

Q-List Questions

SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
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QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Security System in the WHF is not expected to perform any radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Security System in the WHF is not required to function to prevent, mitigate, or monitor any DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Security System in the WHF will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Security System in the WHF is not part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of Security System in the WHF will not affect any characteristics of the natural or engineered barrier that would prevent them from performing their isolation function.

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Attachment IV

SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Security System in the WHF does not have any collection, containment, and/or monitoring functions for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Security System in the WHF does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Security System in the WHF would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Security System in the WHF functions will provide detection and alarms for unauthorized intrusion or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Security System in the WHF may be required to function for special nuclear material accountability.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Security System in the WHF does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Security System in the WHF performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Security System in the WHF was previously on the Q-List by direct inclusion for the Balance of Plant, SSA 3.2.3.15 Security Facilities, as QA-1; but the Security System in the WHF has not been specifically analyzed or included on the Q-List.

O-List Questions

SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
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QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Hazardous Waste System in the WHF is not expected to perform any radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Hazardous Waste System in the WHF is not required to function to prevent, mitigate, or monitor any DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Hazardous Waste System in the WHF would not result in a credible Design Basis Event.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Hazardous Waste System in the WHF is not part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of Hazardous Waste System in the WHF will not affect any characteristics of the natural or engineered barrier that would prevent them from performing their isolation function.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Hazardous Waste System in the WHF does not have any collection, containment, and/or monitoring functions for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Hazardous Waste System in the WHF does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Hazardous Waste System in the WHF could have a failure mode resulting in a fire or explosion DBE if incompatible hazardous chemicals are mixed. However, it is expected that the Hazardous Waste System in the WHF will be designed and located to preclude these hazards from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Hazardous Waste System in the WHF does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Hazardous Waste System in the WHF performs no functions for special nuclear material accountability.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Hazardous Waste System in the WHF does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Hazardous Waste System in the WHF performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Hazardous Waste System in the WHF was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Hazardous Waste System in the WHF has not been specifically analyzed or included on the Q-List.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
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QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Radiological Waste System for the Waste Handling Facility is not required for high-level waste radiological functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. Handling of site-generated solid low-level waste provided by this system is not expected to exceed federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Radiological Waste System in the WHF is not required to function to prevent, mitigate, or monitor any DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

The Radiological Waste System in the WHF could have a failure mode resulting in a fire DBE due to combustion of typical solid radiological wastes such as contaminated paper.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Radiological Waste System in the WHF is not part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of Radiological Waste System in the WHF will not affect any characteristics of the natural or engineered barrier that would prevent them from performing their isolation function.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Radiological Waste System in the WHF collects and contains solid low level radioactive waste generated from maintenance activities in Waste Handling Facility.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Radiological Waste System in the WHF does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Radiological Waste System in the WHF could impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function. However, it is expected that the Radiological Waste System in the WHF will be designed and located to preclude fire as a result of a DBE from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Radiological Waste System in the WHF does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Waste System in the WHF performs no functions for special nuclear material accountability.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

Low level radioactive material contained in the Radiological Waste System in the WHF may require personnel access into radiation areas by its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Radiological Waste System in the WHF performs no radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Radiological Waste System in the WHF was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Radiological Waste System in the WHF has not been specifically analyzed or included on the Q-List.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
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QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Sanitary Waste System in the WHF is not expected to perform any radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Sanitary Waste System in the WHF is not required to function to prevent, mitigate, or monitor any DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

The direct failure of this SSC will not result in a credible design basis event.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Sanitary Waste System in the WHF is not part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of Sanitary Waste System in the WHF will not affect any characteristics of the natural or engineered barrier that would prevent them from performing their isolation function.

Q-List Questions

SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Sanitary Waste System in the WHF does not have any collection, containment, and/or monitoring functions for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Sanitary Waste System in the WHF does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Sanitary Waste System in the WHF could have a failure mode resulting in a fire DBE due to combustion of typical solid wastes such as paper. However, it is expected that the Sanitary Waste System in the WHF will be designed and located to preclude this hazard from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Sanitary Waste System in the WHF does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSC's function required for special nuclear material accountability?

Yes? Rationale:

The Sanitary Waste System in the WHF performs no functions for special nuclear material accountability.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Sanitary Waste System in the WHF does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Sanitary Waste System in the WHF performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Sanitary Waste System in the WHF was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Sanitary Waste System in the WHF has not been specifically specifically or included on the Q-List.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Architectural Features Level 4: N/A

Level 3: N/A Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
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QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Waste Handling Building Architectural Features does not function to provide radiological safety functions that will provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Waste Handling Building Architectural Features does not provide containment, shielding, and mitigation that may be required for released radioactive materials in the event of a DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Waste Handling Building Architectural Features will not lead to a radiological release because of the loss of confinement function of the structure.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Waste Handling Building Architectural Features is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Waste Handling Building Architectural Features will not affect the characteristics of the natural or engineered barriers.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Architectural Features **Level 4: N/A**

Level 3: N/A **Level 5: N/A**

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Waste Handling Building Architectural does not provide collection, containment and shielding for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Waste Handling Building Architectural does not provide a fire protection function.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Waste Handling Building Architectural Features, i.e., collapse, could impair the capability of QA-1 SSCs from performing their radiological safety function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Waste Handling Building Architectural Features does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Waste Handling Building Architectural Features will be located inside the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Waste Handling Building Architectural Features performs no special nuclear material accountability function.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Architectural Features Level 4: N/A

Level 3: N/A Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Waste Handling Building Architectural Features does not provide containment and shielding from radiological exposure to personnel working inside and outside the structure.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Waste Handling Building Architectural Features performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Waste Handling Building Architectural Features is contained on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.1 Waste Handling Building, as QA-1.

Q-List Questions

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Foundations and Structures Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Waste Handling Building Foundations and Structures function is to provide radiological safety which provides reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Waste Handling Building Foundations and Structures provides containment, shielding, and mitigation that may be required for released radioactive materials in the event of a DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Waste Handling Building Foundations and Structures, i.e., collapse, could lead to a radiological release because of the loss of confinement function of the structure.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Waste Handling Building Foundations and Structures is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Waste Handling Building Foundations and Structures will not affect the characteristics of the natural or engineered barriers.

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SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Foundations and Structures Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The design of the Waste Handling Building Foundations and Structures provides containment and shielding for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

As a result of the concrete construction of the Waste Handling Building Foundations and Structures, it may provide protection from the spread of fire between operating areas, and therefore, provide protection for QA-1 and QA-2 SSCs.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Waste Handling Building Foundations and Structures, i.e., collapse, could impair the capability of QA-1 SSCs from performing their radiological safety function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Waste Handling Building Building Foundations and Structures does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Waste Handling Building will be located inside the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Waste Handling Building Foundations and Structures performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU02 - Waste Handling Facility (WHF) System

SSC: Waste Handling Building Foundations and Structures Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Waste Handling Building Foundations and Structures provides containment and shielding from radiological exposure to personnel working inside and outside the structure.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Waste Handling Building Foundations and Structures performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is Important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Waste Handling Building Foundations and Structures is contained on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.1 Waste Handling Building, as QA-1.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communication System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Fire Alarm Communication System in the Radiological Waste Treatment Facility function to monitor potential fire condition DBEs that could result in radioactive releases above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Fire Alarm Communication System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Fire Alarm Communication System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communication System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility provides for the early detection of potential fire conditions that protect QA-1 SSCs and could result in radioactive releases.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Alarm Communication System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility only warns of fire. This system does not detect or alarm for unauthorized intrusions or unauthorized explosive materials.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communication System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Alarm Communication System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire Protection System, as QA-1; but the Fire Alarm Communication System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Office & Data System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Office & Data System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Office & Data System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Office & Data System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Office & Data System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Office & Data System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Office & Data System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Office & Data System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Phone System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Phone System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Phone System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Phone System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Phone System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Phone System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Phone System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Phone System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility may be required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Public Address/Central Alarm System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Public Address/Central Alarm System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00
Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Public Address/Central Alarm System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility may provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Public Address/Central Alarm System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Public Address/Central Alarm System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Security System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Security Alarm System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Security System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility provides for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Radiological Waste Treatment Facility will be a restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Balance of Plant, SSA 3.2.3.15 Security Facilities, as QA-1; but the Security System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: Backup Power Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Backup Power System in the Radiological Waste Treatment Facility supplies standby electric power from diesel generator for QA-1 SSCs during loss of normal power. The Backup Power Distribution System in the Radiological Waste Treatment Facility functions to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Backup Power Distribution System provides emergency power for equipment that may be required to prevent, mitigate, or monitor a DBE which would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Backup Power Distribution System in the Radiological Waste Treatment Facility will result in a DBE that may lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Backup Power Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: Backup Power Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Backup Power System in the Radiological Waste Treatment Facility supplies standby electric power from diesel generator during loss of normal power for Radiological Waste Treatment Facility equipment.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Backup Power Distribution System in the Radiological Waste Treatment Facility as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Backup Power Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, and Balance of Plant, SSA 3.2.3.2 Emergency and Backup Power Generator System, as QA-1; but the Backup Power Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The UPS Power Distribution System in the Radiological Waste Treatment Facility supplies emergency and uninterruptible electric power for personnel safety and critical operations during loss of normal power or DBEs. The UPS Power System in the Radiological Waste Treatment Facility functions to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The UPS Power System in the Radiological Waste Treatment Facility supplies emergency and uninterruptible electric power for personnel safety and critical operations during loss of normal power or a DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the UPS Power System in the Radiological Waste Treatment Facility will result in a DBE that may lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The UPS Power System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the UPS Power System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility supplies emergency and uninterruptible electric power for personnel safety and critical operations for Radiological Waste Treatment Facility equipment.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility performs no fire protection function.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the UPS Power System in the Radiological Waste Treatment Facility as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The UPS Power System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The UPS Power Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, and Balance of Plant, SSA 3.2.3.2 Emergency and Backup Power Generator System, as QA-1; but the UPS Power Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00
Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. Power requirements for radiological safety functions is provided by the UPS and Backup Power Systems in the Radiological Waste Treatment Facility.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBE. Power requirements for radiological safety functions is provided by the UPS and Backup Power Systems in the Radiological Waste Treatment Facility.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Utility Power Distribution System in the Radiological Waste Treatment Facility will result in a DBE that may lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Utility Power Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility supplies electric power for Radiological Waste Treatment Facility equipment.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility does not protect any QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Utility Power Distribution System in the Radiological Waste Treatment Facility as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Utility Power Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, as QA-1; but the Utility Power Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

O-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Decontamination System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1 QA-2 QA-3 QA-4 QA-5 QA-6 QA-7 Non-Q

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility ensures no transferable contamination remains on Radiological Waste Treatment Facility tools, equipment, or SSCs. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Facility Decontamination System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Facility Decontamination System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Decontamination System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility may collect and/or contain site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Facility Decontamination System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

O-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Decontamination System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility will reduce dose rates from the Radiological Waste Treatment Facility SSCs.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Facility Decontamination System in the Radiological Waste Treatment Facility, previously called "Decontamination Chemicals", is contained on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4 Waste Treatment Building, as QA-1; but the Facility Decontamination System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Monitor & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

Portions of the Facility Monitor & Control System in the Radiological Waste Treatment Facility may be required to function to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Facility Monitor & Control System in the Radiological Waste Treatment Facility function to prevent, mitigate, or monitor any potential DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Facility Monitor & Control System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Facility Monitor & Control System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Monitor & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility controls and monitors site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Facility Monitor & Control System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Facility Monitor & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Facility Monitor & Control System in the Radiological Waste Treatment Facility may performs a radiological monitoring function if SSD No. SU29, Waste Handling Facility Radiological Monitoring System, does not addresses this function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Facility Monitor and Control System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Facility Monitor & Control System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the General Lighting System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the General Lighting System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the General Lighting System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The General Lighting System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the General Lighting System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Safety/Security Lighting System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Safety/Security Lighting System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Safety/Security Lighting System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Radiological Waste Treatment Facility will be a restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Safety/Security Lighting System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Safety/Security Lighting System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Lightning Protection System in the Radiological Waste Treatment Facility functions to mitigate a potential DBE that could result in exceeding the federal limits. Lightning is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Lightning Protection System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Lightning Protection System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Lightning Protection System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Lightning Protection System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Lightning Protection System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List

O-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility provides chilled water to various systems and uses throughout the Radiological Waste Treatment Facility but performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Chilled Water Distribution System in the Radiological Waste Treatment Facility will not result in a DBE

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Chilled Water Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Chilled Water Distribution System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Chilled Water Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Chilled Water Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Industrial Air Distribution System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Industrial Air Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Industrial Air Distribution System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Industrial Air Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

O-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? **Rationale:**

The Industrial Air Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? **Rationale:**

The Industrial Air Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? **Rationale:**

The Industrial Air Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Industrial Air Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility may be required to perform radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility may be required to function to prevent, mitigate, or monitor any DBE. It is expected that QA-1 or QA-2 SSCs using the Instrument Air Distribution System in the Radiological Waste Treatment Facility will be designed to fail-safe on loss of the Instrument Air Distribution System but may be required to provide air to other instruments or equipment that may perform mitigating functions.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Instrument Air Distribution System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Instrument Air Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Instrument Air Distribution System in the Radiological Waste Treatment Facility would not impair the capability of any QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Instrument Air Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Instrument Air Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Potable Water Distribution System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Potable Water Distribution System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Potable Water Distribution System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Potable Water Distribution System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Potable Water Distribution System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Secondary Cooling Water System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Secondary Cooling Water System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Secondary Cooling Water System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Secondary Cooling Water System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Secondary Cooling Water System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Secondary Cooling Water System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Secondary Cooling Water System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Secondary Cooling Water System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Sewage Collection System in the Radiological Waste Treatment Facility will not result in a DBE. However, the Sewage Collection System in the Radiological Waste Treatment Facility could have a failure mode resulting in flooding or explosion from the build up of gases such as methane.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Sewage Collection System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Sewage Collection System in the Radiological Waste Treatment Facility could impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function. It is expected that the Sewage Collection System in the Radiological Waste Treatment Facility will be designed and located to preclude missile and fire hazards from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Sewage Collection System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Sewage Collection System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Vacuum System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Vacuum System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility may have collection and containment functions for site-generated radioactive waste because of radioactive particles or gases it may contain.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Vacuum System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

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Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility may require personnel access into radiation areas by its own radioactive source term because of radioactive particles or gases it may contain.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Vacuum System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Vacuum System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Acid Supply System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Acid Supply System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Acid Supply System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Acid Supply System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility could have a failure mode resulting in a fire or explosion DBE if incompatible hazardous chemicals are mixed. However, it is expected that the Acid Supply System in the Radiological Waste Treatment Facility will be designed and located to preclude these hazards from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Acid Supply System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Acid Supply System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Acid Supply System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Caustic Supply System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Caustic Supply System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Caustic Supply System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Caustic Supply System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility could have a failure mode resulting in a fire or explosion DBE if incompatible hazardous chemicals are mixed. However, it is expected that the Caustic Supply System in the Radiological Waste Treatment Facility will be designed and located to preclude these hazards from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Caustic Supply System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Caustic Supply System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Caustic Supply System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Stabilization Agent Supply System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Stabilization Agent Supply System in the Radiological Waste Treatment Facility will not result in a DBE

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Stabilization Agent Supply System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Stabilization Agent Supply System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Stabilization Agent Supply System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Process Supply Systems

Level 4: N/A

Level 3: Stabilization Agent Supply System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Stabilization Agent Supply System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Stabilization Agent Supply System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Fire Detection System in the Radiological Waste Treatment Facility function to monitor potential fire condition DBEs that could result in radioactive releases above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Fire Detection System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Fire Detection System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Detection System may protect QA-1 SSCs in the Radiological Waste Treatment Facility from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Detection System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Detection System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire System, as QA-1; but the Fire Detection System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Fire Suppression System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Fire Suppression System in the Radiological Waste Treatment Facility function to mitigate potential fire condition DBEs that could result in radioactive releases above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Fire Suppression System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Fire Suppression System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Fire Suppression System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Suppression System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Suppression System may protect QA-1 SSCs in the Radiological Waste Treatment Facility from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Suppression System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Suppression System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Suppression System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Suppression System In the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Suppression System In the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Suppression System In the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire Protection System, as QA-1; but the Fire Suppression System In the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Radiological Monitoring System measures, alarms, trends, displays, and reports radiation levels in the Radiological Waste Treatment Facility. The SSC performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Radiological Monitoring System in the Radiological Waste Treatment Facility function to monitor potential radioactive releases during DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Radiological Monitoring System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Radiological Monitoring System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility may be required to monitor site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Radiological Monitoring System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility contains permanently installed monitors for personnel radiation protection.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Radiological Monitoring System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4, Waste Treatment Building, as QA-1; but the Radiological Monitoring System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Security System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Security System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Security System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Security System in the Radiological Waste Treatment Facility as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Radiological Waste Treatment Facility will be a restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Security System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion for the Balance of Plant, SSA 3.2.3.15 Security Facilities, as QA-1; but the Security System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Hazardous Waste System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Hazardous Waste System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems Level 4: N/A

Level 3: Hazardous Waste System Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility could have a failure mode resulting in a fire or explosion DBE if incompatible hazardous chemicals are mixed. However, it is expected that the Hazardous Waste System in the Radiological Waste Treatment Facility will be designed and located to preclude these hazards from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems Level 4: N/A

Level 3: Hazardous Waste System Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List.

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Hazardous Waste System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Hazardous Waste System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility performs radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. Handling of site-generated solid low-level waste provided by this system is not expected to exceed federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility could have a failure mode resulting in a fire DBE due to combustion of typical solid radiological wastes such as contaminated paper.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Radiological Waste System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility collects and contains solid low level radioactive waste generated from spent nuclear fuel handling, and decontamination operations, and maintenance activities in the Waste Treatment Facility.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Radiological Waste System in the Radiological Waste Treatment Facility could impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function. However, it is expected that the Radiological Waste System in the Radiological Waste Treatment Facility will be designed and located to preclude fire as a result of a DBE from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

Low level radioactive material contained in the Radiological Waste System in the Radiological Waste Treatment Facility may require personnel access into radiation areas by its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Radiological Waste System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Radiological Waste System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Sanitary Waste System in the Radiological Waste Treatment Facility will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Sanitary Waste System in the Radiological Waste Treatment Facility will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility could have a failure mode resulting in a fire DBE due to combustion of typical solid wastes such as paper. However, it is expected that the Sanitary Waste System in the Radiological Waste Treatment Facility will be designed and located to preclude this hazard from causing a radioactive release.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility does not provide any personnel radiation shielding, reduce dose rates or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Sanitary Waste System in the Radiological Waste Treatment Facility was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Sanitary Waste System in the Radiological Waste Treatment Facility has not been specifically analyzed or included on the Q-List

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Waste Treatment Building

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Radiological Waste Treatment Building function is to provide radiological safety functions that will provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits by containing site-generated solid low-level radiological waste.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Radiological Waste Treatment Building provides containment, shielding, and mitigation that may be required for released radioactive materials in the event of a DBE.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Waste Handling Building, i.e., collapse, could lead to a radiological release because of the loss of confinement function of the structure.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Radiological Waste Treatment Building is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct Failure of the Radiological Waste Treatment Building will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Waste Treatment Building

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The design of the Radiological Waste Treatment Building provides containment and shielding for site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

As a result of the concrete construction of the Waste Treatment Building structure, it may provide protection from the spread of fire between operating areas, and therefore, provide protection for QA-1 SSCs.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Waste Treatment Building, i.e., collapse, could impair the capability of QA-1 SSCs from performing their radiological safety function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The function of the Waste Treatment Building does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the Waste Handling Building will be located inside the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Waste Treatment Facility performs no functions for special nuclear material accountability.

Q-List Questions

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Attachment IV

SDD: SU04 - Radiological Waste Treatment Facility System

SSC: Waste Treatment Building

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Waste Treatment Building provides shielding and reduces radiological dose rates to onsite personnel.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Waste Treatment Building performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Waste Treatment Building is contained on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.3.4 Waste Treatment Building, as QA-1.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Carrier Staging Shed

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Carrier Staging Shed provides the operations area for preparation of a waste transportation cask to enter the WHF or for leaving the repository, but this building does not have any radiological safety function since the spent nuclear fuel is still in the waste transportation cask designed for extreme transportation conditions without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Carrier Staging Shed is expected to function for expected events such as high wind and earthquakes, but this building does not have any radiological safety function since the spent nuclear fuel is still in the waste transportation cask.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Carrier Staging Shed would not result in a postulated DBE since the spent nuclear fuel is still in the waste transportation cask designed for extreme transportation conditions without exceeding federal limits.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Carrier Staging Shed is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Carrier Staging Shed will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Carrier Staging Shed

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Carrier Staging Shed performs no site-generated radioactive waste control function.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Carrier Staging Shed may provide protection from the spread of fire between operating areas, and therefore, provide protection for QA-1 SSCs.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Carrier Staging Shed could impair the capability of QA-1 SSCs from performing their radiological safety function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Carrier Staging Shed does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Carrier Staging Shed performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Carrier Staging Shed

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Carrier Staging Shed may provide shielding and reduces radiological dose rates to onsite personnel.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Carrier Staging Shed performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Carrier Staging Shed is contained on the Q-List by direct inclusion for the Surface Facilities, SSA 3.2.1.1.7 Support Facilities for the Waste Handling Building, as QA-1 but the Carrier Staging Shed has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communications System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Fire Alarm Communications System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Fire Alarm Communications System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits since the spent nuclear fuel is still in the waste transportation cask that is designed to withstand severe fire conditions.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Fire Alarm Communications System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Fire Alarm Communications System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Fire Alarm Communications System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communications System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Alarm Communications System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Alarm Communications System in the CSS provides for the early detection of potential fire conditions that protect QA-1 SSCs and could result in radioactive releases.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Alarm Communication System in the CSS as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Alarm Communications System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Alarm Communications System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Fire Alarm Communications System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Alarm Communications System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Alarm Communications System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Alarm Communication System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire Protection System, as QA-1; but the Fire Alarm Communication System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems Level 4: N/A

Level 3: Office & Data System Level 5: N/A

	QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
	<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?
 Yes? Rationale:
The Office & Data System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?
 Yes? Rationale:
The Office & Data System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?
 Yes? Rationale:
Direct failure of the Office & Data System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?
 Yes? Rationale:
The Office & Data System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?
 Yes? Rationale:
Direct failure of the Office & Data System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Office & Data System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Office & Data System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Office & Data System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Office & Data System in the CSS as a result of a DBE would not impair the operation of other QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Office & Data System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Office & Data System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Office & Data System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Office & Data System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Office & Data System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Office & Data System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Office & Data System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Phone System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Phone System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Phone System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Phone System in the CSS is not part of the natural or engineered barriers.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Phone System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Phone System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Phone System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Phone System in the CSS as a result of a DBE will not impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Phone System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Phone System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Phone System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Phone System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Phone System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Phone System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Phone System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Public Address/Central Alarm System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Public Address/Central Alarm System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Public Address/Central Alarm System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Public Address/Central Alarm System in the CSS is not part of the natural or engineered barriers.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Public Address/Central Alarm System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Public Address/Central Alarm System in the CSS as a result of a DBE will not impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS may provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Public Address/Central Alarm System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Public Address/Central Alarm System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Public Address/Central Alarm System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Security System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Security System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Security System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Security System in the CSS is not part of the natural or engineered barriers.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Security System in the CSS will not affect the characteristics of the natural or engineered barriers.

O-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Security System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Security System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Security System in the CSS as a result of a DBE will not impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Security System in the CSS may provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Security System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Communications Systems

Level 4: N/A

Level 3: Security System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Security System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Security System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Security System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.2 Communication System, as QA-1; but the Security System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Backup Power Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Backup Power Distribution System in the CSS supplies standby electric power from diesel generators for QA-1 SSCs during loss of normal power; however there are no identified QA-1 SSCs in the CSS. Therefore, the Backup Power Distribution System in the CSS is not required to function to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Backup Power Distribution System in the CSS is not required to prevent, mitigate, or monitor a DBE which would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Backup Power Distribution System in the CSS will result in a DBE that will not lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Backup Power Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Backup Power Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Backup Power Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Backup Power Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Backup Power Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Backup Power Distribution System in the CSS as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Backup Power Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Backup Power Distribution System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Backup Power Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Backup Power Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Backup Power Distribution System in the CSS performs no radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Backup Power Distribution System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, and Balance of Plant, SSA 3.2.3.2 Emergency and Backup Power Generator System, as QA-1; but the Backup Power Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The UPS Power System in the CSS supplies emergency and uninterruptible electric power for personnel safety and critical operations during loss of normal power; however there are no identified QA-1 SSCs in the CSS. Therefore, the UPS Power System in the CSS is not required to function to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The UPS Power System in the CSS is not required to prevent, mitigate, or monitor a DBE which would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the UPS Power System in the CSS will result in a DBE that will not lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The UPS Power System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the UPS Power System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The UPS Power System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The UPS Power System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the UPS Power System in the CSS as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The UPS Power System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The UPS Power System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: UPS Power System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The UPS Power System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The UPS Power System in the CSS performs no radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List.

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The UPS Power Distribution System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, and Balance of Plant, SSA 3.2.3.2 Emergency and Backup Power Generator System, as QA-1; but the UPS Power Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Utility Power Distribution System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. Power requirements for radiological safety functions is provided by the UPS and Backup Power Systems in the CSS.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Utility Power Distribution System in the CSS is not required to function to prevent, mitigate, or monitor any DBE. Power requirements for radiological safety functions is provided by the UPS and Backup Power Systems in the CSS.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Utility Power Distribution System in the CSS will result in a DBE that will not lead to a radioactive release above federal limits. Loss of Off-Site/On-Site Power is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Utility Power Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Utility Power Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Utility Power Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Utility Power Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Utility Power Distribution System in the CSS as a result of a fire DBE could impair the capability of QA-1 SSCs from performing their radiological safety functions. During a fire DBE, cables or equipment could prevent operation or cause maloperation due to hot shorts, open circuits, or shorts to ground.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Utility Power Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Utility Power Distribution System in the CSS performs no special nuclear material accountability function

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Electrical Systems

Level 4: N/A

Level 3: Utility Power Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Utility Power Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Utility Power Distribution System in the CSS performs no radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Utility Power Distribution System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.1 Power Distribution System, as QA-1; but the Utility Power Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Facility Monitoring & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Facility Monitor & Control System in the CSS is not be required to function to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Facility Monitor & Control System in the CSS is not required to prevent, mitigate, or monitor a DBE which would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Facility Monitor & Control System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Facility Monitor & Control System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Facility Monitor & Control System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Facility Monitoring & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The function and design of the Monitor & Control System in the CSS is not for collection, confinement, or monitoring of site-generated radioactive waste. SSD No. SU29, Waste Handling Facility Radiological Monitoring System, addresses this function.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Facility Monitoring & Control System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Facility Monitoring & Control System in the CSS as a result of a DBE will not impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Facility Monitoring & Control System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Facility Monitoring & Control System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Facility Monitoring & Control System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Facility Monitoring & Control System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Facility Monitor & Control System in the CSS may performs a radiological monitoring function if SSD No. SU29, Waste Handling Facility Radiological Monitoring System, does not addresses this function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Facility Monitor & Control System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Facility Monitor & Control System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

General Lighting System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The General Lighting System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the General Lighting System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The General Lighting in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the General Lighting System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The General Lighting System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The General Lighting System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the General Lighting System in the CSS as a result of a DBE would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The General Lighting System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The General Lighting System in the CSS performs no special nuclear material accountability function

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: General Lighting System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The General Lighting System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The General Lighting System in the CSS does not perform any radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The General Lighting System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the General Lighting System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Safety/Security Lighting System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Safety/Security Lighting System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Safety/Security Lighting System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Safety/Security Lighting System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Safety/Security Lighting System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Safety/Security Lighting System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Safety/Security Lighting System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Safety/Security Lighting System in the CSS as a result of a DBE is not expected to impair the capability of QA-1 or QA-2 from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Safety/Security Lighting System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the CSS will be a restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Safety/Security Lighting System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lighting Systems

Level 4: N/A

Level 3: Safety/Security Lighting System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Safety/Security Lighting System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Safety/Security Lighting System in the CSS performs no radiation monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Safety/Security Lighting System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Safety/Security Lighting System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Lightning Protection System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

Portions of the Lightning Protection System in the CSS functions to mitigate a potential DBE that could result in exceeding the federal limits. Lightning is a credible event potentially applicable to Yucca Mountain per Preliminary MGDS Hazards Analysis, B00000000-01717-0200-00130 REV 00. However, it is assumed that the shipping cask is designed to withstand a lightning strike.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Lightning Protection System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Lightning Protection System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Lightning Protection System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Lightning Protection System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Lightning Protection System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Lightning Protection System in the CSS as a result of a DBE is not expected to impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Lightning Protection System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Lightning Protection System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Lightning Protection System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Lightning Protection System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Lightning Protection System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Lightning Protection System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Lightning Protection System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Non-Nuclear HVAC System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Non-Nuclear HVAC System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Non-Nuclear HVAC System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits since the spent nuclear fuel is still in the waste transportation cask.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Non-Nuclear HVAC System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Non-Nuclear HVAC System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Non-Nuclear HVAC System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Non-Nuclear HVAC System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Non-Nuclear HVAC System in the CSS as a result of a DBE would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Non-Nuclear HVAC System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Non-Nuclear HVAC System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Non-Nuclear HVAC System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System (as required)

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Chilled Water Distribution System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Chilled Water Distribution System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Chilled Water Distribution System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Chilled Water Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Chilled Water Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System (as required)

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Chilled Water Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Chilled Water Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Chilled Water Distribution System in the CSS as a result of a DBE would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Chilled Water Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Chilled Water Distribution System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Chilled Water Distribution System (as required)

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Chilled Water Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Chilled Water Distribution System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Chilled Water Distribution System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Chilled Water Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Industrial Air Distribution System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Industrial Air Distribution System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Industrial Air Distribution System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Industrial Air Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Industrial Air Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Industrial Air Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Industrial Air Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Industrial Air Distribution System in the CSS as a result of a DBE would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Industrial Air Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Industrial Air Distribution System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Industrial Air Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Industrial Air Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Industrial Air Distribution System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Industrial Air Distribution System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Industrial Air Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Instrument Air Distribution System in the CSS in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Instrument Air Distribution System in the CSS may be required to function to prevent, mitigate, or monitor any DBE, but no QA-1 SSCs have been identified in the CSS that require Instrument Air. It is also assumed any QA-1 SSCs using the Instrument Air Distribution System in the CSS will be designed to fail-safe on loss of the Instrument Air Distribution System.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Instrument Air Distribution System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Instrument Air Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Instrument Air Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Instrument Air Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Instrument Air Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Instrument Air Distribution System in the CSS as a result of a DBE will not impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Instrument Air Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Instrument Air Distribution System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Instrument Air Distribution System (as required)

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Instrument Air Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Instrument Air Distribution System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Instrument Air Distribution System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Instrument Air Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Potable Water Distribution System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Potable Water Distribution System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Potable Water Distribution System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Potable Water Distribution System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Potable Water Distribution System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Potable Water Distribution System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Potable Water Distribution System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Potable Water Distribution System in the CSS as a result of a DBE would not impact or impair any QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Potable Water Distribution System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Potable Water Distribution System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Potable Water Distribution System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Potable Water Distribution System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Potable Water Distribution System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Potable Water Distribution System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Potable Water Distribution System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:
The Sewage Collection System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:
The Sewage Collection System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:
Direct failure of the Sewage Collection System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:
The Sewage Collection System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:
Direct failure of the Sewage Collection System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Sewage Collection System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Sewage Collection System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Sewage Collection System in the CSS as a result of a DBE would not impact or impair any QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Sewage Collection System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Sewage Collection System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Sewage Collection System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Sewage Collection System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Sewage Collection System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Sewage Collection System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Sewage Collection System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Vacuum System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Vacuum System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Vacuum System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Vacuum System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Vacuum System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Vacuum System in the CSS may have collection and containment functions for site-generated radioactive waste because of radioactive particles or gases it may contain.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Vacuum System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Vacuum System in the CSS as a result of a DBE will not impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Vacuum System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Vacuum System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Piped Utility Systems

Level 4: N/A

Level 3: Vacuum System (as required)

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Vacuum System in the CSS may require personnel access into radiation areas by its own radioactive source term because of radioactive particles or gases it may contain.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Vacuum System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Vacuum System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Vacuum System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Fire Detection System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Fire Detection System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits since the spent nuclear fuel is still in the waste transportation cask that is designed to withstand severe fire conditions.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Fire Detection System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Fire Detection System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Fire Detection System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Detection System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Detection System in the CSS may perform a fire detection function for the protection of the QA-1 SSCs.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Detection System in the CSS as a result of a DBE will not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Detection System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Detection System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Detection System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Detection System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Detection System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Detection System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire System, as QA-1; but the Fire Detection System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Fire Suppression System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Fire Suppression System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits since the spent nuclear fuel is still in the waste transportation cask that is designed to withstand severe fire conditions.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Fire Suppression System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Fire Suppression System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Fire Suppression System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Fire Suppression System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Fire Suppression System in the CSS may be required to protect QA-1 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Fire Suppression System in the CSS as a result of a DBE will not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Fire Suppression System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Fire Suppression System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Fire Suppression System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Fire Suppression System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Fire Suppression System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Fire Suppression System in the CSS was previously on the Q-List by direct inclusion for the Surface Service and Utility Systems, SSA 3.1.1.3.11 Fire System, as QA-1; but the Fire Suppression System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Radiological Monitoring System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Radiological Monitoring System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Radiological Monitoring System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Radiological Monitoring System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Radiological Monitoring System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Radiological Monitoring System in the CSS may be required to monitor site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Radiological Monitoring System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Radiological Monitoring System in the CSS as a result of a DBE would not impact or impair any QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Radiological Monitoring System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Monitoring System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Safety Systems

Level 4: N/A

Level 3: Radiological Monitoring System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Radiological Monitoring System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Radiological Monitoring System in the CSS contains permanently installed monitors for personnel radiation protection.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Radiological Monitoring System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Radiological Monitoring System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Security System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Security System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Security System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Security System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Security System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Security System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Security System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Security System in the CSS as a result of a DBE will not impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Security System in the CSS may provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area. It is expected that the CSS will be located in a restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Security System in the CSS may be required to provide an accountability function for the loaded casks brought into the staging area.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Security System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Security System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Security System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Security System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, SSA 3.2.1.1.7, Support Facility, as QA-1 but the Security System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Hazardous Waste System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Hazardous Waste System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Hazardous Waste System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Hazardous Waste System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Hazardous Waste System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Hazardous Waste System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Hazardous Waste System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Hazardous Waste System in the CSS as a result of a DBE will not impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Hazardous Waste System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSC's function required for special nuclear material accountability?

Yes? Rationale:

The Hazardous Waste System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Hazardous Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Hazardous Waste System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Hazardous Waste System in the CSS is not expected to have any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Hazardous Waste System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Hazardous Waste System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Radiological Waste System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Radiological Waste System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Radiological Waste System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Radiological Waste System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Radiological Waste System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Radiological Waste System for the Carrier Staging Shed may be required to collect, contain, and/or monitor small amounts of contaminated rags generated from equipment and vehicle decontamination.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Radiological Waste System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Radiological Waste System in the CSS as a result of a DBE will not impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Radiological Waste System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Radiological Waste System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Radiological Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Radiological Waste System may require personnel access into radiation areas by the source term of contaminated rags

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Radiological Waste System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Radiological Waste System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Radiological Waste System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Sanitary Waste System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits. No radioactive waste is included in this waste collection system.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Sanitary Waste System in the CSS is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Sanitary Waste System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Sanitary Waste System in the CSS is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Sanitary Waste System in the CSS will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Sanitary Waste System in the CSS does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Sanitary Waste System in the CSS does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of Sanitary Waste System in the CSS as a result of a DBE will not impair the capability of QA-1 and QA-2 SSCs from performing their radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Sanitary Waste System in the CSS does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Sanitary Waste System in the CSS performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU05 - Carrier Staging Shed (CSS) System

SSC: Solid Waste Collection Systems

Level 4: N/A

Level 3: Sanitary Waste System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Sanitary Waste System in the CSS does not provide any personnel radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Sanitary Waste System in the CSS performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Sanitary Waste System in the CSS was previously on the Q-List by direct inclusion of the Waste Handling Building, Site Generated Waste Collection Facilities, SSA 3.2.1.1.8, as QA-1 but the Sanitary Waste System in the CSS has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU08 - CSS Material Handling System

SSC: N/A

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The CSS Material Handling System controls the electromechanical equipment dedicated to preparing the transportation casks, and carriers for receipt at the waste handling areas. The Material Handling System in the CSS performs no radiological safety functions that would provide reasonable assurance that high level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding federal limits since the spent nuclear fuel is still in the waste transportation cask designed for extreme transportation conditions without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The CSS Material Handling System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the CSS Material Handling System could result in a equipment of material drop onto cask that would not result in a release above federal limits as discussed in Question 1.1.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The CSS Material Handling System is not a part of the natural or engineered barriers important to waste isolation

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the CSS Material Handling System will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU08 - CSS Material Handling System

SSC: N/A

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The CSS Material Handling System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The CSS Material Handling System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the CSS Material Handling System could potentially impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The CSS Material Handling System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The CSS Material Handling System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU08 - CSS Material Handling System

SSC: N/A

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The CSS Material Handling System does not provide shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The CSS Material Handling System performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The CSS Material Handling System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, SSA 3.2.1.1.7, Support Facility, as QA-1 but the CSS Material Handling System has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Cask Cart System transfers casks between the operating stations in the WHF, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Cask Cart System is required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Cask Cart System could lead to a radioactive release above the federal limits due to a collision type DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Cask Cart System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Cask Cart System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Cask Cart System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Cask Cart System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Cask Cart System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Cask Cart System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Cask Cart System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Cask Cart System may reduce dose rates by providing remote operation.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Cask Cart System performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Cask Cart System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Cart System has not been specifically analyzed or included on the Q-List.

Q-List Questions

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Cask Clean & Purge System checks the cask cavity pressure and gas for contamination which includes introducing a small negative pressure into the cask cavity, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Cask Clean & Purge System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Cask Clean & Purge System could lead to a radioactive release above the federal limits if loose radioactive material is present as a result the transportation and handling process.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Cask Clean & Purge System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Cask Clean & Purge System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes?

Rationale:

The Cask Clean & Purge System may collect and contain radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes?

Rationale:

The Cask Clean & Purge System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes?

Rationale:

Failure of the Cask Clean & Purge System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes?

Rationale:

The Cask Clean & Purge System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes?

Rationale:

The Cask Clean & Purge System does not provide a special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Cask Clean & Purge System may require access to components containing contaminated gas.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Cask Clean & Purge System is not expected to provide any area radiation monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Cask Clean & Purge System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Clean & Purge System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Decontamination System decontaminates unloaded casks and transfer carts if necessary. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Decontamination System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Decontamination System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Decontamination System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Decontamination System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Decontamination System may perform a site-generated radioactive waste control function.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Decontamination System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Decontamination System as a result of a DBE could impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function since portions of the Decontamination System have a failure mode resulting in flooding or missile as a result of a DBE.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Decontamination System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Decontamination System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Decontamination System will reduce dose rates on casks and transfer carts.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Decontamination System is not expected to perform any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

Failure of the Decontamination System as a result of a DBE could impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function since portions of the Decontamination System have a failure mode resulting in flooding or missile as a result of a DBE.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

- 1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?
- Yes? Rationale:
The Empty Cask Preparation System prepares empty shipping casks for off-site transfer and loads empty shipping casks on rail or truck carriers for on-site transfer to the Carrier Staging Shed. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.
- 1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?
- Yes? Rationale:
The Empty Cask Preparation System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.
- 1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?
- Yes? Rationale:
Direct failure of the Empty Cask Preparation System will not result in a DBE.

QA-2 - Important to Waste Isolation:

- 2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?
- Yes? Rationale:
The Empty Cask Preparation System is not a part of the natural or engineered barriers important to waste isolation.
- 2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?
- Yes? Rationale:
Direct failure of the Empty Cask Preparation System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Empty Cask Preparation System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Empty Cask Preparation System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Empty Cask Preparation System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Empty Cask Preparation System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Empty Cask Preparation System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Empty Cask Preparation System does not provide shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Empty Cask Preparation System is not expected to have any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Empty Cask Preparation System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Empty Cask Preparation System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty DPC Packaging System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Empty DPC Packaging System packages empty DPCs for off-site shipment after SFAs have been removed. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Empty DPC Packaging System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Empty DPC Packaging System will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Empty DPC Packaging System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Empty DPC Packaging System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty DPC Packaging System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes?

Rationale:

The Empty DPC Packaging System may be required to remove cuttings from the DPC lid removal process for shipment off-site.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes?

Rationale:

The Empty DPC Packaging System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes?

Rationale:

Failure of the Empty DPC Packaging System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes?

Rationale:

The Empty DPC Packaging System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes?

Rationale:

The Empty DPC Packaging System performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Assembly Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty DPC Packaging System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Empty DPC Packaging System is not expected to provide radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Empty DPC Packaging System is not expected to perform any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Empty DPC Packaging System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Empty DPC Packaging System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Cask Cart System transfers casks between the operating stations in the WHF, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Cask Cart System is required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Cask Cart System could lead to a radioactive release above the federal limits due to a collision type DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Cask Cart System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Cask Cart System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Cask Cart System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Cask Cart System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Cask Cart System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Cask Cart System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Cask Cart System performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Cart System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes?

Rationale:

The Cask Cart System may reduce dose rates by providing remote operation.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes?

Rationale:

The Cask Cart System performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes?

Rationale:

The Cask Cart System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Cart System has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Cask Clean & Purge System checks the cask cavity pressure and gas for contamination which includes introducing a small negative pressure into the cask cavity, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Cask Clean & Purge System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Cask Clean & Purge System could lead to a radioactive release above the federal limits if loose radioactive material is present as a result the transportation and handling process.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Cask Clean & Purge System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Cask Clean & Purge System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Cask Clean & Purge System may collect and contain radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Cask Clean & Purge System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Cask Clean & Purge System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Cask Clean & Purge System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Cask Clean & Purge System does not provide a special nuclear material accountability function.

Q-List Questions

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Clean & Purge System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Cask Clean & Purge System may require access to components containing contaminated gas.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Cask Clean & Purge System is not expected to provide any area radiation monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Cask Clean & Purge System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Clean & Purge System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Hoist System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Cask Hoist System may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Cask Hoist System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Cask Hoist System could lead to a radioactive release above the federal limits.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Cask Hoist System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Cask Hoist System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Hoist System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Cask Hoist System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Cask Hoist System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Cask Hoist System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Cask Hoist System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSC's function required for special nuclear material accountability?

Yes? Rationale:

The Cask Hoist System does not provide a special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Hoist System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Cask Hoist System does not provide radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Cask Hoist System is not expected to provide any area radiation monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Cask Hoist System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Hoist System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Lid Unbolter System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Cask Lid Unbolter System provides a remote method of removing the cask lid, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Cask Lid Unbolter System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Cask Lid Unbolter System will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Cask Lid Unbolter System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Cask Lid Unbolter System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Lid Unbolter System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Cask Lid Unbolter System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Cask Lid Unbolter System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Cask Lid Unbolter System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Cask Lid Unbolter System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSC's function required for special nuclear material accountability?

Yes? Rationale:

The Cask Lid Unbolter System performs no special nuclear material accountability function.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Cask Lid Unbolter System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Cask Lid Unbolter System may reduce dose rates by providing remote operation.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Cask Lid Unbolter System performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Cask Lid Unbolter System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Cask Lid Unbolter System has not been specifically analyzed or included on the Q-List.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Decontamination System decontaminates unloaded casks and transfer carts if necessary. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Decontamination System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Decontamination System in the CSS will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Decontamination System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Decontamination System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

B00000000-01717-0200-00134 Rev 00

Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Decontamination System may perform a site-generated radioactive waste control function.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Decontamination System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Decontamination System as a result of a DBE could impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function since portions of the Decontamination System have a failure mode resulting in flooding or missile as a result of a DBE.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Decontamination System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Decontamination System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Decontamination System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Decontamination System will reduce dose rates on casks and transfer carts.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Decontamination System is not expected to perform any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

Failure of the Decontamination System as a result of a DBE could impair QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function since portions of the Decontamination System have a failure mode resulting in flooding or missile as a result of a DBE.

Q-List Questions

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input type="checkbox"/>	<input checked="" type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes? Rationale:

The Empty Cask Preparation System prepares empty shipping casks for off-site transfer and loads empty shipping casks on rail or truck carriers for on-site transfer to the Carrier Staging Shed. This system is not required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes? Rationale:

The Empty Cask Preparation System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes? Rationale:

Direct failure of the Empty Cask Preparation System will not result in a DBE.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes? Rationale:

The Empty Cask Preparation System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes? Rationale:

Direct failure of the Empty Cask Preparation System will not affect the characteristics of the natural or engineered barriers.

O-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Empty Cask Preparation System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Empty Cask Preparation System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Empty Cask Preparation System would not impact or impair a QA-1 or QA-2 SSC from performing its radiological safety or waste isolation function.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Empty Cask Preparation System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Empty Cask Preparation System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Canister Transfer Line Cask Systems

Level 4: N/A

Level 3: Empty Cask Preparation System

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Empty Cask Preparation System does not provide shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Empty Cask Preparation System is not expected to have any radiological monitoring functions.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Empty Cask Preparation System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Empty Cask Preparation System has not been specifically analyzed or included on the Q-List.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Carrier Bay Crane System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-1	QA-2	QA-3	QA-4	QA-5	QA-6	QA-7	Non-Q
<input checked="" type="checkbox"/>	<input type="checkbox"/>						

QA-1 - Important to Radiological Safety:

1.1 Is the SSC required to provide reasonable assurance that high-level waste can be received, handled, packaged, stored, emplaced, and retrieved without exceeding the federal limits?

Yes?

Rationale:

The Carrier Bay Crane System lifts the shipping cask from a truck or rail carrier and places the cask on a preparation cart, and may be required to provide reasonable assurance that high-level waste can be received, handled, and packaged without exceeding federal limits.

1.2 Is the SSC required to function to prevent, mitigate, or monitor a credible Design Basis Event which would otherwise result in a radioactive release above the federal limits?

Yes?

Rationale:

The Carrier Bay Crane System is not required to function to prevent, mitigate, or monitor any DBEs that would otherwise result in a radioactive release above federal limits.

1.3 Will the direct failure of the SSC result in a credible Design Basis Event which would lead to a radioactive release above the federal limits?

Yes?

Rationale:

Direct failure of the Carrier Bay Crane System could lead to a radioactive release above the federal limits.

QA-2 - Important to Waste Isolation:

2.1 Does the SSC perform a waste isolation function by forming part of the natural or engineered barriers?

Yes?

Rationale:

The Carrier Bay Crane System is not a part of the natural or engineered barriers important to waste isolation.

2.2 Can direct failure of the SSC significantly affect the hydrological, geochemical, or geomechanical characteristics of the natural or engineered barriers which may prevent them from performing their waste isolation function?

Yes?

Rationale:

Direct failure of the Carrier Bay Crane System will not affect the characteristics of the natural or engineered barriers.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Carrier Bay Crane System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-3 - Important to Radioactive Waste Control:

3.1 Is the function of the SSC designed for collection, containment, and/or monitoring of site-generated radioactive waste?

Yes? Rationale:

The Carrier Bay Crane System does not collect, contain, or monitor any site-generated radioactive waste.

QA-4 - Important to Fire Protection:

4.1 Does the SSC protect QA-1 or QA-2 SSCs from the effects of fire?

Yes? Rationale:

The Carrier Bay Crane System does not protect QA-1 or QA-2 SSCs from the effects of fire.

QA-5 - Important to Potential Interaction:

5.1 As a result of a Design Basis Event, could failure of the SSC impair the capability of QA-1 or QA-2 SSCs from performing their radiological safety or waste isolation function?

Yes? Rationale:

Failure of the Carrier Crane System resulting from a DBE would not cause damage to the shipping cask or the preparation cart other than what was already identified in Question 1.3.

QA-6 - Important to Physical Protection of Facility and Materials:

6.1 Does the SSC's function provide detection or alarm of unauthorized intrusion or unauthorized explosive materials in the restricted area?

Yes? Rationale:

The Carrier Bay Crane System does not provide for detection or alarm of unauthorized intrusions or unauthorized explosive materials in the restricted area.

6.2 Is the SSCs function required for special nuclear material accountability?

Yes? Rationale:

The Carrier Bay Crane System performs no special nuclear material accountability function.

Q-List Questions

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Attachment IV

SDD: SU09 - Cask/Canister Handling System

SSC: Carrier Bay Crane System

Level 4: N/A

Level 3: N/A

Level 5: N/A

QA-7 - Important to Occupational Radiological Exposure:

7.1 Does the SSC provide personnel radiation shielding, reduce dose rates in radioactive areas, or require personnel access into radiation areas by its own radioactive source term?

Yes? Rationale:

The Carrier Bay Crane System does not provide radiation shielding, reduce dose rates, or have its own radioactive source term.

7.2 Is the SSC a permanently installed radiation monitor which monitors areas for personnel radiation protection?

Yes? Rationale:

The Carrier Bay Crane System performs no radiological monitoring function.

Previous QA Classification:

This question is for historical and traceability purposes only. A "yes" answer to this question does not provide inclusion to the Q-List

8.0 Are there other factors, such as previous analyses, a body of consensus, or by direct inclusion, that led to the previous conclusion that this SSC is important to radiological safety (QA-1) or waste isolation (QA-2)?

Yes? Rationale:

The Carrier Bay Crane System was previously on the Q-List by direct inclusion of the Waste Handling Facilities, Cask-handling Facilities, SSA 3.2.1.1.2, as QA-1 but the Carrier Bay Crane System has not been specifically analyzed or included on the Q-List.