MVF Decommissioning Cost Estimate For Financial Assurance Basis of Estimate

| | | Number of | | Schedule | | Number of | |
|---------|---|-----------------------|--|----------|--------------------|------------|---|
| | | Personnel | | Duration | Total Hours | Waste | |
| Task # | Task Name | Assigned | Job Functions Assigned | (weeks) | per Position | Containers | Task Description / Assumptions |
| General | All | See Task Detail Below | | | | | Overaching scope assumption is that the MVF will cease operation after a defined operating period and return to "normal" RCRA hazardous waste use by US Ecology. All permanent and installed structures will remain, sans security fencing installed around rail track. Scope includes decontamination of structures and surfaces, transportation and disposal of any waste remaining at the site, and performance of Final Status Surveys (FSS) in accordance with MARSSIM to demonstrate successful license termination. |
| 1 | Project Planning & Document Preparatior | 6 | PM, CHP, HP, Field Supervisor, Safety, T&D Coordinator | 6 | 120 | | Decommissioning Plan, Characterization Work Plan, T&D Plan, SSHP. All job functions work part-time on planning documents. All defined job functions assumed to be part-time (20 hrs/wk) for 6 weeks. Schedule duration does not include regulatory review cycles. |
| 2 | Site Charcterization | 9 | PM, CHP, HP, Field Supervisor, Safety, Technicians (4) | 2 | 80 | | Building Surface Measurements, Soil Sampling, MARRSIM characterization surveys. All positions assumed to be full-time for 2 weeks, except CHP (half-time). Assumes one Mob-De-mob cycle for each team member including airfare, per-diem, lodging, etc. |
| 3 | Site Work | 10 | PM, CHP, HP, Field Supervisor, Safety, T&D Coordinator, Technicians (4) | 3 | 120 | | Decontamination, Dismantlement (as required) and Waste Package Loading/Shipping. All defined job functions (except CHP) assumed to be full-time in the field for 3 weeks. Light building contamination assumed due to low activity cncentrations of bulk waste handled in facility (limited by USEI WAC). Little to no soil contamination due to containment of bulk waste offloading activities and very limited waste processing/repackaging. Assumes one Mob-De-mob cycle for each team member including airfare, per-diem, lodging, etc. |
| 4 | Waste Transportation and Disposal | 9 | PM, HP, Field Supervisor, Safety, T&D Coordinator, Technicians (4) | 1 | 40 | | Waste package loading, marking, labeling, surveying and dispsoal site manifesting. Scope also includes all transportation coordination and container fleet management activities. All defined job functions (ecept CHP) assumed to be full-time in the field for 1 week (in addition to 'Site Work' task). Waste shipping will begin concurrent with 'Site Work' Task and continue beyond. |
| 4a | LARW | | | | | 10 | 1000 tons of low-activity waste (10 railcars) assumed to be in inventory. Alternate disposal at USE Idaho assumed. |
| 4b | LLRW | | | | | 3 | 100 ft3 of LLRW in (3) B-25 boxes assumed in inventory. Class A LLRW dispsoal assumed. |
| 4c | Sealed Sources | | | | | 3 | 3 drums of sources assumed to be in inventory. Class A LLRW disposal assumed. |
| 5 | MARSSIM Final Status Survey | 8 | PM, CHP, HP, Field Supervisor, Technicians (4) | 3 | 120 | | Includes all FSS surveys, documentation, report generation, and regulatory review cycles. |

MVF Decommissioning Cost Estimate For Financial Assurance

As of: 01/30/2019

| | | | LABOR | | | | | | |
|-----------------------------------|--------------------|-------------|---------|-----------|--------------|--|--|--|--|
| | Number of | Rate (Fully | | Number of | | | | | |
| Labor Category | Personnel | Burdened) | Unit | Hours | Extended | Notes | | | |
| Project Manager | 1 | \$150.00 | \$/hour | 480 | \$72,000.00 | | | | |
| Field Supervisor | 1 | \$125.00 | \$/hour | 480 | \$60,000.00 | | | | |
| T&D Coordinator | 1 | \$75.00 | \$/hour | 280 | \$21,000.00 | | | | |
| Technician | 4 | \$65.00 | \$/hour | 360 | \$93,600.00 | | | | |
| Safety Engineer | 1 | \$125.00 | \$/hour | 360 | \$45,000.00 | | | | |
| Certified Health Physicist | 1 | \$180.00 | \$/hour | 240 | | Assumed half-time | | | |
| Health Physicist | 1 | \$125.00 | \$/hour | 480 | \$60,000.00 | | | | |
| | | | | | \$0.00 | | | | |
| Labor Subtotal | | | | 2680 | \$394,800.00 | | | | |
| NON-LABOR | | | | | | | | | |
| | Number of | _ | | Total | | | | | |
| Item | Personnel or Items | Rate | Unit | Number | Extended | Notes | | | |
| Per diem - Meals | 10 | \$50.00 | day | 300 | | Characterization + Site Work | | | |
| Lodging + Tax (Boise, ID) | 10 | \$150.00 | day | 300 | | Characterization + Site Work | | | |
| Rental Car | 3 | \$400.00 | week | 9 | . , | Characterization + Site Work | | | |
| Rental Car Fuel | 3 | \$50.00 | each | 9 | | Characterization + Site Work | | | |
| Parking | 3 | \$75.00 | week | 9 | \$675.00 | Characterization + Site Work | | | |
| Airfare | 10 | \$1,100.00 | RT | 20 | 1) | Characterization + Site Work | | | |
| Supplies | n/a | \$5,000.00 | lot | 1 | \$5,000.00 | | | | |
| Heavy Equipment | n/a | \$2,500.00 | week | 3 | \$7,500.00 | | | | |
| Lab Analysis | n/a | \$400.00 | sample | 100 | | (50) characterization and (50) FSS samples | | | |
| | | | | | \$0.00 | | | | |
| | | | | | \$0.00 | | | | |
| | | | | | \$0.00 | | | | |
| Subtotal - Non-Labor | | | | | \$139,225.00 | | | | |
| WASTE TRANSPORTATION & DISPOSAL | | | | | | | | | |
| Item | | Rate | Unit | Number | Extended | Notes | | | |
| Low-Activity Soils and Debris T&D | | \$300.00 | ton | 1000 | | US Ecology Idaho | | | |
| LLRW T&D - B25 Boxes | | \$600.00 | ft3 | 300 | | Energy Solutions | | | |
| T&D of Sources - 3 drums | | \$30,000.00 | each | 3 | | US Ecology Washington or WCS | | | |
| | | | | | \$0.00 | | | | |
| | | | | | \$0.00 | | | | |
| | | | | | \$0.00 | | | | |
| Subtotal - Waste T&D | | | | | \$570,000.00 | | | | |

| TOTAL | | | \$1,104,025.00 |
|--------------------------------|-----|----|----------------|
| NON-LABOR MARK-UP | 10% | | \$13,922.50 |
| GRAND TOTAL | | | \$1,117,947.50 |
| CONTINGENCY | | 5% | \$55,897.38 |
| GRAND TOTAL (INCL CONTINGENCY) | | | \$1,173,844.88 |