 |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 667              | 667                    |                                 |                                   |                             |                              |                 |
| <b>Components</b>   | <b>Total ft3</b> | <b>Fraction<br/>RW</b> | <b>Fraction<br/>DAW</b>         | <b>Fraction<br/>Metal</b>         | <b>Fraction<br/>Lead</b>    | <b>Fraction<br/>Concrete</b> |                 |
| Glove Boxes   |                  |                        |                                 |                                   |                             |                              |                 |
| Hoods   |                  |                        |                                 |                                   |                             |                              |                 |
| Benches/Tables/Desks  |                  |                        |                                 |                                   |                             |                              |                 |
| Casework/Cabinets   |                  |                        |                                 |                                   |                             |                              |                 |
| Reefers, Large Equipment  |                  |                        |                                 |                                   |                             |                              |                 |
| Misc. Equip./Labware  |                  |                        |                                 |                                   |                             |                              |                 |
| Hot Cells   |                  |                        |                                 |                                   |                             |                              |                 |
| Storage Tanks   |                  |                        |                                 |                                   |                             |                              |                 |
| Other   |                  |                        |                                 |                                   |                             |                              |                 |
| Sinks   |                  |                        |                                 |                                   |                             |                              |                 |
| Drains  |                  |                        |                                 |                                   |                             |                              |                 |
| Ventilation Drops   |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Drains</b>   | <b>No.</b>       |                        | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Ventilation Drops</b>  | <b>No.</b>       |                        | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                              |                 |
| <b>Person-hours</b>   | <b>Mgr</b>       | <b>Supvsr</b>          | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>             | <b>Clerical</b> |
| <b>Characterize</b>   | 4                | 8                      | 16                              |                                   |                             |                              | 4               |
| <b>Equip. Release</b>   | 8                | 16                     | 32                              |                                   |                             |                              | 8               |
| <b>Pack/Load waste</b>  |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Decon/Remed.</b>   |                  |                        |                                 |                                   |                             |                              |                 |
| <b>Final Survey</b>   | 4                | 8                      | 16                              |                                   |                             |                              | 4               |
| <b># Lab Samples to be collected</b>  |                  | 1                      |                                 |                                   |                             |                              |                 |

|   |              |                     |                                 |                                   |                |                |  |
|---|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>   | 245          | <b>Room or Area</b> | H237-5                          |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Mass Spectrometry Class 100 Clean Room</div> <b>Use</b> Trace and Ultratrace Environmental Sample Prep. |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>   |              |                     |                                 |                                   |                |                |  |
| <b>Area Classification</b>  | 3            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>  |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>  |              |                     |                                 |                                   |                |                |  |
|   | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>   | 150          |                     |                                 |                                   |                | 150            |  |
| <b>Wall Area, ft<sup>2</sup></b>  | 500          |                     |                                 |                                   |                | 500            |  |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 150          |                     |                                 |                                   |                | 150            |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                   |     |  |           |  |                       |  |
|-------------------|-----|--|-----------|--|-----------------------|--|
| Drains            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| Ventilation Drops | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours    | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-----|--------|---------|---------|---------|-----------|----------|
| Characterize    | 1   | 2      | 4       |         |         |           | 1        |
| Equip. Release  | 1   | 2      | 4       |         |         |           | 1        |
| Pack/Load waste |     |        |         |         |         |           |          |
| Decon/Remed.    |     |        |         |         |         |           |          |
| Final Survey    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                                 |                     |        |  |  |  |  |
|---|---------------------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245                             | <b>Room or Area</b> | H237-5 |  |  |  |  |
| <b>Use</b>                                    | Mass Spec. Clean Room Class 100 |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                 |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 3                               |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                                 |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                                 |                     |        |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 260   |         |                        |                          |         | 260     |
| <b>Wall Area, ft<sup>2</sup></b>    | 720   |         |                        |                          |         | 720     |
| <b>Ceiling Area, ft<sup>2</sup></b> | 260   |         |                        |                          |         | 260     |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 1   | 2      | 4       |         |         |           | 1        |
| <b>Equip. Release</b>  | 1   | 2      | 4       |         |         |           | 1        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 1   | 2      | 4       |         |         |           | 1        |

  

**# Lab Samples to be collected**

|   |                                    |                     |        |  |  |  |  |
|---|------------------------------------|---------------------|--------|--|--|--|--|
| <b>Building</b>                               | 245                                | <b>Room or Area</b> | H237-6 |  |  |  |  |
| <b>Use</b>                                    | Mass Spec Balance Room Class 10000 |                     |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                                    |                     |        |  |  |  |  |
| <b>Area Classification</b>                    | 2                                  |                     |        |  |  |  |  |
| <b># Floors above Basement</b>                |                                    |                     |        |  |  |  |  |
| <b># Floors below Roof</b>                    |                                    |                     |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 90    |         |                        |                          | 90      |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 380   |         |                        |                          | 380     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 90    |         |                        |                          | 90      |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |     |  |        |  |  |  |  |
|---|-----|--|--------|--|--|--|--|
| <b>Building</b>                               | 245 | <b>Room or Area</b>                          | H237-6 |  |  |  |  |
| <b>Use</b>                                    |     | Mass. Spectrometry Balance (sample weighing) |        |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |     |  |        |  |  |  |  |
| <b>Area Classification</b>                    | 2   |  |        |  |  |  |  |
| <b># Floors above Basement</b>                |     |  |        |  |  |  |  |
| <b># Floors below Roof</b>                    |     |  |        |  |  |  |  |

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 100   |         |                        |                          | 100     |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 400   |         |                        |                          | 400     |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 100   |         |                        |                          | 100     |         |

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|



|   |              |                     |                                 |                                   |                             |                          |                              |
|---|--------------|---------------------|---------------------------------|-----------------------------------|-----------------------------|--------------------------|------------------------------|
| <b>Building</b>   | 245          | <b>Room or Area</b> | H247-1                          |                                   |                             |                          |                              |
| <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> Low level Radiochemistry Clean Room-Sample Prep.<br/> Radioanalytical Work for Radionuclide Separations from low level radioactivity samples, and source prep. For radioactivity measurements. </div> |              |                     |                                 |                                   |                             |                          |                              |
| <b>Use</b>  |              |                     |                                 |                                   |                             |                          |                              |
| <b>Radionuclides, Extent of Contamination</b>   |              |                     |                                 |                                   |                             |                          |                              |
| <b>Area Classification</b>  |              | 2                   |                                 |                                   |                             |                          |                              |
| <b># Floors above Basement</b>  |              |                     |                                 |                                   |                             |                          |                              |
| <b># Floors below Roof</b>  |              |                     |                                 |                                   |                             |                          |                              |
|   | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b>              | <b>Class 3</b>           |                              |
| <b>Floor Area, ft<sup>2</sup></b>   | 840          |                     |                                 |                                   | 840                         |                          |                              |
| <b>Wall Area, ft<sup>2</sup></b>  | 1180         |                     |                                 |                                   | 1180                        |                          |                              |
| <b>Ceiling Area, ft<sup>2</sup></b>   | 840          |                     |                                 |                                   | 840                         |                          |                              |
| <b>Components</b>   |              | <b>Total ft3</b>    | <b>Fraction<br/>RW</b>          | <b>Fraction<br/>DAW</b>           | <b>Fraction<br/>Metal</b>   | <b>Fraction<br/>Lead</b> | <b>Fraction<br/>Concrete</b> |
| Glove Boxes   |              |                     |                                 |                                   |                             |                          |                              |
| Hoods   |              |                     |                                 |                                   |                             |                          |                              |
| Benches/Tables/Desks  |              |                     |                                 |                                   |                             |                          |                              |
| Casework/Cabinets   |              |                     |                                 |                                   |                             |                          |                              |
| Reefers, Large Equipment  |              |                     |                                 |                                   |                             |                          |                              |
| Misc. Equip./Labware  |              |                     |                                 |                                   |                             |                          |                              |
| Hot Cells   |              |                     |                                 |                                   |                             |                          |                              |
| Storage Tanks   |              |                     |                                 |                                   |                             |                          |                              |
| Other   |              |                     |                                 |                                   |                             |                          |                              |
| Sinks   |              |                     |                                 |                                   |                             |                          |                              |
| Drains  |              |                     |                                 |                                   |                             |                          |                              |
| Ventilation Drops   |              |                     |                                 |                                   |                             |                          |                              |
| <b>Drains</b>   | <b>No.</b>   |                     | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                          |                              |
| <b>Ventilation Drops</b>  | <b>No.</b>   |                     | <b>Inch Dia.</b>                |                                   | <b>Total ft<sup>3</sup></b> |                          |                              |
| <b>Person-hours</b>   | <b>Mgr</b>   | <b>Supvsr</b>       | <b>HP Tech</b>                  | <b>Shipper</b>                    | <b>Skilled</b>              | <b>Unskilled</b>         | <b>Clerical</b>              |
| <b>Characterize</b>   | 4            | 8                   | 16                              |                                   |                             |                          | 4                            |
| <b>Equip. Release</b>   | 4            | 8                   | 16                              |                                   |                             |                          | 4                            |
| <b>Pack/Load waste</b>  |              |                     |                                 |                                   |                             |                          |                              |
| <b>Decon/Remed.</b>   |              |                     |                                 |                                   |                             |                          |                              |
| <b>Final Survey</b>   | 2            | 4                   | 8                               |                                   |                             |                          | 2                            |
| <b># Lab Samples to be collected</b>  |              | 1                   |                                 |                                   |                             |                          |                              |

|  |              |                     |                                 |                                   |                |                |  |
|--|--------------|---------------------|---------------------------------|-----------------------------------|----------------|----------------|--|
| <b>Building</b>  | 245          | <b>Room or Area</b> | H247-2                          |                                   |                |                |  |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Low level Radiochemistry Clean Room-Fusion</div> <b>Use</b> <span style="border: 1px solid black; padding: 2px;">Sample drying, ashing, infusion. Labware storage and cleaning.</span> |              |                     |                                 |                                   |                |                |  |
| <b>Radionuclides, Extent of Contamination</b>  |              |                     |                                 |                                   |                |                |  |
| <b>Area Classification</b>   | 2            |                     |                                 |                                   |                |                |  |
| <b># Floors above Basement</b>   |              |                     |                                 |                                   |                |                |  |
| <b># Floors below Roof</b>   |              |                     |                                 |                                   |                |                |  |
|  | <b>Total</b> | <b>Class 1</b>      | <b>%<br/>needing<br/>Remed.</b> | <b>ft2<br/>needing<br/>Remed.</b> | <b>Class 2</b> | <b>Class 3</b> |  |
| <b>Floor Area, ft<sup>2</sup></b>  | 713          |                     |                                 |                                   | 713            |                |  |
| <b>Wall Area, ft<sup>2</sup></b>   | 1075         |                     |                                 |                                   | 1075           |                |  |
| <b>Ceiling Area, ft<sup>2</sup></b>  | 713          |                     |                                 |                                   | 713            |                |  |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other                    |           |                |                 |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   |           |                |                 |                   |                  |                      |
| Ventilation Drops        |           |                |                 |                   |                  |                      |

  

|                          |     |  |           |  |                       |  |
|--------------------------|-----|--|-----------|--|-----------------------|--|
| <b>Drains</b>            | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |
| <b>Ventilation Drops</b> | No. |  | Inch Dia. |  | Total ft <sup>3</sup> |  |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 4   | 8      | 16      |         |         |           | 4        |
| <b>Pack/Load waste</b> |     |        |         |         |         |           |          |
| <b>Decon/Remed.</b>    |     |        |         |         |         |           |          |
| <b>Final Survey</b>    | 2   | 4      | 8       |         |         |           | 2        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 1 |
|--------------------------------------|---|

|   |  |                     |                  |  |  |  |  |
|---|--|---------------------|------------------|--|--|--|--|
| <b>Building</b>                               | 245  | <b>Room or Area</b> | H-Wing Penthouse |  |  |  |  |
| <b>Use</b>                                    | HVAC, H2O Softner, Acid Vents (Perchloric), Radioactive Hood Exhaust |                     |                  |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |  | Various from labs   |                  |  |  |  |  |
| <b>Area Classification</b>                    | 1  |                     |                  |  |  |  |  |
| <b># Floors above Basement</b>                | 2  |                     |                  |  |  |  |  |
| <b># Floors below Roof</b>                    | 1  |                     |                  |  |  |  |  |

  

|                                     | Total | Class 1 | %<br>needing<br>Remed. | ft2<br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|-------|---------|------------------------|--------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 11948 | 11948   | 0.05                   | 597.4                    |         |         |
| <b>Wall Area, ft<sup>2</sup></b>    | 9198  | 9198    |                        |                          |         |         |
| <b>Ceiling Area, ft<sup>2</sup></b> | 11948 | 11948   |                        |                          |         |         |

  

| Components               | Total ft3 | Fraction<br>RW | Fraction<br>DAW | Fraction<br>Metal | Fraction<br>Lead | Fraction<br>Concrete |
|--------------------------|-----------|----------------|-----------------|-------------------|------------------|----------------------|
| Glove Boxes              |           |                |                 |                   |                  |                      |
| Hoods                    |           |                |                 |                   |                  |                      |
| Benches/Tables/Desks     |           |                |                 |                   |                  |                      |
| Casework/Cabinets        |           |                |                 |                   |                  |                      |
| Reefers, Large Equipment |           |                |                 |                   |                  |                      |
| Misc. Equip./Labware     |           |                |                 |                   |                  |                      |
| Hot Cells                |           |                |                 |                   |                  |                      |
| Storage Tanks            |           |                |                 |                   |                  |                      |
| Other: 3" PVC vent       | 60        | 1              | 1               |                   |                  |                      |
| Sinks                    |           |                |                 |                   |                  |                      |
| Drains                   | 62.2      |                |                 |                   |                  |                      |
| Ventilation Drops        | 4300.0    | 0.9            | 0.05            | 0.95              |                  |                      |

  

|                          |     |    |           |   |                       |      |
|--------------------------|-----|----|-----------|---|-----------------------|------|
| <b>Drains</b>            | No. | 14 | Inch Dia. | 8 | Total ft <sup>3</sup> | 62.2 |
| <b>Ventilation Drops</b> | No. |    | Inch Dia. |   | Total ft <sup>3</sup> |      |

  

| Person-hours           | Mgr | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|------------------------|-----|--------|---------|---------|---------|-----------|----------|
| <b>Characterize</b>    | 4   | 8      | 16      |         |         |           | 4        |
| <b>Equip. Release</b>  | 30  | 60     | 120     |         | 120     | 120       | 30       |
| <b>Pack/Load waste</b> | 35  | 70     | 140     | 60      | 140     | 140       | 35       |
| <b>Decon/Remed.</b>    | 4   | 16     | 40      | 8       | 40      | 40        | 4        |
| <b>Final Survey</b>    | 8   | 16     | 32      |         |         |           | 8        |

  

|                                      |   |
|--------------------------------------|---|
| <b># Lab Samples to be collected</b> | 8 |
|--------------------------------------|---|

Note: Ventillation above includes. 67 HEPAS in 12 banks

|   |                    |                     |  |  |  |  |
|---|--------------------|---------------------|--|--|--|--|
| <b>Building</b>                               | <div>Various</div> | <b>Room or Area</b> | <div>Laboratories Previously Used.</div> |  |  |  |
| <b>Use</b>                                    |                    | <div></div>         |  |  |  |  |
| <b>Radionuclides, Extent of Contamination</b> |                    | <div>Various</div>  |  |  |  |  |
| <b>Area Classification</b>                    | <div>2 and 3</div> |                     |  |  |  |  |
| <b># Floors above Basement</b>                | <div></div>        |                     |  |  |  |  |
| <b># Floors below Roof</b>                    | <div></div>        |                     |  |  |  |  |

|                                     | Total  | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------------|--------|---------|------------------------|--------------------------------------|---------|---------|
| <b>Floor Area, ft<sup>2</sup></b>   | 50000  |         |                        |                                      | 25000   | 25000   |
| <b>Wall Area, ft<sup>2</sup></b>    | 135000 |         |                        |                                      | 67500   | 67500   |
| <b>Ceiling Area, ft<sup>2</sup></b> | 50000  |         |                        |                                      | 25000   | 25000   |

| Components               | Total ft <sup>3</sup> | Fraction |                     |                       |                      |                          |
|--------------------------|-----------------------|----------|---------------------|-----------------------|----------------------|--------------------------|
|                          |                       | RW       | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead | ft <sup>3</sup> Concrete |
| Glove Boxes              |                       |          |                     |                       |                      |                          |
| Hoods                    |                       |          |                     |                       |                      |                          |
| Benches/Tables/Desks     |                       |          |                     |                       |                      |                          |
| Casework/Cabinets        |                       |          |                     |                       |                      |                          |
| Reefers, Large Equipment |                       |          |                     |                       |                      |                          |
| Misc. Equip./Labware     |                       |          |                     |                       |                      |                          |
| Hot Cells                |                       |          |                     |                       |                      |                          |
| Storage Tanks            |                       |          |                     |                       |                      |                          |
| Other                    |                       |          |                     |                       |                      |                          |
| Sinks                    |                       |          |                     |                       |                      |                          |
| Drains                   |                       |          |                     |                       |                      |                          |
| Ventilation Drops        |                       |          |                     |                       |                      |                          |

|                   |     |             |           |             |                       |             |
|-------------------|-----|-------------|-----------|-------------|-----------------------|-------------|
| Drains            | No. | <div></div> | Inch Dia. | <div></div> | Total ft <sup>3</sup> | <div></div> |
| Ventilation Drops | No. | <div></div> | Inch Dia. | <div></div> | Total ft <sup>3</sup> | <div></div> |

| Person-hours    | Mgr  | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|------|--------|---------|---------|---------|-----------|----------|
| Characterize    | 62.5 | 125    | 250     |         |         |           | 62.5     |
| Equip. Release  | 25   | 50     | 100     |         |         |           | 25       |
| Pack/Load waste |      |        |         |         |         |           |          |
| Decon/Remed.    |      |        |         |         |         |           |          |
| Final Survey    | 25   | 50     | 100     |         |         |           | 25       |

|                                      |               |
|--------------------------------------|---------------|
| <b># Lab Samples to be collected</b> | <div>25</div> |
|--------------------------------------|---------------|

**TAB 3.5: FACILITY ROLL-UP - Laboratories**

|                               | Total  | Class 1 | %<br>needing<br>Remed. | ft <sup>2</sup><br>needing<br>Remed. | Class 2 | Class 3 |
|-------------------------------|--------|---------|------------------------|--------------------------------------|---------|---------|
| Floor Area, ft <sup>2</sup>   | 151577 | 36813   |                        | 1615                                 | 34469   | 83459   |
| Wall Area, ft <sup>2</sup>    | 348064 | 62850   |                        | 298                                  | 81403   | 208334  |
| Ceiling Area, ft <sup>2</sup> | 152357 | 36813   |                        | 95                                   | 34469   | 84239   |

| Components               | Fraction              |    |                     |                       |                      | ft <sup>3</sup><br>Concrete |
|--------------------------|-----------------------|----|---------------------|-----------------------|----------------------|-----------------------------|
|                          | Total ft <sup>3</sup> | RW | ft <sup>3</sup> DAW | ft <sup>3</sup> Metal | ft <sup>3</sup> Lead |                             |
| Glove Boxes              | 370                   |    | 86.5                | 13.5                  |                      |                             |
| Hoods                    | 5245                  |    |                     | 215                   |                      |                             |
| Benches/Tables/Desks     | 17151                 |    | 2.5                 | 7.5                   |                      |                             |
| Casework/Cabinets        | 21534                 |    | 24.6                | 40.4                  |                      |                             |
| Reefers, Large Equipment | 41105                 |    |                     |                       |                      |                             |
| Misc. Equip./Labware     | 11014                 |    | 33                  | 7                     |                      |                             |
| Hot Cells                | 93                    |    |                     |                       |                      |                             |
| Storage Tanks            | 2718.6                |    | 260                 |                       |                      |                             |
| Other                    | 4813                  |    |                     |                       | 2.4                  |                             |
| Sinks                    | 474                   |    |                     | 25.2                  |                      |                             |
| Drains                   | 100.41                |    | 0.01                | 0.01                  |                      |                             |
| Ventilation Drops        | 4773.75               |    | 6.25                | 6.25                  |                      |                             |
| Waste in Storage         | 960                   |    | 768                 | 192                   |                      |                             |

|                   |     |                      |           |                      |                       |                      |
|-------------------|-----|----------------------|-----------|----------------------|-----------------------|----------------------|
| Drains            | No. | <input type="text"/> | Inch Dia. | <input type="text"/> | Total ft <sup>3</sup> | <input type="text"/> |
| Ventilation Drops | No. | <input type="text"/> | Inch Dia. | <input type="text"/> | Total ft <sup>3</sup> | <input type="text"/> |

| Person-hours    | Mgr   | Supvsr | HP Tech | Shipper | Skilled | Unskilled | Clerical |
|-----------------|-------|--------|---------|---------|---------|-----------|----------|
| Characterize    | 436   | 872    | 1748    |         |         |           | 436      |
| Equip. Release  | 524.5 | 1049   | 2106    | 4       | 129     | 129       | 523.5    |
| Pack/Load waste | 93.55 | 188.25 | 351     | 185     | 390     | 390       | 93.55    |
| Decon/Remed.    | 67.5  | 147.75 | 315     | 72      | 330     | 330       | 67.3     |
| Final Survey    | 355   | 711    | 1424    |         |         |           | 355      |

# Lab Samples to be collected

### 3.6 PLANNING AND PREPARATION (Work Days)

Estimate the number of workdays, by specific labor category, that will be required to complete planning and preparation activities. Include all labor categories, including Supervisor, Foreman, Craftsman, Technician, Health Physicist, Laborer, Clerical, and others as needed.

| Activity  | Project Mgr | Supervisor | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
|---|-------------|------------|---------------|---------|-------------------------------|---------------------------------|----------|
| Preparation of Documentation for Regulatory Agencies  | 15.0        | 15.0       | 5.0           | 15.0    |                               |                                 | 10.0     |
| Submittal of Decommissioning Plan to NRC when required by 10 CFR 30.36(g)(1), 40.42(g)(1), or 70.38(g)(1)                           | 5.0         |            |               | 5.0     |                               |                                 | 5.0      |
| Development of Work Plans   | 10.0        | 10.0       |               | 10.0    |                               |                                 | 10.0     |
| Procurement of Special Equipment  | 20.0        | 5.0        |               | 5.0     |                               |                                 | 5.0      |
| Staff Training  | 2.0         | 4.0        | 8.0           | 2.0     | 40.0                          | 40.0                            | 5.0      |
| Characterization of Radiological Condition (including sampling, soil and tailings analysis, or groundwater analysis, if applicable) | 54.5        | 109.0      | 218.5         |         |                               |                                 | 54.5     |
| Other (specify) Mobilization  | 1.0         | 2.0        | 8.0           | 1.0     |                               |                                 |          |
| TOTALS  | 107.5       | 145.0      | 239.5         | 38.0    | 40.0                          | 40.0                            | 89.5     |

### 3.7 DECONTAMINATION OR DISMANTLING OF RADIOACTIVE FACILITY COMPONENTS (Work Days)

Estimate the number of workdays, by specific labor category, that will be required to complete decontamination and/or dismantling activities for each facility component. Copy and complete this table as necessary for each room, laboratory, or area. Rooms, laboratories, or areas with similar levels of contamination may be consolidated in one table.

| Name of room, laboratory, or area: |              | NIST Laboratory Areas Roll-up |            |               |         |                               |                                 |          |
|------------------------------------|--------------|-------------------------------|------------|---------------|---------|-------------------------------|---------------------------------|----------|
| Level of Contamination:            |              |                               |            |               |         |                               |                                 |          |
| Component                          | Action       | Project Mgr                   | Supervisor | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
| Glove Boxes                        | Remove/Disp  | 2                             | 8          | 17            | 1       | 3                             | 3                               | 2        |
| Fume Hoods                         | Remove/Disp  | 6                             | 13         | 25            | 1       | 3                             | 3                               | 6        |
| Lab Benches                        | Decon/Remove | 1                             | 3          | 5             | 1       | 7                             | 7                               | 1        |
| Sinks                              | Decon/Remove | 1                             | 3          | 5             | 1       | 4                             | 4                               | 1        |
| Drains                             | Remove/Disp  | 4                             | 6          | 12            | 1       | 5                             | 5                               | 4        |
| Floors                             | Decon/Wipe   | 4                             | 6          | 12            | 1       | 10                            | 10                              | 4        |
| Walls                              | Decon/Wipe   | 3                             | 4          | 7             |         | 6                             | 6                               | 3        |
| Ceilings                           | Decon/Wipe   |                               |            |               |         |                               |                                 |          |
| Ventilation/Ductwork               | Remove/Disp  | 4                             | 12         | 28            | 1       | 15                            | 15                              | 4        |
| Cabinets                           | Decon/Remove | 4                             | 7          | 14            | 1       | 4                             | 4                               | 4        |
| Hot Cells                          | Remove/Disp  | 4                             | 4          | 7             | 1       | 4                             | 4                               | 4        |
| Equipment/Materials                | Sur/Rem/Disp | 38                            | 82         | 170           | 4       | 22                            | 22                              | 38       |
| Soil Plots                         | Sample       |                               |            |               |         |                               |                                 |          |
| Storage Tanks                      | Remov/Disp   | 4                             | 7          | 12            | 6       | 12                            | 12                              | 4        |
| Storage Areas                      | Remove/Disp  | 3                             | 4          | 7             | 3       | 1                             | 1                               | 3        |
| Radwaste Areas                     | Remove/Disp  | 3                             | 4          | 7             | 4       | 3                             | 3                               | 3        |
| Scrap Recovery Areas               | N/A          |                               |            |               |         |                               |                                 |          |
| Maintenance Shop                   | Remove/Disp  |                               |            |               |         |                               |                                 |          |
| Equipment Decontamination          | Remove/Disp  |                               |            |               |         |                               |                                 |          |
| Sources                            | Remove/Disp  | 5                             | 10         | 19            | 7       | 7                             | 7                               | 5        |
| Other (specify)                    | Remove/Disp  |                               |            |               |         |                               |                                 |          |
| TOTALS                             |              | 86                            | 173        | 347           | 33      | 106                           | 106                             | 86       |

### 3.8 RESTORATION OF CONTAMINATED AREAS ON FACILITY GROUNDS

#### (Work Days)

|  |             |                               |               |         |                               |                                 |          |
|--|-------------|-------------------------------|---------------|---------|-------------------------------|---------------------------------|----------|
| Estimate the number of work days, by specific labor category, that will be required to restore contaminated areas on the facility grounds. |             |                               |               |         |                               |                                 |          |
| Name of room, laboratory, or area:   |             | NIST Laboratory Areas Roll-up |               |         |                               |                                 |          |
| Activity   | Project Mgr | Supervisor                    | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
| Restore Floors   | 0           | 1                             | 2             | 0       | 2                             | 2                               | 0        |
| Restore Walls  |             |                               |               |         |                               |                                 |          |
| Restore Roof   |             |                               |               |         |                               |                                 |          |
| Restore Utilites   |             |                               |               |         |                               |                                 |          |
|  |             |                               |               |         |                               |                                 |          |
| TOTALS   | 0           | 1                             | 2             | 0       | 2                             | 2                               | 0        |



### 3.9 FINAL RADIATION SURVEY (Work Days)

Estimate the number of work days, by specific labor category, that will be required to conduct a final radiation survey.

| Name of room, laboratory, or area: |             | NIST Laboratory Areas Roll-up |               |         |                               |                                 |          |
|------------------------------------|-------------|-------------------------------|---------------|---------|-------------------------------|---------------------------------|----------|
| Activity                           | Project Mgr | Supervisor                    | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
| FSS Setup                          | 13          | 7                             | 6             |         |                               |                                 | 22       |
| Survey Packages                    | 13          | 6                             | 7             |         |                               |                                 | 22       |
| Class 1                            | 7           | 45                            | 103           |         |                               |                                 |          |
| Class 2                            | 6           | 16                            | 31            |         |                               |                                 |          |
| Class 3                            | 5           | 15                            | 31            |         |                               |                                 |          |
| TOTALS                             | 44          | 89                            | 178           |         |                               |                                 | 44       |

### 3.10 SITE STABILIZATION AND LONG-TERM SURVEILLANCE

#### (Work Days)

Estimate the number of work days, by specific labor category, that will be required to complete site stabilization and long-term surveillance activities.

| Activity                 | Project Mgr | Supervisor | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
|--------------------------|-------------|------------|---------------|---------|-------------------------------|---------------------------------|----------|
| No Site Stabilization or |             |            |               |         |                               |                                 |          |
| Long Term Maintenance    |             |            |               |         |                               |                                 |          |
|                          |             |            |               |         |                               |                                 |          |
|                          |             |            |               |         |                               |                                 |          |
|                          |             |            |               |         |                               |                                 |          |
| TOTALS                   |             |            |               |         |                               |                                 |          |

### 3.11 TOTAL WORK DAYS BY LABOR CATEGORY

| Enter the total work days for each specific labor category from the applicable table above (i.e., from the bottom rows of Tables 3.6 through 3.10). |             |            |               |         |                               |                                 |          |
|---|-------------|------------|---------------|---------|-------------------------------|---------------------------------|----------|
| Task  | Project Mgr | Supervisor | HP Technician | Shipper | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
| Planning and Preparation (TOTALS from Table 3.6)  | 108         | 145        | 240           | 38      | 40                            | 40                              | 90       |
| Decontamination and/or Dismantling of Radioactive Facility Components (Sum of TOTALS from all copies of Table 3.7)                                  | 86          | 173        | 347           | 33      | 106                           | 106                             | 86       |
| Restoration of Contaminated Areas on Facility Grounds (TOTALS from Table 3.8)   | 0           | 1          | 2             | 0       | 2                             | 2                               | 0        |
| Final Radiation Survey (TOTALS from Table 3.9)  | 44          | 89         | 178           |         |                               |                                 | 44       |
| Site Stabilization and Long-Term Surveillance (TOTALS from Table 3.10)  |             |            |               |         |                               |                                 |          |

### 3.12 WORKER UNIT COST SCHEDULE

Estimate labor costs (including salary, fringe benefits, and corporate overhead). Include all appropriate labor categories, including Supervisor, Foreman, Craftsman, Technician, Health Physicist, Laborer, Clerical, and others as needed.

| Labor Cost Component                  | Project Mgr | Supervisor | HP Technician | Shipper   | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical |
|---------------------------------------|-------------|------------|---------------|-----------|-------------------------------|---------------------------------|----------|
| Salary & Fringe (\$/year)             | \$114,540   | \$96,530   | \$80,442      | \$96,530  | \$49,280                      | \$44,130                        | \$48,680 |
| Overhead Rate (%)                     | 75%         | 75%        | 75%           | 75%       | 75%                           | 75%                             | 75%      |
| Total Cost Per Year                   | \$200,445   | \$168,928  | \$140,774     | \$168,928 | \$86,240                      | \$77,228                        | \$85,190 |
| Living Expenses (PD*7/5) <sup>1</sup> | \$419       | \$419      | \$419         | \$419     |                               |                                 |          |
| Total Cost Per Work Day <sup>2</sup>  | \$1,190     | \$1,068    | \$960         | \$1,068   | \$332                         | \$297                           | \$328    |

<sup>1</sup> Per Diem Rate: \$299 per day.

<sup>2</sup> Based on 260 work days per year (e.g., 260).

### 3.13 TOTAL LABOR COSTS BY MAJOR DECOMMISSIONING TASK

Multiply the estimated work days for each specific labor category (from Table 3.11) by the total cost per work day for the corresponding labor category (from Table 3.12), and enter the results in the table below. Then, add across all labor categories to determine the total labor costs for each major decommissioning task.

| Labor Cost Component  | Project Mgr | Supervisor | HP Technician | Shipper  | Radiation Workers (Craftsmen) | Radiation Workers (Non-skilled) | Clerical | Total Labor Cost |
|---|-------------|------------|---------------|----------|-------------------------------|---------------------------------|----------|------------------|
| Planning and Preparation  | \$127,876   | \$154,907  | \$229,929     | \$40,596 | \$13,268                      | \$11,881                        | \$29,325 | \$607,781        |
| Decontamination and/or Dismantling of Radioactive Facility Components | \$101,936   | \$184,953  | \$332,653     | \$34,854 | \$35,201                      | \$31,522                        | \$28,029 | \$749,148        |
| Restoration of Contaminated Areas on Facility Grounds                 | \$480       | \$863      | \$1,551       | \$431    | \$536                         | \$480                           | \$132    | \$4,473          |
| Final Radiation Survey  | \$52,340    | \$95,081   | \$170,887     |          |                               |                                 | \$14,417 | \$332,724        |
| Site Stabilization and Long-Term Surveillance                         |             |            |               |          |                               |                                 |          |                  |

### 3.14 PACKAGING, SHIPPING, AND DISPOSAL OF RADIOACTIVE WASTES (Excluding Labor Costs)

#### (a) Packing Material Costs

| Estimate the types and volumes of waste expected to be generated, along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container. |              |                      |                            |                        |                       |
|--|--------------|----------------------|----------------------------|------------------------|-----------------------|
| Waste Type   | Volume (ft3) | Number of Containers | Type of Containers         | Unit Cost of Container | Total Packaging Costs |
| DAW  | 1181         | 2.0                  | 20' Sea-Land or intermodal | \$2,000                | \$4,000               |
| Metal  | 507          | 3.0                  | 20' Sea-Land or intermodal | \$2,000                | \$6,000               |
| Lead   | 2            | 1.0                  | 55 gal. Drum               | \$200                  | \$200                 |
| Concrete   | 100          | 3.0                  | B-25                       | \$2,500                | \$7,500               |
| TOTAL  |              |                      |                            |                        | \$17,700              |

#### (b) Shipping Costs

| Estimate the types and volumes of waste expected to be generated, along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container. |                      |                               |                      |                             |                          |                      |
|--|----------------------|-------------------------------|----------------------|-----------------------------|--------------------------|----------------------|
| Waste Type   | Number of Truckloads | Unit Cost (\$/mile/truckload) | Surcharges (\$/mile) | Overweight Charges(\$/mile) | Distance Shipped (miles) | Total Shipping Costs |
| DAW  | 1                    | \$4.25                        | \$1.50               |                             | 525                      | \$3,019              |
| Metal  | 2.5                  | \$4.25                        | \$1.50               |                             | 525                      | \$7,547              |
| Lead   |                      | \$4.25                        | \$1.50               |                             | 525                      |                      |
| Concrete   | 0.5                  | \$4.25                        | \$1.50               |                             | 525                      | \$1,509              |
| TOTAL  | 4                    |                               |                      |                             |                          | \$12,075             |

#### (c) Waste Disposal Costs

| Estimate the volume of waste to be disposed. Multiply the volume of waste disposed by the unit disposal cost (including any volume based surcharges). Add any surcharges that are based on the number of containers of waste. along with the number and types of containers required for packaging the waste. Multiply the number of containers required by the unit cost per container. |                       |                  |                                 |              |  |                      |
|--|-----------------------|------------------|---------------------------------|--------------|--|----------------------|
| Waste Type   | Disposal Volume (ft3) | Density (lb/ft3) | Quantity or Disposal Mass (lbs) | Unit Cost    | Surcharges (based on \$/ft3 or \$/container) | Total Disposal Costs |
| DAW  | 1181                  | 20               | 23617                           | \$7.25       |  | \$171,224            |
| Metal  | 507                   | 70               | 35480                           | \$6.00       |  | \$212,880            |
| Lead   | 2                     | 350              | 840                             | \$5.00       |  | \$4,200              |
| Concrete   | 100                   | 100              | 10040                           | \$3.75       |  | \$37,648             |
| Liquid Waste   | 59                    | 63               | 3717                            | \$8.00       |  | \$29,736             |
| Class B Waste (WCS)  | 20                    | N/A              | N/A                             | \$700.00     |  | \$14,000             |
| Sealed Sources (Two-120ft3 shipments to WCS federal cell)  | 240                   | N/A              | 2                               | \$320,000.00 |  | \$640,000            |
| TOTAL  | 1791                  |                  |                                 |              |  | \$1,109,688          |

### 3.15 EQUIPMENT/SUPPLY COSTS (Excluding Containers)

| Estimate the quantity of equipment and supplies required for decommissioning and multiply that quantity by the appropriate unit costs. |          |           |                             |
|--|----------|-----------|-----------------------------|
| Equipment/Supplies   | Quantity | Unit Cost | Total Equipment/Supply Cost |
| Protective Clothing  | 4187     | \$7.5     | \$31,402                    |
| Respirators  | 738      | \$5       | \$3,688                     |
| HP Instruments   | 12       | \$2,200   | \$26,400                    |
| Misc Tools   | 1        | \$25,000  | \$25,000                    |
| Consumables  | 1        | \$5,000   | \$5,000                     |
| TOTAL  |          |           | \$91,489                    |

### 3.16 LABORATORY COSTS

If applicable, estimate the costs for analyses to be performed by an independent third party laboratory.

| Activity             | Quantity | Unit Cost | Total Item Cost |
|----------------------|----------|-----------|-----------------|
| Sampling             | 130      | \$15      | \$1,950         |
| Transport of Samples | 130      | \$20      | \$2,600         |
| Testing and Analysis | 130      | \$825     | \$107,250       |
| Other (specify)      |          |           |                 |
| TOTAL                |          |           | \$111,800       |



### 3.17 MISCELLANEOUS COSTS

| Estimate any other applicable costs. |            |
|--------------------------------------|------------|
| Activity                             | Total Cost |
| License Fees                         | \$2,700    |
| Insurance                            | \$101,648  |
| Taxes                                | \$303,688  |
|                                      |            |
| TOTAL                                | \$408,035  |

### 3.18 TOTAL DECOMMISSIONING COSTS

Enter the total costs reported in Tables 3.13, 3.14(a)-(c), 3.15, 3.16, and 3.17 into the appropriate cells below, and add them to obtain a subtotal. Add to the subtotal a contingency allowance in the amount of 25 percent of the total decommissioning cost estimate. Also, calculate for each task/component the percentage it represents of the total.

| Task/Component   | Cost        | Percentage |
|--|-------------|------------|
| Planning and Preparation (from Table 3.13)                                   | \$607,781   | 17.6%      |
| Decontamination and/or Dismantling of Radioactive Facility (From Table 3.13) | \$749,148   | 21.7%      |
| Restoration of Contaminated Areas on Facility Grounds (From Table 3.13)      | \$4,473     | 0.1%       |
| Final Radiation Survey (From Table 3.13)                                     | \$332,724   | 9.7%       |
| Packing Material Costs (TOTAL from Table 3.14(a))                            | \$17,700    | 0.5%       |
| Shipping Costs (TOTAL from Table 3.14(b))                                    | \$12,075    | 0.4%       |
| Waste Disposal Costs (TOTAL from Table 3.14(c))                              | \$1,109,688 | 32.2%      |
| Equipment/Supply Costs (TOTAL from Table 3.15)                               | \$91,489    | 2.7%       |
| Laboratory Costs (TOTAL from Table 3.16)                                     | \$111,800   | 3.2%       |
| Miscellaneous Costs (TOTAL from Table 3.17)                                  | \$408,035   | 11.8%      |
| SUBTOTAL   | \$3,444,914 | 100.0%     |
| 25% Contingency  | \$861,228   | 25.0%      |
| TOTAL DECOMMISSIONING COST ESTIMATE  | \$4,306,142 | 125.0%     |

**Decommissioning Cost Breakdown**

