

# **SECTION I**

## **CLOSURE PLAN, POST-CLOSURE PLAN, AND FINANCIAL REQUIREMENTS**

Revision No.

5.0

**SECTION I**

**CLOSURE PLAN, POST-CLOSURE PLAN,**

**AND FINANCIAL REQUIREMENTS**

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# SECTION I

## CLOSURE PLAN, POST-CLOSURE PLAN, AND FINANCIAL REQUIREMENTS

### I-1 Closure Plan

5 This document constitutes the Resource Conservation and Recovery Act (RCRA) and Toxic  
Substances Control Act (TSCA) Closure Plan and closure cost estimates. The Closure Plan and  
closure cost estimates are for the closure of hazardous waste management units and other  
pertinent facilities at Chemical Waste Management's (CWM) Emelle, Alabama Facility, hereinafter  
referred to as the Facility. The Closure Plan is required by 40 CFR 264.112 and the Alabama  
10 Department of Environmental Management (ADEM) Administrative Code Rule 335-14-5-.07(3),  
and the closure cost estimates are required by 40 CFR 264.142 and ADEM Administrative Code  
Rule 335-14-5-.08(3). Since many of the hazardous waste management units at the Facility are  
dually permitted as both RCRA units and TSCA units; closure of the dually permitted TSCA units  
will also be performed in accordance with 40 CFR 761.65(e). In accordance with 40 CFR  
15 761.65(d)(7)(iv) and 761.65(e)(3), this Closure Plan is also the TSCA Closure Plan as referenced  
in the TSCA Permit Application. All sections and appendices referred to herein are incorporated  
as part of this Closure Plan by reference.

A description of the Facility including location, size, geographical, and topographical information  
20 is contained in Section B (Facility Description) of this Application. A description of the location,  
maximum inventory of waste, unit design features, and management of each regulated unit at the  
Facility is also included in this Application. The descriptions of the container management units,  
tank units, and containment building units are included in Sections D-1, D-2, and D-9,  
respectively, of this Application. In addition, information on the hydrogeological conditions at the  
25 Facility, including information on the underlying soil and groundwater conditions, is contained in  
Section D-6 (Landfill Design) and Section E of this Application. In general, the operations  
conducted at this Facility include storage and treatment of waste and the disposal of waste in  
secure landfill trenches, in accordance with the regulations as described in Sections B, C, and D  
of this Application.

#### 30 I-1a Closure Performance Standard

##### I-1a(1) Closure Performance Standard for Non-Disposal Hazardous Waste Management Units

Consistent with the closure performance standard required by 40 CFR 264.111, 40 CFR  
761.65(e)(1), and ADEM Administrative Code Rule 335-14-5-.07(2), the Facility will be closed in  
35 a manner that minimizes the need for further maintenance and controls, and to the extent

necessary to protect human health and the environment, prevents the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or waste decomposition products to groundwater, to surface water, or to the atmosphere.

5 Clean closure for all RCRA and/or TSCA non-disposal units will be performed in accordance with the procedures contained in the subsections of Subsection I-1e. In general, the performance standard will be achieved by implementation of the following procedures:

- 10 • All existing waste inventories (if any) will be removed from the unit in accordance with the procedures provided in Subsection I-1e(1);
- All tanks, piping, equipment, steel structures and structural components will be cleansed for reuse or treated as hazardous debris (see Subsection I-1e for descriptions of "cleansed" and "hazardous debris") and removed from the unit in accordance with the procedures provided in Subsection I-1e(2);
- 15 • All foundations and other concrete structures will be sampled and analyzed to determine if the concrete is hazardous. If hazardous the debris will be cleansed (see Subsection I-1e for descriptions of "cleansed" and "hazardous debris"), then demolished, treated as non-hazardous debris, and removed from the unit in accordance with the procedures provided in Subsection I-1e(2);
- 20 • All visually contaminated soils, soils with hydrocarbon odors, and other soils within the area of potential contamination that have indications of potential contamination (e.g., high headspace readings via an organic vapor analyzer (OVA) or other field detection methods) will be excavated and removed from the unit in accordance with the procedures provided in Subsection I-1e(2);
- 25 • Surface soil samples will be collected, analyzed and evaluated in accordance with Subsections I-1e(3)(a), I-1e(3)(b) and I-1e(3)(c), respectively, to verify that the closure procedures have been successful in removing all 40 CFR 264 Appendix IX and ADEM Administrative Code Rule 335-14-5-Appendix IX (hereinafter referred to as Appendix IX) hazardous constituents in concentrations in excess of the highest concentration of the respective constituent found in background soils. Additional background samples may be required to be taken prior to the implementation of closure procedures as described in Subsection I-1e(3)(a); and
- 30 • If the initial verification soil sample results do not verify clean closure, soils will be removed from the areas where contamination is indicated in accordance with the procedures provided in Subsections I-1e(2) and I-1e(3)(a) of this section. After removal of these soils, additional verification surface soil samples will be collected, analyzed and evaluated in accordance with Subsections I-1e(3)(a), I-1e(3)(b) and I-1e(3)(c), respectively, to verify that the closure procedures have been successful
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in removing all Appendix IX and hazardous constituents in concentrations in excess of the highest concentration of the respective constituent found in background soils.

5 If clean closure cannot be practicably achieved by these procedures, then the closure performance standard will be met by closure of the hazardous waste management unit in accordance with the closure and post-closure care requirements that apply to landfills (i.e., ADEM Administrative Code Rule 335-14-5-.14(11)). This contingent closure of a container management unit, tank management unit, or containment building unit as a landfill will be performed in accordance with ADEM Administrative Code Rules 335-14-5-.09(9)(b), 335-14-5-.10(8)(b), and 10 335-14-5-.30(3)(b), respectively.

The above-described Closure Performance Standard, and the Closure Procedures in the subsections of Subsection I-1e, are designed to satisfy the objectives of 40 CFR 264.111, 40 CFR 761.65(e)(1) and the ADEM Administrative Code Rule 335-14-5-.07(2).

15 **I-1a(2) Closure Performance Standard for Disposal Units**

Disposal units (i.e., landfill trenches) will be closed in place by installing a final cover designed and constructed to provide long-term minimization of migration of liquids into and through the closed landfill; to function with minimum maintenance; to promote drainage and to minimize erosion or abrasion of the cover; to minimize and accommodate settling and subsidence so that 20 the cover's integrity is maintained; and to have a permeability of any bottom liner system or natural sub-soils present (whichever is less). In addition, during the post-closure care period, the Facility will perform the necessary monitoring, maintenance and inspections to ensure the following:

- 25 • maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
- continue to operate the leachate collection and removal systems until leachate is no longer detected;
- 30 • maintain and monitor the leak detection system in accordance with 40 CFR 264.301(c)(3)(iv), 40 CFR 264.301(c)(4), and 40 CFR 264.303(c) and ADEM Administrative Code Rules 335-14-5-.14(2)(b)3.(iv), 335-14-5-.14(2)(b)4., and 335-14-5-.14(4);
- maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 40 CFR 264 Subpart F and ADEM Administrative Code 35 Rule 335-14-5-.06;
- prevent run-on and run-off from eroding or otherwise damaging the final cover; and
- protect and maintain surveyed benchmarks.

Due to the uniqueness of landfill closures (i.e., closure-in-place), and since the landfills at the Facility are constructed and closed in place in accordance with the construction requirements of ADEM Administrative Code Rule 335-14-5-.14, no verification sampling is required to determine or evaluate the adequacy of closure and to determine if the Closure Performance Standard has been achieved. In addition, after final closure, the Facility will comply with all post-closure requirements contained in 40 CFR 264.117 through 264.120, 264.310 and ADEM Administrative Code Rules 335-14-5-.07(8) through 335-14-5-.07(11) and 335-14-5-.14(11)(d).

The above-described Closure Performance Standard and the Closure Procedures described in Subsection I-1e(4) for landfill disposal trenches are designed to satisfy the objectives of 40 CFR 264.310 and ADEM Administrative Code Rule 335-14-5-.14(11)(a).

### **I-1b Partial Closure and Final Closure Activities**

All partial and final Closure Plans and closure cost estimates for the Facility are based on the maximum extent of operations. The maximum extent of operations for this Closure Plan assumes that each regulated unit will be operating at its maximum permitted capacity, that Trench 22 will be filled to capacity but not yet closed, and that Cell 1 of Trench 23 will be active and partially filled as described in Subsection I-1e(4).

The closure activities will be performed under one of the following two scenarios:

- the most likely scenario is that the Facility will operate the on-site facilities to manage some or all of the waste in inventory and the residuals from decontamination or treatment and will complete the closure activities; or, in the event that this scenario is not achievable,
- an independent third party will perform all of the closure activities described herein.

Even though the first scenario, as described above, is the most likely scenario under which the closure procedures will be performed, the closure cost estimates in Appendix I-6 of this section are based on the second scenario described above as it represents the greatest cost of closure.

Under the scenarios described above, compliance with the Closure Performance Standard in Subsection I-1a will require the operation (either by the Facility or a third party) of several process units during the closure period in order to complete the processing of wastes in inventory. Unit 1700, the leachate storage tanks and tank systems (i.e., associated piping and accessories from the perimeter limits of the landfill to the Unit 1700 tanks), and Unit 2001, the Leachate Treatment Plant (i.e., associated piping and accessories from the Unit 1700 tanks to the Unit 2001 tanks), will be used through a portion of the post-closure care period (as described in Subsections I-1e(4) and I-2b) and therefore will be closed at some point after closure of the landfill. Because of the



sequential construction of the landfill units and the large areas of land available for landfill construction, adequate landfill capacity is available at all times during the life of the Facility for on-site disposal of waste inventory, residuals from closing other waste management units, and equipment and structures that are to be dismantled during closure.

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This Plan anticipates that the only partial closures of the Facility will be the closure of individual landfill disposal trenches as they reach their maximum capacity. Note that landfill trenches are composed of subdivisions designated as landfill cells. Landfill trenches will be closed only when all of their individual landfill cells have been filled. Closure of individual landfill disposal trenches at the Facility will be a continuing activity throughout the Facility's operating life. Specific partial closure procedures for the landfill disposal trenches are included in Subsection I-1e(4). However, this Plan may contain inferences to partial closure of units other than the landfill trenches. Any such inferences to partial closures other than landfill disposal trenches throughout this section are included to account for the possibility of closing certain units as a partial closure of the Facility, but they are not intended to infer that partial closures of other units are anticipated under this section.

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Partial and final closure activities for container management units, tank storage/treatment units, containment buildings, and landfill disposal trenches are contained in the subsections of Subsection I-1e.

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### **I-1c Maximum Waste Inventory**

In accordance with 40 CFR 264.112(b)(3), 40 CFR 761.65(e)(1)(iii) and ADEM Administrative Code Rule 335-14-5-.07(3)(b)3., this document assumes closure of the Facility at a point in time when all of the regulated treatment and storage units described in this Application are in operation and storing their maximum capacity of wastes, and the cells of a lined landfill disposal trench are active as described in Subsection I-1e(4). This situation is believed to represent the maximum cost of closure.

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The maximum quantity of waste inventory (i.e., RCRA and TSCA) to be removed and managed from each unit is indicated in Table I-5.1 in Appendix I-5 to this section. Table I-5.1 in Appendix I-5 also provides an estimate of the volume or amount of these wastes anticipated for off-site treatment or disposal and the associated off-site treatment or disposal method to be utilized.

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### **I-1d Schedule for Closure**

The Facility will operate for the full useful life of the property. For the purpose of the final closure schedule, it is anticipated that four (4) cells of landfill disposal Trench T-22 will be filled, but not yet closed, at the time final closure procedures begin. Additionally, for the purpose of the final closure schedule, it is anticipated that Cell 1 of Trench 23 will be active and partially filled within Trench 23. This assumption coincides with current operations at the Facility based on the types

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and quantities of waste currently received by the Facility. It is anticipated that the Facility will be operated, with future permit renewals, for at least another 100 years and possibly beyond. Thus, final closure of the Facility is currently estimated to begin in the year 2120 at the earliest. Schedules for clean closure for each individual unit and for the entire Facility are shown in the figures in Appendix I-2 to this section. The estimated time required to complete closure of each unit presented in these schedules is based on information formulated in Appendix I-5 (Basis for Closure Cost Estimates) and in Appendix I-6 (Closure Cost Estimates) to this section.

### **I-1d(1) Time Allowed for Closure**

In accordance with 40 CFR 264.112(b)6, 40 CFR 761.65(e)(1)(vi) and ADEM Administrative Code Rule 335-14-5-.07(3)(b)6., the total time to complete closure activities for each regulated unit is indicated in the individual closure schedules provided in Appendix I-2 to this section. In accordance with 40 CFR 264.113(b) and ADEM Administrative Code Rule 335-14-5-.07(4)(b), closure activities are required to be completed within 180 days from receipt of the final volume of waste at the individual unit. However, due to the need to operate units to treat and dispose of waste and treatment residuals, and the complexity of clean closing units, all units except inactive Unit 703 will require extensions (i.e., beyond 180 days from receipt of the final volume of waste) to the amount of time required for closure. The time extension is hereby requested by this Permit Application, according to the individual closure schedules for each unit provided in Appendix I-2 to this section. Closure of the entire facility will require a considerable amount of time, as indicated by the closure schedules presented in Appendix I-2. Units 1700 and 2001 will remain in operation into the post-closure period, as explained in the following paragraph.

The leachate storage tank systems in Unit 1700 and the Leachate Treatment Plant in Unit 2001 will remain in operation into the post-closure period until the volume of leachate pumped from the landfill trenches no longer warrants the maintenance of these tanks and treatment systems. Once it has been determined that the tank systems or treatment system are no longer needed, closure of the respective unit will begin. The determination of when these systems are no longer needed will be agreed to in writing by the Facility and ADEM. All of the components associated with Unit 1700 or Unit 2001 will be removed and cleansed as described in this section; however, all components of these two units requiring landfill disposal will be disposed of at off-site facilities.

The estimated time required for simultaneous final closure of the entire Facility, except Units 1700 and 2001, is based on the individual unit closure schedules. Therefore, the estimated time required to complete the closure procedures described in this section for the entire Facility is approximately 3.5 years from the date of receipt of final waste volume. When practical, unit closures or closure tasks will be performed concurrently.

Because this schedule is based on minimum estimated times for individual closure tasks, it must be viewed as the shortest possible schedule. Scheduling limitations and maintenance

requirements due to weather and equipment breakdowns could easily extend the closure period by several months. The Facility believes that the estimated time of closure is reasonable but ambitious for such a large and complex facility.

**I-1d(2) Extensions of Closure Time**

5 Closure of individual units will typically require longer than the 180 days allowed by 40 CFR 264.113, 40 CFR 761.65(e)(6)(iv), and ADEM Administrative Code Rule 335-14-5-.07(4). The Facility hereby requests an extension of closure time to accomplish the closure of individual units, and for final closure of the Facility as a whole, in accordance with the timelines indicated in Appendix I-2.

10 The closure time extensions for these individual units are reasonable and are justified by the size and complexity of these units and the man-hour estimates contained in the closure cost estimates for these units, which are included in Appendix I-6 to this section. The time required for final closure of the Facility is justified by the maximum extent of operations of the Facility and the  
15 interdependencies of closure of the individual units. An additional extension may be required for several units due to the time required to gain approval from other regulatory agencies (e.g., US EPA Region IV TSCA Branch). Also, a further extension of time may be needed to allow for time lost due to rain days or other inclement weather and to account for restricted work hours to reduce the risk for employee heat stress during the months from May through October. These additional  
20 extensions will be requested in the future if needed.

In order to prevent endangerment to human health and the environment, the Facility will continue to comply with all applicable laws, rules, and permit conditions for the active portions of the Facility while closure is proceeding at other units. The Facility will continue to operate each active unit in  
25 accordance with applicable portions of Sections C and D of this Application, to monitor groundwater in accordance with the applicable portions of Section E of this Application, and to adhere to the procedures to prevent hazards and to perform routine inspections in accordance with Section F of this Application. In addition, the Facility will comply with the requirements of the Personnel Training Plan and the Contingency Plan contained in Sections H and G of this  
30 Application, respectively, and any other applicable permit conditions until the final closure of the Facility is accomplished.

If at any time during the closure activities it is anticipated that the disposal of waste inventories and/or the completion of closure activities for any additional units cannot be achieved within the  
35 schedules identified in this section, the Facility will request an additional extension in accordance with 40 CFR 264.113, 40 CFR 761.65(e)(6)(iv), 40 CFR 761.65(e)(6), and ADEM Administrative Code Rule 335-14-5-.07(4). The request for extension will be made to the Director within thirty (30) days prior to the expiration of the 90-day period for disposal of waste inventories and/or the 180-day period for completion of closure.

## I-1e Closure Procedures

The closure of the non-disposal units at the Facility will be performed in accordance with the 40 CFR 264 Subparts G, I, J and DD and ADEM Administrative Code Rules 335-14-5-.07, 335-14-5-.09, 335-14-5-.10, 335-14-5-.30(3) and 40 CFR 761.65(e). In general, the processes  
5 involved to achieve clean-closure are the removal of all waste inventories; cleansing of equipment and structures which may be reused in hazardous waste service (see Appendix I-10 for procedures for management of this equipment); handling of equipment, and tanks as hazardous waste debris for subsequent landfill disposal; verified cleaning of structures, concrete slabs and foundations and handling as non-hazardous waste debris for subsequent disposal on-site in the  
10 Facility's landfill; removal of tanks, piping, equipment, concrete foundations, structures and contaminated soils; and verification of clean-closure via residual soil sampling to meet the Closure Performance Standard provided in Subsection I-1a. Note that the cleaning of structures, concrete slabs and foundations is simply so that they can be handled as non-hazardous debris during subsequent demolition activities. The concrete rubble resulting from these cleaned slabs and  
15 foundations will still be disposed of in the Facility's landfill.

For the purposes of this Plan, the term "cleansed or cleansing" shall refer to the high-pressure washing of equipment and other components of the unit, or concrete building slabs, that contacted  
20 hazardous waste. This cleansed equipment will be reused or managed in accordance with the procedures outlined in Appendix I-10 to this section without verification of decontamination via an approved sampling/testing procedure, unless equipment was used to manage TSCA wastes that are decontaminated in accordance with the measurement-based standards of 40 CFR 761.79(b). The term "washed or washing" shall refer to the high-pressure washing of equipment and other components of the unit (e.g., buildings) that did not contact hazardous waste. The washed  
25 equipment will be managed as non-hazardous without verification of decontamination. The term "treated or treatment" shall refer to the high-pressure washing, sandblasting, immobilization, etc., of hazardous waste debris prior to landfill disposal with verification of adequate treatment via visual inspection in accordance with 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6). Other decontamination methods and standards for equipment removed from  
30 TSCA service only are described in Subsection I-1e(2).

In accordance with 40 CFR 268.45(a), "hazardous debris" must be treated prior to land disposal, using one or more of the alternative treatment standards listed in Table 1-Alternative Treatment Standards for Hazardous Debris in 40 CFR 268.45 and ADEM Administrative Code Rule  
35 335-14-9-.04(6). The physical extraction technology or technologies to be used as an alternative treatment standard for hazardous debris prior to land disposal must be capable of treating the debris to obtain a "clean debris surface." In accordance with Table 1 of 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6), "clean debris surface" means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous  
40 waste except that residual staining from soil and waste consisting of light shadows, slight streaks,

or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5% of each square inch of surface area. Therefore, verification of adequate treatment of hazardous debris via a physical extraction technology will be performed by visual inspection. Equipment to be reused in hazardous waste service will also be subject to verification of adequate cleansing via the procedures described in Appendix I-10 to this section.

All equipment, piping and tanks that have contacted hazardous waste and are not to be reused in hazardous waste service, and all liquid and solid cleansing and hazardous waste debris treatment residuals will be removed and managed as hazardous wastes. Therefore, sampling of these materials will only be required for characterization to determine the proper treatment and disposal methods and not to verify clean closure of the unit. In order to minimize the amount of waste generated during closure, some equipment of value such as pumps, agitators, mixers, valves etc., may be reused in hazardous waste service off-site or inventoried for future reuse in hazardous waste service after cleansing in accordance with this Plan. Hazardous waste service equipment that has been cleansed for future reuse will be identified, stored, tracked and reused in accordance with the procedures provided in Appendix I-10 to this section.

Components destined for landfill disposal (e.g., tanks, piping, pumps, etc.) will be treated as "hazardous debris" by one or more of the physical extraction technologies or one of the immobilization technologies in accordance with 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6) and as described in Subsection I-1e(2). Concrete rubble from building slabs which have been cleaned and designated non-hazardous debris will be disposed of in the on-site Facility hazardous waste landfill.

The on-site landfill disposal units will be used to dispose of the majority of the waste inventories, treated hazardous debris and treatment residuals generated during the closure activities. Only wastes which require incineration will be taken off-site for disposal. The closure cost estimates in Appendix I-6 to this section reflect these assumptions.

### **I-1e(1) Procedures to Remove Waste Inventory**

The first step involved in achieving clean closure of the Facility in accordance with the Closure Performance Standard in Subsection I-1a is the removal of all waste inventories. All hazardous waste inventories will be removed and either treated and disposed of on-site, or transported off-site for treatment and disposal, or a combination thereof. The major factors which will be considered in the determination of treatment and disposal alternatives for the waste inventories will include the following:

- the type and quantity of waste;
- requirements of land disposal restrictions;

- available capacity of treatment units and landfill trenches;
- schedule requirements;
- economic factors; and
- protection of human health and the environment.

5

Loading of waste inventories for off-site treatment or disposal includes loading containerized waste into van trailers, loading roll-off boxes onto transport frames, and pumping waste from tanks into tanker trucks. All wastes destined for off-site management will be inventoried, manifested and transported in accordance with the applicable requirements of Subparts B and C of 40 CFR 10 262 and ADEM Administrative Code Rules 335-14-3-.02 and 335-14-3-.03, and the Department of Transportation (DOT).

Containers of liquid wastes will be moved to a decanting unit where they will be processed. RCRA "empty" containers will be crushed and disposed in a landfill disposal trench. The decanted liquids 15 will be pumped into tanks for temporary storage or directly into tanker trucks. Eventually the decanted liquids will be transferred to an on-site stabilization unit for treatment and subsequent disposal on-site, or shipped off-site by tanker trucks for reuse, treatment, or disposal. Containers of solid wastes requiring treatment will be stabilized within the container or bulked and transferred to a stabilization unit. Wastes transferred to a stabilization unit will be treated and transferred to 20 the landfill for disposal. Containers of solid wastes suitable for direct landfilling will be transported by trucks to the landfill, where the containers of waste will be disposed of in the on-site landfill disposal units. Any leaking containers or damaged containers inappropriate for shipment will be re-containerized or placed in overpacks. Where practical, containers of wastes will be bulked for treatment off-site or for treatment and disposal on-site. Unsalvageable, empty containers will be 25 transferred to the landfill for disposal.

All pumpable RCRA and TSCA wastes stored in the tanks will be pumped into tanker trucks with existing transfer pumps and piping. Any non-pumpable sludges and solids remaining in the tanks will be removed and loaded into vacuum tankers or roll-off boxes for off-site treatment and/or 30 disposal.

The leachate storage tank systems (Unit 1700) and Leachate Treatment Plant (Unit 2001) will remain in operation into the post-closure care period until the volume of leachate pumped from the landfill disposal units no longer warrants the maintenance of these systems. Once it has been 35 determined that the tank and treatment systems are no longer needed, the waste inventory in the tanks will be pumped into tanker trucks and taken off-site for treatment or disposal. The determination of when these tanks and treatment systems are no longer needed will be agreed to in writing by the Facility and ADEM. The leachate storage and treatment tanks will then be removed and shipped off-site for treatment or disposal.

The viable alternatives for the on-site management of waste inventories are treatment by stabilization and/or solidification for subsequent landfilling, aqueous treatment, cyanide/sulfide treatment, treatment of hazardous debris by a method listed and described in 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6) and landfilling, or direct landfilling with no treatment. The viable alternatives for the off-site management of waste inventories are incineration, aqueous treatment, deep well injection, and/or landfill disposal. The anticipated method for management of the waste within each unit is depicted in Table I-5.1 in Appendix I-5 to this section. For cost estimating purposes only, it is assumed that all waste inventories will be managed and disposed of on-site, with the exception of wastes that will require incineration or aqueous treatment, which will be managed by off-site by regulated facilities.

### **I-1e(2) Procedures for Cleansing, Treatment and Removal of Equipment, Structures, and Soil**

After the existing inventories of waste have been removed from a unit, the building, ancillary equipment, and structures that were in direct contact with waste and associated with hazardous waste management operations will be treated as hazardous waste debris by the physical extraction or immobilization technologies as described in ADEM Administrative Code Rule 335-14-9-.04(6) and 40 CFR 268.45 for subsequent landfill disposal, or cleansed for reuse in accordance with the procedures in Appendix I-10 to this section. The treatment of hazardous debris via physical extraction, immobilization, or other technologies will be performed within the unit being closed, or within another hazardous waste management unit at the Facility. Cleansing or treatment (as defined in Subsection I-1e) will be performed within a unit, if the floor provides a means to contain the wash waters. Storage tanks, containers, and/or tanker trucks will be used to accumulate liquids generated from the hazardous debris treatment and equipment cleansing procedures. The liquid and solid residuals generated during the treatment of hazardous debris and the cleansing of reusable equipment that has come in contact with hazardous waste will be removed and managed as a waste in accordance with the applicable requirements of 40 CFR 268, ADEM Administrative Code Chapter 335-14-9, and/or 40 CFR 761 Subparts D – Storage and Disposal and G – PCB Spill Cleanup Policy, as described herein.

In general, the treatment of hazardous debris will be performed by using various physical extraction treatment methods or one of the immobilization technologies (e.g., macroencapsulation) as described in Table 1.-Alternative Treatment Standards for Hazardous Debris in accordance with 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6). Procedures and recommendations for these methods of cleansing and treatment can be found in *Guide for Decontaminating Buildings, Structures and Equipment at Superfund Sites*, (EPA/600/2-85/028) published by the EPA. Excerpts from this EPA guidance document are included in Appendix I-1 to this section. The primary physical extraction treatment method used will be a high-pressure wash/rinse cycle, at a rate of 0.5 gallons per square foot of surface area treated or cleansed. This level of treatment should be more than adequate to remove any

visible contamination, which satisfies the requirements of 40 CFR 268.45 and ADEM Administrative Code Rule 335-14-9-.04(6). To increase effectiveness and possibly increase the depth of penetration, commercial cleaners or surfactants, such as Alconox<sup>®</sup>, may be added to the water when deemed necessary. Depending on the efficiency of high-pressure washing, sandblasting may also be employed.

Once the cleansing and treatment procedures have been completed, all cleansed equipment will either be reused on-site in hazardous waste service or managed for future reuse in accordance with the procedures provided in Appendix I-10 to this section, and all treated hazardous debris will be disposed of on-site in the landfill. Alternatively, following the cleansing of certain metal, it may be recycled as scrap metal in accordance with ADEM Administrative Code Rule 335-14-2-.01(6)(a)3.(ii) and 40 CFR 261.6(a)(3). A one-time notice of this recycling alternative will be placed in the Facility's file (if the one-time notice has not already been filed) as required in 40 CFR 268.7(a)(6) and ADEM Administrative Code Rule 335-14-9-.01(7). However, for closure cost estimating purposes only, it is assumed that all equipment and building materials will be disposed of in the Facility landfill. In addition, the closure cost estimate includes costs for the treatment and disposal of waste (i.e., treatment residuals, treated hazardous debris, etc.) generated during the closure activities. The cost estimate also reflects the cost of closure being performed by a third party.

The specific hazardous debris treatment methods and reusable equipment cleansing procedures which will be performed after the existing inventories of waste have been removed from the unit are as follows:

- All unsalvageable tanks will be treated as hazardous debris (i.e., in accordance with ADEM Administrative Code Rule 335-14-9-.04(6) and 40 CFR 268.45) in place by high pressure washing both internally and externally. The surfaces of the tanks will be high pressure washed until a "clean debris surface" as defined in Subsection I-1e is obtained. Once the tanks have been treated and visually inspected, they will be dismantled and cut into pieces for disposal in the on-site landfill or may be recycled as scrap metal in accordance with ADEM Administrative Code Rule 335-14-2-1.01(6)(a)3.(ii) or 40 CFR 261.6(a)(3).
- Reusable tanks that were in contact with the RCRA waste only will be dismantled, and all internal and external parts will be high pressure washed within secondary containment. After cleansing, appurtenances that were in contact with RCRA waste only may be reused on-site in hazardous waste service or managed for future reuse in accordance with the procedures provided in Appendix I-10 to this section.
- All transfer piping and its associated appurtenant equipment that can be visually inspected to verify a "clean debris surface", and that are not reusable, will be treated



by high pressure washing in place, or dismantled and transferred to a secondary containment area for treatment as hazardous debris. After these components have been verified to be clean by visual inspection, they will be dismantled, cut up and disposed of in the on-site landfill.

- 5 • All transfer piping and associated appurtenant equipment that cannot be visually inspected to verify a “clean debris surface”, and that are not reusable, will be treated as hazardous debris by one of the immobilization technologies (i.e., macroencapsulation), and disposed of in the on-site landfill.
- 10 • Reusable pumps and mechanical equipment (e.g., tank agitators, valves, etc.) that were in contact with the RCRA waste only will be dismantled, and all internal and external parts will be high pressure washed within secondary containment. After cleansing, appurtenances that were in contact with RCRA waste only may be reused on-site in hazardous waste service or managed for future reuse in accordance with the procedures provided in Appendix I-10 to this section.
- 15 • Fixed equipment and appurtenances that were in contact with TSCA (i.e., PCB) wastes will be treated as hazardous debris, dismantled and disposed of in the on-site landfill.
- 20 • Movable equipment and appurtenances that were in contact with RCRA and TSCA (i.e., PCB) wastes and that are to be reused in TSCA service will first be treated as hazardous debris by high pressure washing and subsequently be decontaminated in accordance with the requirements of 40 CFR 761.79(b). If this equipment is not placed back into TSCA service on-site, it will be managed for future reuse in accordance with the procedures provided in Appendix I-10 to this section.
- 25 • Movable equipment and appurtenances that were in contact with RCRA and TSCA (i.e., PCB) wastes and that are to be reused on-site in TSCA service will be managed in accordance with the procedures described in Appendix I-10 to this section. If this equipment is not placed back into TSCA service on-site, it will be managed for future reuse in accordance with the procedures described in Appendix I-10.
- 30 • All unusable miscellaneous steel components such as steel frames, loading/unloading bay roofs, pipe racks, etc., that were in contact with the waste will be dismantled, treated as hazardous debris and disposed of in the on-site landfill. Alternatively, following treatment as hazardous debris, these components may be recycled as scrap metal in accordance with ADEM Administrative Code Rule 335-14-2-.01(6)(a)3.(ii) and 40 CFR 261.6(a)(3). A one-time notice of this recycle alternative will be placed in the Facility's file (if the one-time notice has not already  
35 been filed) as required in 40 CFR 268.7(a)(6) and ADEM Administrative Code Rule 335-14-9-.01(7).

- All reusable miscellaneous steel components that did not contact waste such as steel frames, loading/unloading bay roofs, pipe racks, catwalks, ladders, etc. will be dismantled and transferred to one of the contained areas for "washing," as defined in Subsection I-1(e). After washing, these components will be managed as non-hazardous, or recycled or reused. Liquid residuals from washing will be recycled for use in subsequent cleansing or treatment.
- After the removal of all equipment and building components and other miscellaneous steel materials from the unit, all concrete components of the unit, such as foundations, sumps, walls, dikes and other structures, will be cleaned by pressure washing to allow their handling as non-hazardous debris. This debris will, however, be disposed of in the on-site Facility landfill.
- All liquid and solid residuals generated from the treatment of hazardous debris that was in contact with RCRA waste only will be collected and managed as hazardous waste in accordance with 40 CFR 268.45.
- All solvents used or reused for decontamination of tanks and tank appurtenances that were in contact with the TSCA (i.e., PCB) wastes only will be collected and disposed of in accordance with the applicable requirement of 40 CFR 761.79(g)(3)-(5).
- If the waste managed within a unit was a mixture of TSCA (i.e., PCB) regulated waste and RCRA waste subject to land disposal restrictions, then the residuals generated during closure of the unit will be managed in accordance with 40 CFR 761 Subparts D and G.
- After excavation and removal of concrete debris, screening soil sample(s) will be collected in accordance with Subsection I-1e(3)(a) to establish the final list of constituents to be analyzed for the verification of clean closure. These screening soil samples, collected in-situ, will also be used to determine TSCA disposal requirements, if applicable. If PCB concentrations in the screening soil samples are less than or equal to 1 part per million (ppm), grab samples or other ex-situ samples may be collected during soil excavations and analyzed to determine the appropriate methods of treatment/disposal. If PCB concentrations are greater than 1 ppm, TSCA disposal decisions must be based on analysis of in-situ samples, following the protocols contained in Subsection I-1e(3)(a) of this section.
- Assuming TSCA disposal requirements do not apply, after the screening soil samples have been taken, all visibly contaminated soils, soils with hydrocarbon odor, and soils otherwise indicated to be contaminated (i.e., high headspace readings via OVA or other field detection methods) within the area of potential contamination indicated will be excavated, placed in roll-off boxes, and covered. In order to determine the appropriate method of disposal for these soils, an equivalent

of four (4) grab samples per roll-off box will be collected from the excavator bucket. These samples will be composited into one sample for each roll-off box of excavated materials and analyzed to determine the appropriate methods of treatment/disposal. In order to eliminate the need for the storage of excavated soils in permitted storage units at the Facility, and to expedite closure activities, soils may alternatively be characterized to determine the appropriate method of disposal by the collection and analysis of representative in-place soil samples. This alternative practice must be used to determine TSCA disposal requirements if PCBs exceeded 1 ppm in the soil screening samples. The number of discrete in-place soil samples will be not less than 30% of the number of discrete verification soil samples for each unit as indicated in Table I-3.1 in Appendix I-3 to this section. No more than five (5) discrete in-place soil samples for characterization shall be composited for analysis.

- After excavation and removal of all visibly contaminated soils, soils with hydrocarbon odor, and soils otherwise indicated to be contaminated as described above, verification soil samples will be taken in accordance with Subsection I-1e(3)(a) for the verification of clean closure.
- If the clean closure verification criteria provided in Subsection I-1e(3) are not achieved by the removal of the soils indicated to be contaminated by inspection as described above, subsequent excavation, sampling, removal and management of additional soils from areas of contamination will be performed in accordance with the procedures described above. Additional soils will be excavated in 12" deep increments from the area(s) which are represented by a composite verification sample(s) that indicate(s) the presence of contaminant(s) in excess of the clean closure criteria provided in Subsection I-1e(3)(c). Additional soils will be excavated until clean closure is verified or until it is determined that clean closure is impractical.
- All personal protective equipment such as coveralls, boots, gloves and disposable respirators utilized during closure shall be collected and containerized for disposal as a hazardous waste.
- All Facility-owned equipment utilized in the closure and cleansing processes such as excavators, sandblasters and high-pressure washers shall be steam cleaned, visually inspected for the presence of residual waste or materials, and released for on-site use upon the approval of the Facility Manager or authorized delegate. All liquid and solid residuals generated from the steam cleaning of this equipment will be collected and managed as hazardous wastes.
- All equipment utilized in the closure and cleansing processes such as excavators, sandblasters, and high-pressure washers which are rented, or which will otherwise be used off-site, shall be decontaminated. Following decontamination, the equipment shall be verified clean via an ADEM-approved sampling procedure and

analytical protocol. After verification of decontamination, the equipment will be released off-site upon the approval of the Facility Manager or authorized delegate. All liquid and solid residuals generated from the decontamination of this equipment will be collected and managed as hazardous wastes.

5 **I-1e(3) Sampling Procedures and Analytical Protocols**

In order to demonstrate clean closure and to achieve the Closure Performance Standard of Subsection I-1a, verification sampling of the remaining surface soils in the area of potential contamination for each hazardous waste management unit shall be performed as required by 40 CFR 264.112(b)(4), 40 CFR 761.65(e)(1)(iv) and ADEM Administrative Code Rule 335-14-5-.07(3)(b)4. In addition, other non-regulated units (i.e., maintenance building Units 300 and 606, truck parking areas PK-700 and PK-1000, and roadways indicated on Figure I-5.1 in Appendix I-5 to this Section) will be subjected to verification sampling. The procedures for the collection and analysis of background sample(s) and screening sample(s) are provided in Subsection I-1e(3)(a). The procedures used to determine the number and location of the clean closure verification samples to be collected are also provided in Subsection I-1e(3)(a). The procedures for analysis and evaluation of the analytical results from these verification soil samples are provided in Subsections I-1e(3)(a) and I-1e(3)(b), respectively. All sample collection and handling procedures and sample analyses shall be performed in accordance with the applicable portions of EPA's "Test Methods for Evaluating Solid Waste, Physical/Chemical methods (EPA Publication SW-846)" or equivalent approved methods.

15  
20 ***I-1e(3)(a) Sampling Procedures***

Prior to the implementation of closure procedures, the existing background samples will be reviewed to ensure that at least four (4) background samples have been analyzed by an independent laboratory for the full list of 40 CFR 264 Appendix IX and ADEM Administrative Code Rule 335-14-5-Appendix IX (Appendix IX) constituents. If there are not at least four (4) background samples which meet this condition, then new background soil samples will be collected from locations at the Facility that have not been impacted by hazardous waste operations. These background samples will be submitted for individual laboratory analysis for the full list of Appendix IX constituents. The results of the Appendix IX analyses of the new background soil samples, in conjunction with the existing background soil analyses provided in Appendix I-4 to this section, will be used to establish the criteria for the verification of clean closure of the Facility.

After the removal of all existing waste inventories from each hazardous waste management unit, and prior to the removal of any soils, screening soil samples from specific locations within the area of potential contamination of each unit will be collected and composited as shown in Table I-3.1 in Appendix I-3 to this section. The screening sample(s) will be analyzed for all of the Appendix IX constituents. The analytical results from the screening sample(s) will be employed to establish the final list of constituents that will be used to verify clean closure on an individual

unit basis. Discrete samples for compositing into the final screening sample(s) for analysis will be collected from the top 12" of soil in areas of visible contamination, areas adjacent to or beneath liquid collection sumps, locations adjacent to loading/unloading areas, depression areas and any other areas that are suspected to be, or are most likely to be, contaminated with hazardous waste or hazardous waste constituents. Only the Appendix IX constituents that are present in the composite screen sample(s) in concentrations above the detection limit will be included in the list of constituents to be used for analysis of the verification samples.

In order to verify that the procedures of Subsections I-1e(1) and I-1e(2) have been successful in removing all hazardous constituents from the area and that clean closure has been achieved, verification samples of surface soils from the area of potential contamination will be collected. The analytical results will be evaluated in accordance with the procedures outlined in Subsections I-1e(3)(b) and I-1e(3)(c).

In order to obtain an accurate and valid assessment of the remaining contamination, if any, surface soil samples that are representative of the site conditions will be collected. The number of verification soil samples to be collected will be determined in accordance with classical statistical techniques using the criteria and methodology described herein. The number of verification soil samples to be taken from each area is shown in Table I-3.1 in Appendix I-3 to this section. The statistical technique to be used in clean closure verification is the systematic grid sampling approach, as described below. Additional information on the systematic grid sampling approach is included in Appendix I-3 to this section. The systematic grid sampling approach will be applied to all non-disposal hazardous waste management units and the non-regulated truck parking areas PK-700 and PK-1000 (at final closure) subject to the verification sampling plan.

The equation used to determine the number of samples required obtaining a specific precision and confidence level is as follows:

$$n = \frac{t_{\mu}^2(CV)^2}{P^2} \quad \text{Where:} \quad \begin{array}{l} n = \text{number of samples} \\ t_{\mu} = \text{two-tailed t-value at a } \mu \text{ level of confidence} \\ \text{and @ } n-1 \text{ degrees of freedom.} \\ CV = \text{coefficient of variation} \\ P = \text{allowable margin of error} \end{array}$$

For the purposes of this section the following values for  $t_{\mu}$ , CV and P were selected.

- $t_{\mu}$  = 95% confidence level;
- CV = 65% coefficient of variation; and
- P = 20% allowable margin of error.

These percentages were selected based on recommended values from the EPA document *Preparation of Soil Sampling Protocol: Techniques and Strategies*, (EPA-600/4-83-020) by Benjamin Mason. The level of confidence and precision provided by the use of these values is appropriate for the soil sampling strategies and is in compliance with EPA requirements for PCB remediation (40 CFR 761 Subpart G). The calculation of the theoretical number of samples, n, is an iterative process since the value of t is dependent upon the degrees of freedom, which is given as n - 1. An initial sample number and its corresponding  $t_{\alpha}$  value will be selected from 40 CFR 264 Appendix IV and ADEM Administrative Code Rule 335-14-5- Appendix IV. Recalculation of n based on this t value and the CV and P values can be performed. If the recalculated number is significantly different than the initial number, an iterative process will be conducted.

The location of verification samples to be collected will be determined by using a systematic grid sampling approach. The grid spacing for this approach is indicated as G and is determined by the following equation:

$$G = (A/n)^{1/2}$$

Where:      G = Grid spacing  
                 A = Area of potential contamination  
                 n = Theoretical number of samples

The area of potential contamination, A, for each unit at the Facility is provided in Table I-3.1 in Appendix I-3 to this section.

Once the number of samples and the grid spacing have been determined, the locations for sample collection will be determined. Using a random number generator, the location of one point on the grid will be established by applying two random factors to the maximum dimensions of the area around the units along perpendicular axes. The sample location grid will then be constructed by marking grid lines on the established grid spacing (G), with lines running parallel to coordinate axes. Sample locations will be in the center of each grid area and will be limited to the defined area of potential contamination. The estimated number of samples to be collected as calculated in accordance with the procedures described above is shown in Table I-3.1 in Appendix I-3 to this section.

Once the soils which are indicated to be contaminated by inspection as described in Subsection I-1e(2) have been removed as part of the closure procedures, a core sample from the top 24" of soil will be collected from the center of each grid. In order to minimize the potential for the submittal of contaminated samples for analysis, these core samples may be split so that 1/2 of each sample can be used for field headspace analysis for volatile organics. If headspace analyses are conducted and if a headspace reading above background is obtained in the field, approximately one (1) foot of soil may be removed from the respective grid, and the location will be re-sampled. At the discretion of the Facility, this procedure may be repeated for each grid until

headspace readings that are not above background levels are obtained for each grid sample. Any soils removed during this evaluation of clean closure process will be managed as described in the Subsection I-1e(2).

5 At the time of final Facility closure, other non-regulated areas which are not covered by the systematic grid sampling approach as described above, such as the roadways indicated on Figure I-5.1 in Appendix I-5 to this Section, and maintenance building Units 300 and 606, will be sampled using a stratified random sampling procedure. Discrete verification samples for each maintenance building subject to verification sampling (i.e., Units 300 and 606) will be taken from  
10 the top 12" of soil at a frequency of not less than every 50 linear feet around the perimeter of each unit. The roadways indicated on Figure I-5.1 in Appendix I-5 to this Section will be sampled at a frequency of not less than every 200 linear feet of roadway. Samples shall be collected prior to the removal of the soils, if any, and preference shall be given to suspect areas such as areas adjacent to vehicle entrances and exits of the unit, locations adjacent to loading/unloading areas,  
15 and depression areas.

The discrete verification samples which are taken will be composited for analysis as indicated in Table I-3.1 in Appendix I-3 to this section for analysis. The composite samples will be limited to a maximum of five (5) grab samples so that the spatial variability of contamination can be  
20 determined. Table I-3.1 includes the number of composite sample(s) which will be submitted to the laboratory for verification analysis. This protocol for selection and compositing of verification samples provides a conservative approach and helps to ensure that any remaining contamination is detected.

25 Standard soil sampling techniques will be used for sample collection, storage, preservation, prevention of cross-contamination, sampling equipment decontamination and management of samples in accordance with the applicable requirements and procedures from SW-846, ASTM methods and/or the *Environmental Compliance Branch Standard Operating Procedures and Quality Assurance*, (U.S. EPA, Region IV, ESD, Athens, GA, February 1991), or similar  
30 publications current at the time of closure.

**I-1e(3)(b) Analytical Protocol**

As discussed in Subsection I-1e(1), both RCRA and TSCA (i.e., PCB) wastes are managed at the Facility. Due to the wide variety of wastes managed at the Facility, all screening samples described in Subsection I-1e(3)(a) will be analyzed for all of the constituents from 40 CFR 264  
35 Appendix IX and ADEM Administrative Code Rule 335-14-5-Appendix IX (i.e., Appendix IX). The analytical results from the screening sample(s) will be employed to establish the final list of Appendix IX constituents that will be used to verify clean closure of each hazardous waste management unit. All initial verification soil samples will be analyzed for only the Appendix IX constituents that are present in the screen sample(s) in concentrations above the detection limit.  
40 If the initial verification soil samples do not verify clean closure, additional soils will be removed

from the areas of contamination in accordance with the procedures provided in Subsection I-1e(2). Subsequent verification soil samples will be collected in accordance with Subsection I-1e(3)(a), and analyzed for only the Appendix IX constituents that were present in the screen sample(s) in concentrations above the detection limit and present in the initial verification samples(s) in concentrations in excess of the highest concentration of the respective constituent found in background soils. A summary of the analytical results from nine (9) previous background samples is shown on Table I-4.1 in Appendix I-4 to this section. These existing background samples were not analyzed for the full list of Appendix IX constituents; therefore, prior to the implementation of closure procedures, the Facility will ensure that at least four (4) fully analyzed background samples exist as described in Subsection I-1e(3)(a). Sample location maps and full analytical reports including the analytical methods, analytical results and detection limits for each analyte in all existing and new background samples, in the screening sample(s), and in the clean closure verification samples will be provided in the closure certification report which will be submitted within sixty (60) days of the completion of partial closure of each hazardous waste management unit or final closure of the Facility.

The verification soil samples taken from the non-regulated units (i.e., maintenance building Units 300 and 606, truck parking areas PK-700 and PK-1000, and the roadways indicated on Figure I-5.1 in Appendix I-5 to this Section) will be analyzed for Priority Pollutant Metals, Priority Pollutant PCBs, Priority Pollutant Semi-Volatiles and Priority Pollutant Volatiles.

***I-1e(3)(c) Evaluation of Contaminant Removal***

Analytical results for the verification soil samples from each hazardous waste management unit will be evaluated to verify that the closure procedures have been successful in removing constituent concentrations in excess of the highest concentration of the respective constituent found in background soils for all of the Appendix IX hazardous constituents that were present in the screen sample for that particular unit. Analytical results for the verification soil samples from each non-regulated unit (i.e., maintenance building Units 300 and 606, truck parking areas PK-700 and PK-1000, and the roadways indicated on Figure I-5.1 in Appendix I-5 to this Section) will be evaluated to verify that no constituent concentrations exist in excess of the highest concentration of the respective constituent found in background soils for Priority Pollutant metals, Priority Pollutant PCBs, Priority Pollutant Semi-Volatiles and Priority Pollutant Volatiles. If the initial verification soil samples results do not verify clean closure, additional soils will be removed from the areas of contamination in accordance with the procedures provided in Subsection I-1e(2). Subsequent to the removal of these additional soils, additional verification surface soil samples will be collected and analyzed in accordance with Subsections I-1e(3)(a) and I-1e(3)(b), respectively. Analytical results from these additional verification soil samples will be evaluated to verify that clean closure criteria have been fulfilled as described herein.

If these clean closure criteria are met, then successful removal of the contaminants will be considered verified, and the unit will be considered successfully clean closed. If removal of the



contaminants to meet this criteria is not practicable, the unit will be closed in place, and the applicable post-closure care will be performed in accordance with Subsection I-2 (Post-Closure Plan) and the applicable requirements of ADEM Administrative Code Rule 335-14-5-.14(11). Within thirty (30) days of the date that it is determined that clean closure of a unit is not achievable or practicable, the Facility will submit to the Director a written request for permit modification to amend the Closure Plan in accordance with Subsection I-1f(2).

**I-1e(4) Closure of Landfill Disposal Trenches T-22 and T-23**

The closure of landfill disposal Trenches T-22 and T-23 at the Facility will be performed in accordance with the ADEM Administrative Code Rule 335-14-5-.14(11). Final closure of these landfill disposal trenches will be conducted once the final receipt of waste, including residuals from the closure activities, has been properly placed in the respective trench. It is anticipated that only Trench 22 will be closed within the permit period anticipated after the approval of this permit renewal application. Trench 23 has sufficient disposal capacity to operate for at least 40 years, and thus is not expected to receive sufficient waste during the permit period to require closure.

In general, the procedures for closure of a landfill disposal trench will involve the installation of a final cover as required by 40 CFR 264.310(2) and ADEM Administrative Code Rule 335-14-5-.14(11)(b). The final cover for Trench T-22 and T-23 is described in Subsection D-6-2e of Section D-6 of this Application. Once a landfill disposal trench has been closed, post-closure care and maintenance will begin, in accordance with Subsection I-2.

During normal operation, the cells within a landfill trench are sequentially constructed, filled, and closed according to the general steps provided in Subsection D-6-1-2-3 of Attachment D-6-1-2 of this Application. This operation sequence provides maximum flexibility of waste placement while maintaining all land disposal activities within run-off containment berms. This approach provides a compromise between minimizing the area open for catchment of precipitation and providing for efficient utilization of land area for waste disposal.

It is difficult to give a definitive schedule of landfill operations due to several variables, such as varying quantities of waste received. However, the estimated time required to perform closure of landfill disposal Trench T-22 is shown in Appendix I-2 to this section.

In the event the Facility is required to complete an unplanned closure, the nature of the closure would depend on which cell(s) within a trench are active and the extent of filling and partial closure of the trench at the time of unplanned closure. Unplanned closure scenarios that could be encountered are varied and numerous. Appendix I-5 of Section I provide the basis of estimating closure and post closure costs for the Facility and describes the most expensive point in closure during this upcoming ten-year permit period for the landfill units. The estimated time required to perform closure of landfill disposal Trench T-23 as shown in Appendix I-2 assumes an unplanned

closure of Cell 1 that was only partially filled with waste. This corresponds to the assumed most expensive point of closure used for estimating closure costs.

5 During closure, certain landfill leachate storage tank systems (i.e., tank systems including the associated piping and accessories from the perimeter limits of the landfill to the tanks in Unit 1700) and the Leachate Treatment Plant will remain in operation until the volume of leachate pumped from the landfill trenches no longer warrants the maintenance of these tank and treatment systems. Once it has been determined that the tank and treatment systems are no longer needed, closure of these units will begin. The determination of when these tank and treatment systems  
10 are no longer needed will be agreed to in writing by the Facility and ADEM. All of the components associated with Unit 1700 and Unit 2001 will be removed and cleansed as described in this Plan; however, all components destined for landfill disposal will be disposed of off-site. Any collected leachate may be treated on-site or shipped to an off-site facility for treatment.

15 The groundwater monitoring program will be performed in accordance with Section E of this Application and will continue throughout partial, final, and post-closure as described in Subsections I-1e and I-2. The groundwater monitoring program may be periodically modified during post-closure in accordance with a written request to the regulatory agencies for a permit modification to authorize a change in procedures.

20 During closure of the landfill trenches, a representative from the Facility and an independent registered professional engineer will inspect closure activities and certify that closure has been conducted in accordance with the approved Closure Plan.

### **I-1f Notices Required for Closure**

25 In order to ensure that partial closures of landfill trenches and final closure of the Facility have been properly completed in accordance with this Plan, certain notices, certifications, and document records will be submitted and filed with the appropriate parties. These notices, which are described in the following sections, include closure notifications (prior to and during closure), notifications of an amended closure plan, closure certifications, and survey plats.

#### **I-1f(1) Notification of Partial and Final Closure**

30 In accordance with 40 CFR 264.112(d), 761.65(e)(6) and ADEM Administrative Code Rule 335-14-5-.07(3)(d), the Facility will notify the Department, in writing, at least sixty (60) days prior to the date on which closure activities are expected to begin.

35 The closure procedures will begin no later than thirty (30) days after receiving the final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous waste no later than one (1) year after the date on which the

unit received the most recent volume of hazardous waste, the Facility may be granted an extension of up to one year by the Department.

### **I-1f(2) Notification of Amendment of Closure Plan**

5 In accordance with 40 CFR 264.112(c), 761.65(e)(4)(i) through 761.65(e)(4)(iii), and ADEM  
Administrative Code Rule 335-14-5-.07(3)(c), a notification of modification of the Permit or request  
to modify the Permit will be submitted any time the extent of operation at the Facility, the expected  
date of closure, or a planned design change requires a change in the Closure Plan. The request  
for a permit modification will be submitted in writing to the Director at least 60 days prior to a  
10 proposed change in Facility design or operations, and no later than 60 days after an unexpected  
event has occurred that affects the Plan (30 days if the unexpected event occurs during partial or  
final closure). The written notification or request for permit modification will include a copy of the  
amended Closure Plan for review or approval by the Director.

### **I-1f(3) Certification of Closure**

15 Certification of closure will be provided as required by 40 CFR 264.115, 761.65(e)(8) and ADEM  
Administrative Code Rule 335-14-5-.07(6) within 60 days of completion of closure of each  
hazardous management unit and within 60 days of completion of final closure, the Facility will  
submit to the Director, by registered mail, a certification that the hazardous waste management  
unit or Facility, as applicable, has been closed in accordance with the specifications in the  
approved Closure Plan. The certification will be signed by the Facility and an independent  
20 registered professional engineer. Documentation supporting the independent registered  
engineer's certification will be furnished to the Director upon request until he releases the Facility  
from the financial assurance requirements for closure under 40 CFR 264.143(i) and ADEM  
Administrative Code Rule 335-14-5-.08.

25 As part of the certification, the certifying engineer will be involved throughout the closure process,  
including a final inspection upon completion of the closure procedures. The final inspection will  
ensure that the closure of each unit and/or the Facility has been completed in conformance with  
the intent of this Plan. In the final inspection, the certifying engineer will certify the following:

- 30
- that all wastes have been removed (by visual examination);
  - that all removed wastes have been disposed of in the Facility landfill or delivered to appropriate permitted waste management facilities);
  - that all piping and other equipment and all structures scheduled for removal have been removed and disposed of in the Facility landfill or delivered to a permitted
- 35 waste management facility (by visual examination and inspection of manifest copies);

- that all equipment and structures that are not scheduled for removal have been cleansed and treated, and that all cleansing and treatment residuals have been disposed of in the Facility landfill or delivered to an appropriate waste management facility (by visual examination, examination of sample results and inspection of manifest copies);
- that the cover systems for landfills were inspected for uniformity and lack of damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials, etc.), during the construction or installation of the cover systems; and
- that clean closure has been achieved (by examination and inspection of analytical results from soil samples).

The certifying engineer will be required to record these inspection findings and prepare a report describing the inspection, presenting the findings, evaluating the findings and certifying the partial or final closure. Sample location maps and full analytical reports including the analytical methods, analytical results and detection limits for each analyte in all existing and new background samples, in the screening sample(s), and in the clean closure verification samples will be provided in the closure certification report.

As defined by 40 CFR 761.3, the certification for Closure Cost Certification shall include the following language:

*“Under the civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.”*

#### **I-1f(4) Survey Plat**

No later than the submission of the certification of closure of each hazardous waste disposal unit, the Facility will submit to the local zoning authority and to the Director a survey plat indicating the location and dimensions of landfill trenches or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat will be prepared and certified by a professional land surveyor. The plat will contain a note, prominently displayed, which states the Facility's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with ADEM Administrative Code Rule 335-14-5-.07(7).

## I-2 Post-Closure Plan

### I-2a General Post-Closure Care Requirements

This subsection constitutes the RCRA and TSCA Post-Closure Plan and the post-closure cost estimates, as required by 40 CFR 264.118 and 40 CFR 264.144 and ADEM Administrative Code Rules 335-14-5-.07(9) and 335-14-5-.08(5). Post-closure care for each hazardous waste management unit subject to the post-closure care requirements will be performed for thirty (30) years after the submission of the certification of closure of each unit. The Facility will perform post-closure inspection, monitoring, and maintenance for the landfill disposal trenches that are subject to the post-closure care requirements of ADEM Administrative Code Rule 335-14-5-.07(8) as described within the following subsections.

#### **I-2a(1) General Inspection, Maintenance, and Monitoring Activities**

During the post-closure care period, the hazardous waste management units subject to post-closure care requirements will undergo routine inspections, maintenance and monitoring activities. The results of inspections will be recorded in a log to be maintained by the Facility contact. In accordance with 40 CFR 264.117 and ADEM Administrative Code Rule 335-14-5-.07(8), the following items will be inspected, maintained, and monitored for landfill disposal Trenches T-11 through T-23, Lagoons L-1 and L-2, and the Incinerator Scrubber Blowdown Caustic Lagoon:

- The security fence and gates will be inspected semi-annually for deterioration in accordance with 40 CFR 264.117(b) and ADEM Administrative Code Rule 335-14-5-.07(8)(b). Any necessary repairs will be implemented to maintain Facility security. Warning signs surrounding the Facility will be inspected and maintained or replaced as necessary.
- The landfill final cover systems will be visually inspected for signs of erosion, settlement, subsidence, and/or displacement and for the condition of vegetative cover in accordance with 40 CFR 264.310(b) and ADEM Administrative Code Rule 335-14-5-.14(11)(d). In accordance with ADEM Administrative Code Rule 335-14-5-.14(11)(d)7., the inspection frequency will be at least quarterly for the duration of the post-closure care period. At any time after two years of post-closure care, the Facility may file for a modification to the frequencies of inspection based on demonstrated performance of the final closure cover systems. Maintenance of the closure cover system will be performed as necessary (as determined by the inspections) in order to ensure the integrity of the final cover. For the purpose of estimating post-closure costs, it is assumed that routine re-vegetation and soil erosion repair will be required annually. These repairs are assumed to consist of

refilling the growth media, re-grading the area of concern, and re-vegetating, as necessary to maintain the integrity of the final cover system.

- The capped lagoons, Lagoon L-1, Lagoon L-2 and the Incinerator Scrubber Blow-down Caustic Lagoon; will be inspected quarterly for exposed and/or damaged fabric and geosynthetic clay liner (GCL).
- The vegetative cover on all landfill trenches will be cut at least annually. The trimmings from the mowed area will be left as mulch, unless the growth of the vegetative cover is impeded by these trimmings. In this case the trimmings will be baled and removed. In addition, to insure proper vegetative cover, fertilization will be conducted semi-annually.
- The run-on, run-off, and drainage control systems will be inspected for integrity and evidence of erosion in conjunction with the landfill disposal trench final cover system inspections and maintained as necessary to insure proper operation.
- All surveyed benchmarks associated with the landfill disposal units will be inspected semi-annually and clearly marked with a visible indicator. Each will be visually inspected to confirm its condition, and missing, damaged, or unprotected benchmarks will be repaired or replaced as necessary.
- The groundwater monitoring wells will be visually inspected on a semi-annual basis. Any detected defects or wear which impede the function of the wells will be repaired as necessary. All groundwater inspection procedures shall be conducted in accordance with the groundwater monitoring plan provided in Section E of this Application.
- The groundwater will be monitored on a semi-annual basis. All groundwater monitoring procedures, sampling and analytical protocols, and data evaluation shall be conducted in accordance with the groundwater monitoring plan provided in Section E of this Application.

### **I-2b Post-Closure Care Requirements for Trenches T-19, T-21, T-22, and T-23**

In addition to the general requirements for inspection, maintenance, and monitoring as described in Subsection I-2a, the Facility will continue to operate the leachate collection and removal systems and continue to maintain and monitor the leak detection systems for landfill disposal Trenches T-19, T-21, T-22, and T-23 throughout the post-closure care period in accordance with 40 CFR 264.310(b) and ADEM Administrative Code Rule 335-14-5-.14(11)(d). The results of these inspections and monitoring activities will be recorded in a log to be maintained by the Facility contact. In accordance with 40 CFR 264.117 and ADEM Administrative Code Rule 335-14-5-.14(11)(d), the following items will be inspected, maintained, and monitored for landfill disposal Trenches T-19, T-21, T-22, and T-23:

- The Facility will maintain and monitor the leak detection system in accordance with the requirements of the Response Action Plan (RAP) provided in Attachment D-6-1-6 of this Application and will collect and remove pumpable liquids from the leak detection system sumps to minimize the head on the bottom liner in accordance with 40 CFR 264.303(c) and ADEM Administrative Code Rule 335-14-5-.14(4)(c). The Facility will maintain, monitor and operate the leachate collection and removal system until leachate is no longer detected in accordance with the requirements of 40 CFR 264.310(b)(2) and ADEM Administrative Code Rule 335-14-5-.14(11)(d)2. The volume of leachate removed from the landfill sumps will be recorded in the post-closure inspection and monitoring log to be maintained by the Facility contact and will become part of the Operating Record as required by ADEM Administrative Code Rules 335-14-5-.05(4)(b)6. and 40 CFR 264.73(b)(6).
- The Facility will maintain and operate the dedicated leachate storage tank system(s) (i.e., tank systems including the associated piping and accessories from the perimeter limits of the landfill to the tanks in Unit 1700) during the post-closure care period until the volume of leachate removed from the landfill trenches no longer warrants the maintenance of these leachate storage tank systems. If these tanks have been closed, then the accumulated leachate will be pumped directly to a tanker truck.
- The Facility will maintain and operate the Leachate Treatment Plant (i.e., system including the associated piping and accessories from Unit 1700 to the treatment system in Unit 2001) during the post-closure care period until the volume of leachate no longer warrants the maintenance of the system.

### **I-2c Post-Closure Care Requirements for Trenches T-11 through T-18, and T-20**

In addition to those post-closure activities described in Subsection I-2a, and in accordance with 40 CFR 270.1(c) and ADEM Administrative Code Rule 335-14-8-.01(1)(c), the landfill disposal trenches at the Facility that were certified closed after January 26, 1983 (i.e., Trenches T-11 through T-18, and T-20) will be subject to post-closure care to minimize the need for further maintenance, and to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. Leachate is currently managed within the chalk lined landfill disposal Trenches T-11 through T-18, and T-20.

### **I-2d Notices Required for Post-Closure**

Post-closure notices are required for landfills, surface impoundments, certain tanks systems, containment buildings, corrective action management units and certain other hazardous waste management units at the Facility. In general, these notices include notification of amendment of

the post-closure plan, post-closure notices to local authorities, post-closure certification, and notice in deed for the property.

### **I-2d(1) Notification of Amendment of Post-Closure Plan**

5 In accordance with 40 CFR 264.118(d) and ADEM Administrative Code Rule 335-14-5-.07(9)(d),  
a notification of modification of the Permit, or request to modify the Permit will be submitted any  
time the extent of operation at the Facility or a planned design change requires a change in the  
post-closure plan. The written notification or request for Permit modification will include a copy of  
the amended post-closure plan for review or approval by the Director. A request for Permit  
10 modification will be submitted in writing to the Director at least sixty (60) days prior to a proposed  
change in Facility design or operations, and no later than sixty (60) days after an unexpected  
event has occurred that affects the Closure or Post-Closure Plans (30 days if the unexpected  
event occurs during closure). For each non-disposal unit for which the Facility or Director  
determines must be closed as a landfill (i.e., certain units that cannot be demonstrated  
15 clean-closed), the closure plan will be modified to include a written post-closure plan for such unit  
that will be submitted to the Director within ninety (90) days from the date that the Facility or  
Director makes such a determination.

### **I-2d(2) Post-Closure Notices to Local Authorities**

20 In accordance with 40 CFR 264.119 and ADEM Administrative Code Rule 335-14-5-.07(10), no  
later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the  
Facility will submit to the local zoning authority and to the Department a record of the type,  
location, and quantity of hazardous wastes disposed within each landfill trench or other disposal  
unit at the Facility.

### **I-2d(3) Notice in Deed to Property**

25 In addition to the submission of post-closure notices as described above and within sixty (60) days  
of certification of closure of the first hazardous waste disposal unit and within sixty (60) days of  
certification of closure of the last hazardous waste disposal unit, the Facility will:

- 30 1. Record, in accordance with State Law, a notation on the deed to the Facility property,  
or in some other instrument which is normally examined during title search, that will  
in perpetuity notify any potential purchaser of the property that:
  - i. The land has been used to manage hazardous wastes;
  - ii. Its use is restricted under ADEM Administrative Code Rule 335-14-5-.07; and
  - 35 iii. The survey plat indicating the location and dimensions of landfill trenches or  
other hazardous waste disposal units with respect to permanently surveyed  
benchmarks within the Facility have been filed with the local zoning authority



or the authority with jurisdiction over local land use and with the Department;  
and

2. Submit to the Department a certification that the Facility has recorded the notation and a copy of the document in which the notation has been placed.

5

#### **I-2d(4) Post-Closure Certification**

In accordance with 40 CFR 264.120 and ADEM Administrative Code Rule 335-14-5-.07(11), the Facility will submit to the Department, by registered mail, a certification no later than sixty (60) days after the completion of the established post-closure care period for each hazardous waste disposal unit. The certification will state that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the Post-Closure Plan. The certification will be signed by the Facility and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification will be furnished to the Department upon request until it releases the Facility from the financial assurance requirements for post-closure care under 40 CFR 264.145(i) and ADEM Administrative Code Rule 335-14-5-.08(6)(i).

### **I-3 Closure and Post-Closure Cost Estimates**

As required by 40 CFR 264.142 and ADEM Administrative Code Rule 335-14-5-.08(3), and by 40 CFR 264.144 and ADEM Administrative Code Rule 335-14-5-.08(5), respectively, this section describes the closure and post-closure cost estimates prepared for the Facility.

The cost estimates are based on closure activities being conducted by an independent third party performing treatment and disposal off-site; however, units of the Facility which are not either already closed or actively undergoing closure may continue to manage waste inventories and decontamination residuals from the unit(s) under on-going closure as described herein. Many of the hazardous waste management units at the Facility are also permitted as Toxic Substance Control Act (TSCA) units. The closure cost estimate includes the TSCA-regulated waste inventories for the units that are also regulated under TSCA, which satisfy the requirements of 40 CFR 761.65(f).

For the purpose of estimating closure costs, it is assumed that, at the time of final closure, all container management units, tank systems, and containment buildings are at maximum permitted capacity, and that the landfill disposal trench will be in operation as described in Subsection I-1e(4). In addition, closure cost estimates have been provided for the CWA-regulated Leachate Treatment Plant (Unit 2001) and certain non-regulated areas (i.e., maintenance buildings Units 300 and 606, truck parking areas PK-700 and PK-1000, and the roadways indicated on Figure I-5.1 in Appendix I-5 to this section). For closure cost estimating purposes

only, it is assumed that most waste will be treated as necessary and disposed of in the Facility landfill, and that only wastes which require incineration or aqueous treatment will be taken off-site for disposal. Specific basis of estimate information for closure and post-closure cost estimates are provided in Appendix I-5 and Appendix I-6.

5

Detailed closure cost estimates for each hazardous waste management unit at the Facility, and also for non-regulated units, are provided in Appendix I-6.

10 Post-closure cost estimates for the Facility are provided in Appendix I-7. These post-closure cost estimates will be revised as necessary if any additional post-closure care activities are identified in the future.

15 The assumptions included herein and in the closure and post-closure cost estimates in Appendices I-6 and I-7 are used for cost estimating purposes only and are not to be inferred as the only procedure or alternative for partial or final closure activities.

#### **I-4 Financial Assurance Mechanism for Closure and Post-Closure**

20 The closure and post-closure cost estimates are for existing units. Proposed Trench T-23 will begin operation during the ten-year permit period, but even Cell 1 of Trench 23 will not be completely filled during the permit period. Therefore, the most expensive point of closure involves closing a completely filled Trench 22, a partially filled Cell 1 of Trench 23, and the other regulated storage and treatment units at the Facility. The total dollar amount to be guaranteed by the financial assurance mechanism for closure and post-closure is shown in Table I-6.1. Appendix I-8 to this section describes the financial assurance mechanism for closure and post-closure care of the Facility. The current proof of financial assurance for closure and post-closure of the Facility is on file with the Department. The purpose of these assurances is to guarantee that there will be funds available for an independent third party to perform the closure and post-closure activities in accordance with this section. The closure cost estimate will be updated within 30 days after ADEM approval of a modification to this closure plan, if the change in the closure plan increases the cost of closure.

30

35 The closure and post-closure cost estimates will be adjusted annually for inflation in accordance with the requirements of 40 CFR 264.142(b), 40 CFR 264.144(b), 40 CFR 761.65(f)(2) and ADEM Administrative Code Rules 335-14-5-.08(3)(b) and 335-14-5-.08(5)(b) within sixty (60) days of the anniversary date of the establishment of the financial instrument used to comply with 40 CFR 264.146 and ADEM Administrative Code Rule 335-14-5-.08(7). The Facility will perform this annual adjustment by using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product (GNP) as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor will be calculated by dividing the latest published deflator

by the deflator for the previous year. The latest closure cost estimate will be multiplied by the inflation factor to determine the adjusted closure cost estimate.

5 As permitted units are constructed, and at least sixty (60) days prior to placing these units into operation, the Facility will submit updated financial assurance documents if the additional costs for closure are not already incorporated into the closure cost estimate.

[End of Section I Text]

**APPENDIX I-1**

**SECTION I**

**CLEANSING/TREATMENT ALTERNATIVES AND  
PROCEDURES**

Revision No.

5.0

# APPENDIX I-1

## SECTION I

### LIST OF DOCUMENTS

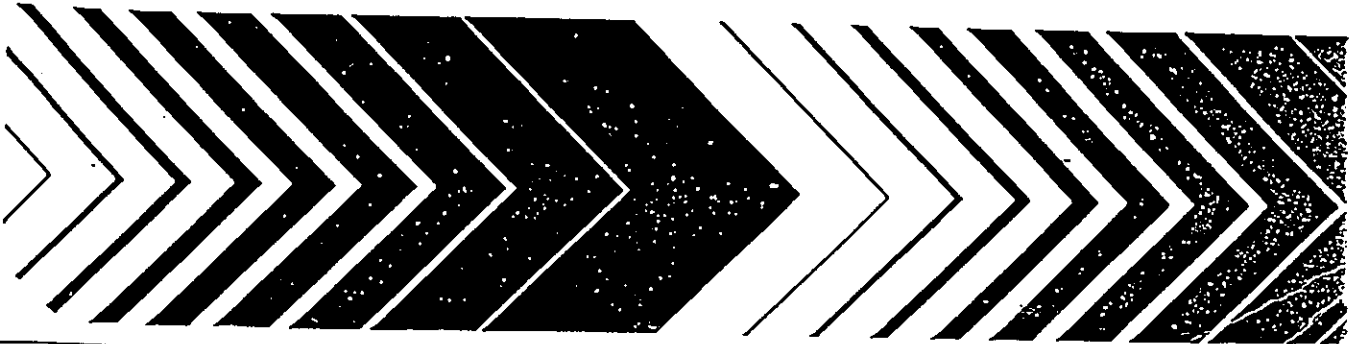
- Document 1:** Procedures for High Pressure Washing and Sand Blasting; excerpts from: *Guide for Decontaminating Buildings, Structures, and Equipment at Superfund Sites*; EPA/600/2-85/028), dated March 1985.



# Guide for Decontaminating Buildings, Structures, and Equipment at Superfund Sites

PB85-201234

REPRODUCED BY  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL TECHNICAL INFORMATION SERVICE  
SPRINGFIELD, VA 22161



#### Section 4/Gritblasting (Method 7)

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##### Treatment and Disposal Costs--

Overall costs should be moderate; costs for utilities and fuel should be low. Equipment and materials costs will make up most of the treatment costs. Personnel costs should not be very large. Disposal costs should be low.

##### Future Work

This technique is generally well developed. Research should concentrate on developing encapsulating materials and techniques that are relatively inexpensive and contaminant-specific.

##### Information Sources

The bulk of the information in this subsection came from References 20, 21, 23, and 24.

## GRITBLASTING (METHOD 7)

### General Description

Gritblasting is a surface removal technique in which an abrasive material is used for uniform removal of contaminated surface layers from a building or structure.

### Advantages

Gritblasting is a widely used surface-removal technique. It can simultaneously and readily remove paint and contaminants near the surface.

### Disadvantages

Large amounts of dust and debris are generated. This method is effective only as a surface treatment. Gritblasting can potentially detonate pockets of combustible contaminants. A large quantity of abrasive is required, and this method is relatively slow.

### State of the Art

This technology is well developed. Gritblasting has been used since 1870 to remove surface layers from metallic and ceramic surfaces, and is currently used extensively throughout industry. For example, sandblasting is commonly used to clean the surfaces of old brick and stone buildings. A large number of gritblasting equipment manufacturers and contractors are available.

Variations of Idea

Steel pellets, sand, alumina, or glass beads may be used as the abrasive. Remote-control gritblasters are available.

Applicability

The gritblasting method is potentially applicable to all surface contaminants except highly toxic residues (e.g., asbestos, dioxins) and some highly sensitive explosives (e.g., lead azide, lead styphnate). This method is applicable to all surface materials except glass, transite, and Plexiglas.

Effectiveness

Surface layer contaminants are completely removed by gritblasting; however, this method is ineffective for depths greater than about 0.5 to 1.5 cm. Corners may not be gritblasted as effectively as flat surfaces. Because abrasive is "sprayed," the method is applicable to many hard-to-reach areas (ceilings, behind equipment, etc.).

Engineering Considerations

Building Preparation--

Obstructions, such as pipes bolted to a wall, may require removal prior to treatment.

Process Description--

Figure 3 presents a flow diagram of gritblasting operations.

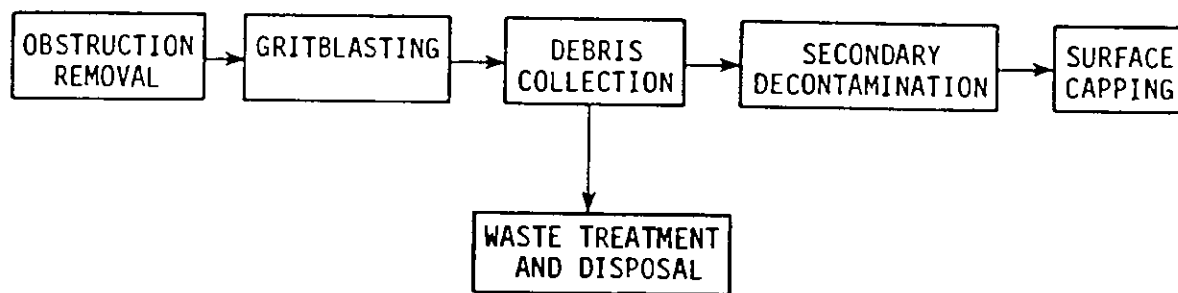


Figure 3. Gritblasting process flow diagram.

Once all obstructions have been removed, an abrasive (steel pellets, sand, alumina, or glass beads) is spray-applied to the building surface. The removed surface material and abrasive are collected and placed in appropriate containers for treatment and/or disposal. The building is then cleaned of residual dust by vacuuming and/or waterwashing. If necessary, secondary



#### Section 4/Gritblasting (Method 7)

---

decontamination is performed to remove contaminants that have penetrated building materials beyond the surface layer.

##### Equipment and Support Facilities Needed--

Gritblasting equipment requirements include a blast-gun, pressure lines, abrasive, and an air compressor. These components are illustrated in Figure 4. In addition, a debris/dust collection system, cleanup equipment, and personal protective gear are required.

##### Time Requirements--

Minimal setup time is required, depending on whether obstructions must be removed.

Personnel time is needed for gritblasting, collection of debris, transport of debris to a waste management facility, and cleanup--all labor-intensive tasks. Remote control units may decrease labor time, but at the expense of capital cost. Approximately 35 m<sup>2</sup> can be gritblasted per 8-h day.

Equipment removal (mainly of blasting equipment) requires minimal tear-down time. Cleanup requires the vacuuming or waterspraying of walls and the collection of all removed material and spent abrasive for transport to a waste disposal site.

##### Safety Requirements

Potential personnel hazards consist of dust inhalation and dust explosion (if combustible material is gritblasted). To minimize these hazards, the area should be washed down and wet processes should be used. Personal protective equipment should include face hoods, respirators, and protective clothing. See Section 5 for additional worker health and safety requirements.

##### Waste Disposal

The mixture of contaminated surface debris and spent abrasive material can be thermally decontaminated (e.g., by kiln incineration) before disposal. However, large amounts of residue still can be expected because the abrasives normally do not burn. If the wastes are not treated to remove contamination, they may require disposal as hazardous wastes. Consult 40 CFR Part 261 and appropriate EPA guidance for definitions and listings of hazardous waste. If the wastes are considered hazardous, they must be disposed of in a RCRA-permitted facility.

##### Costs

##### Structural Damage and Repair Costs--

In most cases, minimal structural damage will result because only the surface layer is removed. Costs for capping the treated surface may be incurred.

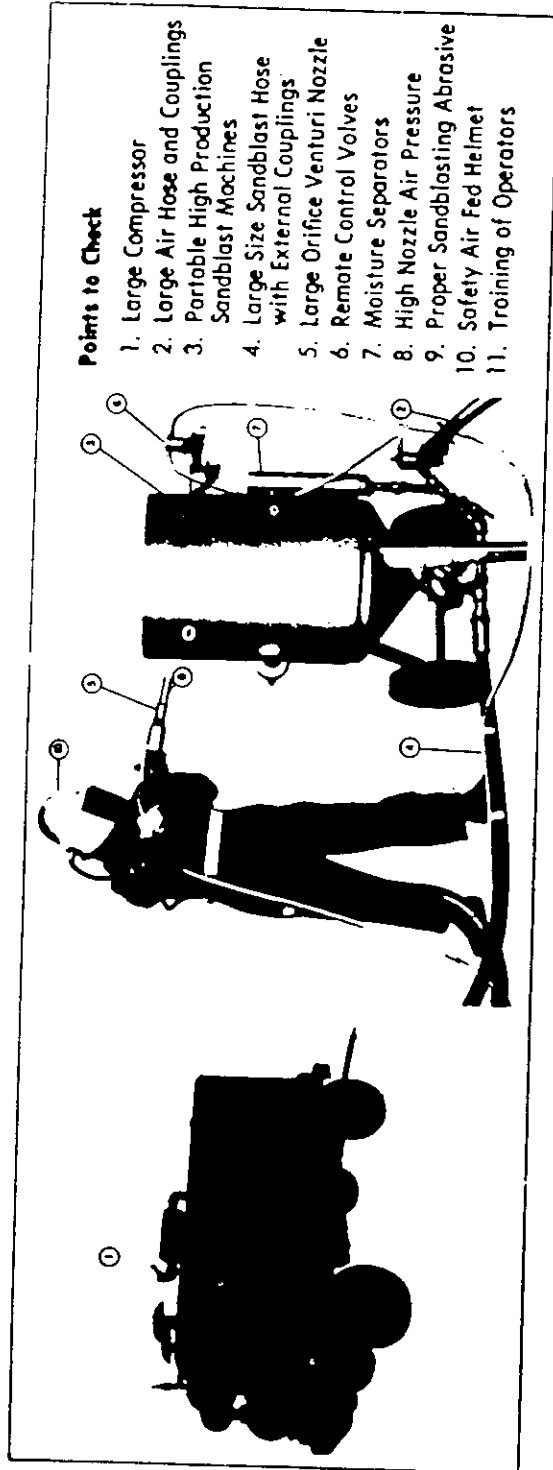


Figure 4. Equipment components of a gritblasting system.

Manufacturer's brochure.

## Section 4/Hydroblasting-Waterwashing (Method 8)

### Treatment and Disposal Costs--

Costs for utilities and fuel for electric air compressors and vacuum systems will be incurred. Equipment costs may be moderate, as this method requires a gritblaster, air compressor, debris collection system, and dust-suppression system. Material costs for abrasives should be moderate. This method is labor-intensive and costly as manhours are required for manual operation of gritblasting equipment, collection of debris, waste disposal, and cleanup. If the waste material is considered hazardous, waste disposal costs will be high. See Appendix C for an analysis of costs associated with the use of this method.

### Future Work

Experimental effort should be made to determine if gritblasting will detonate residual combustible wastes on building surfaces. Engineering development is needed for methods of collecting dust and treating waste materials generated during the process to recover the abrasive.

### Information Sources

The bulk of the information in this subsection came from Reference 20. Use of this method is illustrated in the case studies presented in Appendices G, H, and K.

## HYDROBLASTING/WATERWASHING (METHOD 8)

### General Description

A high-pressure (3500 to 350,000 kPa) water jet is used to remove contaminated debris from surfaces. The debris and water are then collected and thermally, physically, or chemically decontaminated. Figure 5 is a schematic diagram of the hydroblasting process.

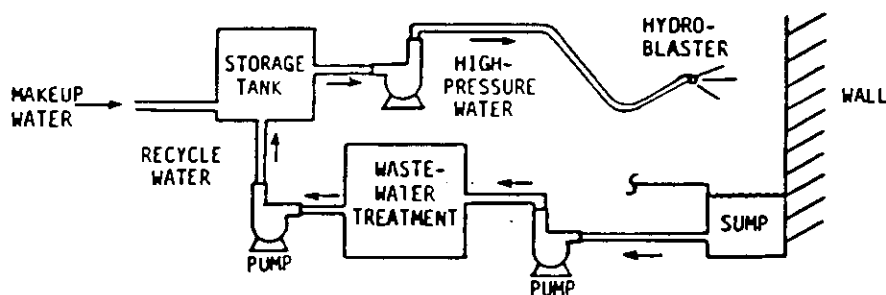


Figure 5. Schematic diagram of the hydroblasting process.

### Advantages

Hydroblasting offers a relatively inexpensive, nonhazardous surface decontamination technique that uses off-the-shelf equipment. Hydroblasting can very easily incorporate variations such as hot or cold water, abrasives, solvents, surfactants, and varied pressures. Many manufacturers produce a wide range of hydroblasting systems and high-pressure pumps.

### Disadvantages

Hydroblasting may not effectively remove contaminants that have penetrated the surface layer. Also, large amounts of contaminated liquids will have to be collected and treated.

### State of the Art

Hydroblasting has been used to remove explosives from projectiles, to decontaminate military vehicles, and to decontaminate nuclear facilities. Hydroblasting also has been employed commercially to clean bridges, buildings, heavy machinery, highways, ships, metal coatings, railroad cars, heat exchanger tubes, reactors, piping, etc. Off-the-shelf equipment is available from many manufacturers and distributors.

### Variations of Idea

Remotely operated hydroblasting rigs can be designed and used on walls or floors. Surfactants, caustic solutions, or commercial cleaners can be added to the water to decrease surface tension and increase effectiveness, and possibly increase the depth of penetration. Solvents such as acetone can be used in combination with water or can replace water altogether to solubilize contaminants. Sand or other abrasives can be used to increase surface removal effectiveness (add-on attachments are available from the manufacturers).

### Applicability

At present, hydroblasting is applicable to explosives, heavy metals, and radioactive contaminants. The potential exists for applicability to other contaminants. This method can be used on contaminated concrete, brick, metal, and other materials. It is not applicable to wooden or fiberboard materials.

### Effectiveness

Complete removal of surface contamination is anticipated. On the average, hydroblasting removes 0.5 to 1.0 cm of concrete surface at the rate of 35 m<sup>2</sup>/h. High pressures and chemical additives can remove contaminants from below the surface.

Other methods may be needed to remove or decontaminate any residual contaminants that have penetrated beyond the surface layer of material.

Section 4/Hydroblasting-Waterwashing (Method 8)

Engineering Considerations

Building Preparation--

Before decontamination activities begin, existing sumps or water collection systems are checked for leaks. Installation of sumps and external water storage tanks may be necessary.

Process Description--

A flow diagram of the hydroblasting process is presented in Figure 6. High pressure water (3500 to 350,000 kPa) is applied to building or equipment surfaces. The removed surface debris and spent water are collected in a sump and treated to separate the solids. The water is recycled to storage tanks where makeup water is added. Secondary decontamination techniques may be required to remove subsurface contamination.

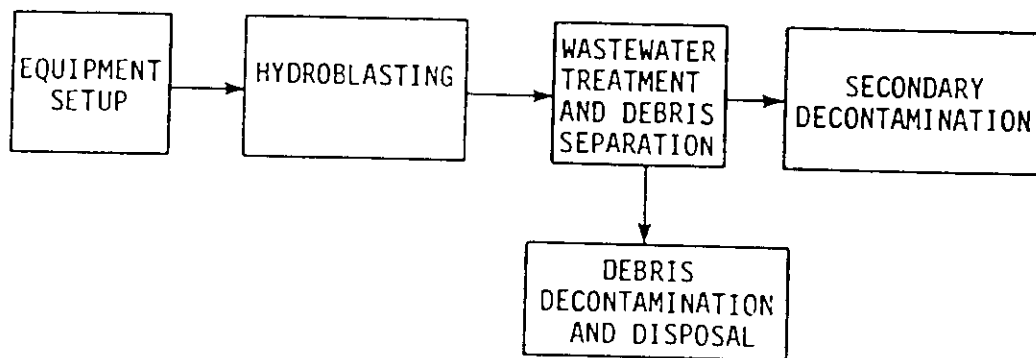


Figure 6. Hydroblasting process flow diagram.

Equipment and Support Facilities Needed--

Hydroblasting requires a water-blasting system consisting of high-pressure pump hoses and nozzles, water collection sumps, water storage tanks, and conventional water pumps. In addition, protective clothing is required for workers.

Time Requirements--

Minimal time is required to inspect an existing sump system or to install a new one (if necessary), and to set up the hydroblast system.

Personnel time could be extensive because all surfaces must be treated. Automated hydroblasting systems will decrease personnel time, but will increase equipment costs. Decontamination time could be moderate to long depending upon the technique chosen for the decontamination of debris and the secondary treatments.

Equipment removal and cleanup times should be low to moderate. The collection system will need to be rinsed of debris and all contamination, and the spent water must be treated.

Safety Requirements

No process hazards are anticipated. High-pressure water lines are a potential hazard for workers. Glasses, gloves, and protective clothing should be worn by all personnel to avoid contact with the contaminant. If sand, solvents, or caustic solutions are added to the water, personal protection should be increased accordingly. Hearing protection may also be required. See Section 5 for additional worker health and safety requirements.

Waste Disposal

The removed surface debris and spent water are collected in a sump system. Solids are separated by settling, and the liquid portion is recycled. Solids and spent liquids may be considered hazardous wastes. Consult 40 CFR Part 261 and appropriate EPA guidance for definitions and listings of hazardous wastes. If the solids or liquids are considered hazardous, they must be disposed of in a RCRA-permitted landfill. Alternatively, the solids may be treated in a RCRA-permitted incinerator and the liquid pretreated to remove contaminants prior to discharge to an NPDES-permitted wastewater treatment facility. Activated charcoal alone or in combination with sand may be used as the filter media, but it will also require treatment or disposal as a hazardous waste.

Costs

Structural Damage and Repair Costs--

Water may damage insulation and wooden surfaces. The treated surface of some materials may require painting or other refinishing methods. Repair costs should be low to moderate.

Treatment and Disposal Costs--

A hydroblaster can be powered by gas, electricity, or diesel fuel, thus costs for utilities and fuel should be moderate. Equipment costs should be moderate to high. Other material costs to be incurred include those for water and solvents, surfactants, and abrasives (if added). Personnel costs could be high. Automated systems can decrease personnel costs but will increase equipment costs. Disposal costs will be moderate to high, depending on the volume of waste generated and whether or not it is considered hazardous. See Appendix C for an analysis of costs associated with the use of this method.

Future Work

More information and experimental testing are needed for selecting a treatment technique to remove small quantities of contaminants from large quantities of water. Decontamination and disposal techniques are also needed for the surface debris.

# APPENDIX I-2

## SECTION I

### CLOSURE SCHEDULES

Revision No.

5.0

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**SECTION I**  
**CLOSURE SCHEDULES**

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**CLOSURE SCHEDULES**

**I-2-1 Introduction**

5 The schedules for clean closure for the entire Facility, each hazardous waste management unit and the miscellaneous non-regulated units (i.e., maintenance buildings Units 300 and 606, truck parking areas PK-700 and PK-1000, and the roadways indicated on Figure I-5.1 in Appendix I-5) subject to closure verification are shown graphically in the figures in this Appendix. Each schedule includes the total time required to close each hazardous waste unit and the time  
10 required for intervening closure activities which will allow tracking of the progress of partial and final closure. The closure activity categories and the estimated time required to complete each activity are based on information provided and formulated in Appendix I-5, Basis for Closure Cost Estimates, and Appendix I-6, Clean Closure Cost Estimates. When possible, concurrent closure activities will be scheduled during closure of the entire facility as shown in Figure I-2.1.

15 Closure activities will begin no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous waste (i.e., "Final Acceptance" in the closure schedules) or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date  
20 on which the unit received the most recent volume of hazardous waste. This is in accordance with 40 CFR 264.112(d) and ADEM Administrative Code Rule 335-14-5-.07(3)(d).

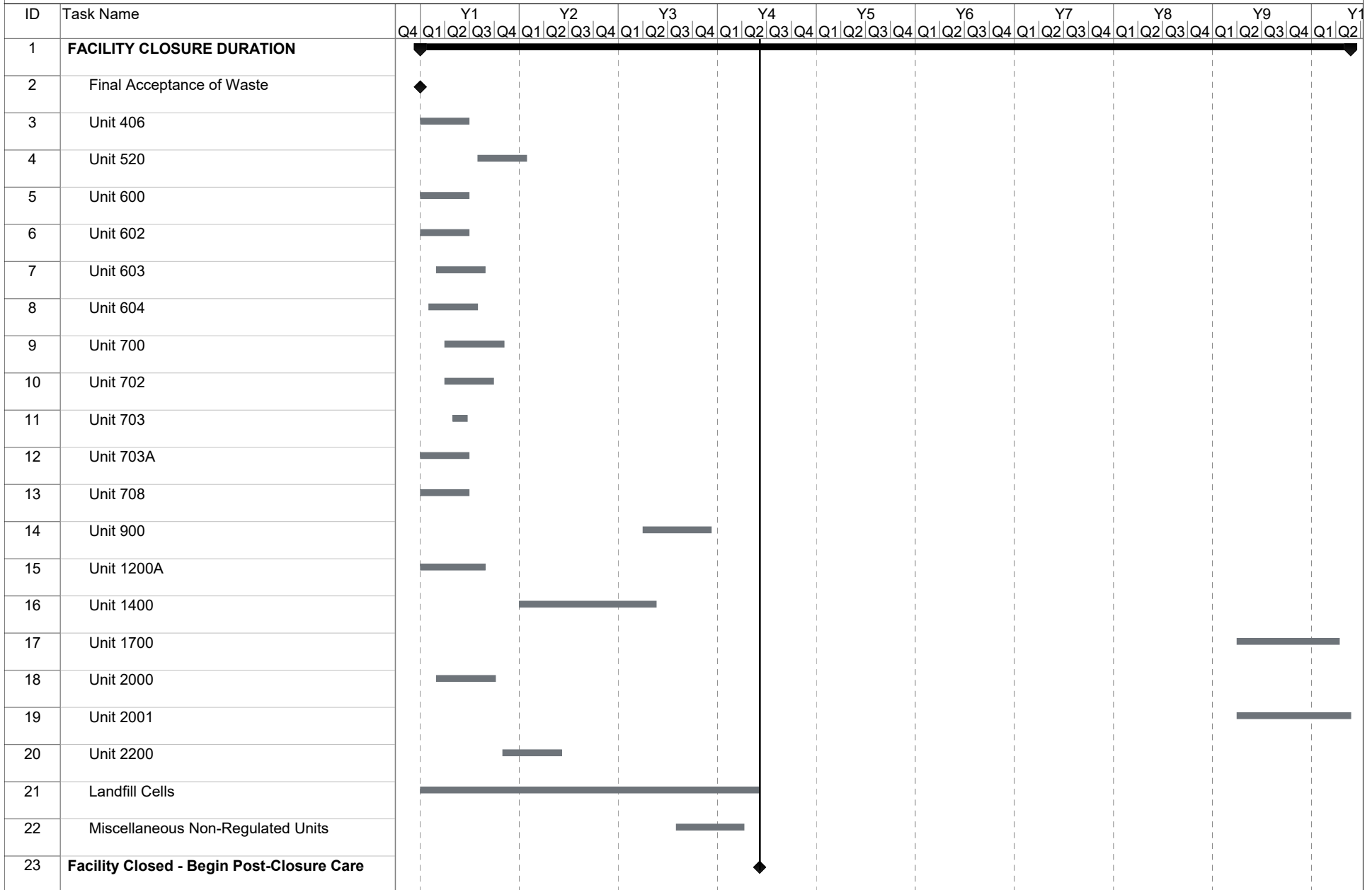
[End of Appendix I-2 Text]

25

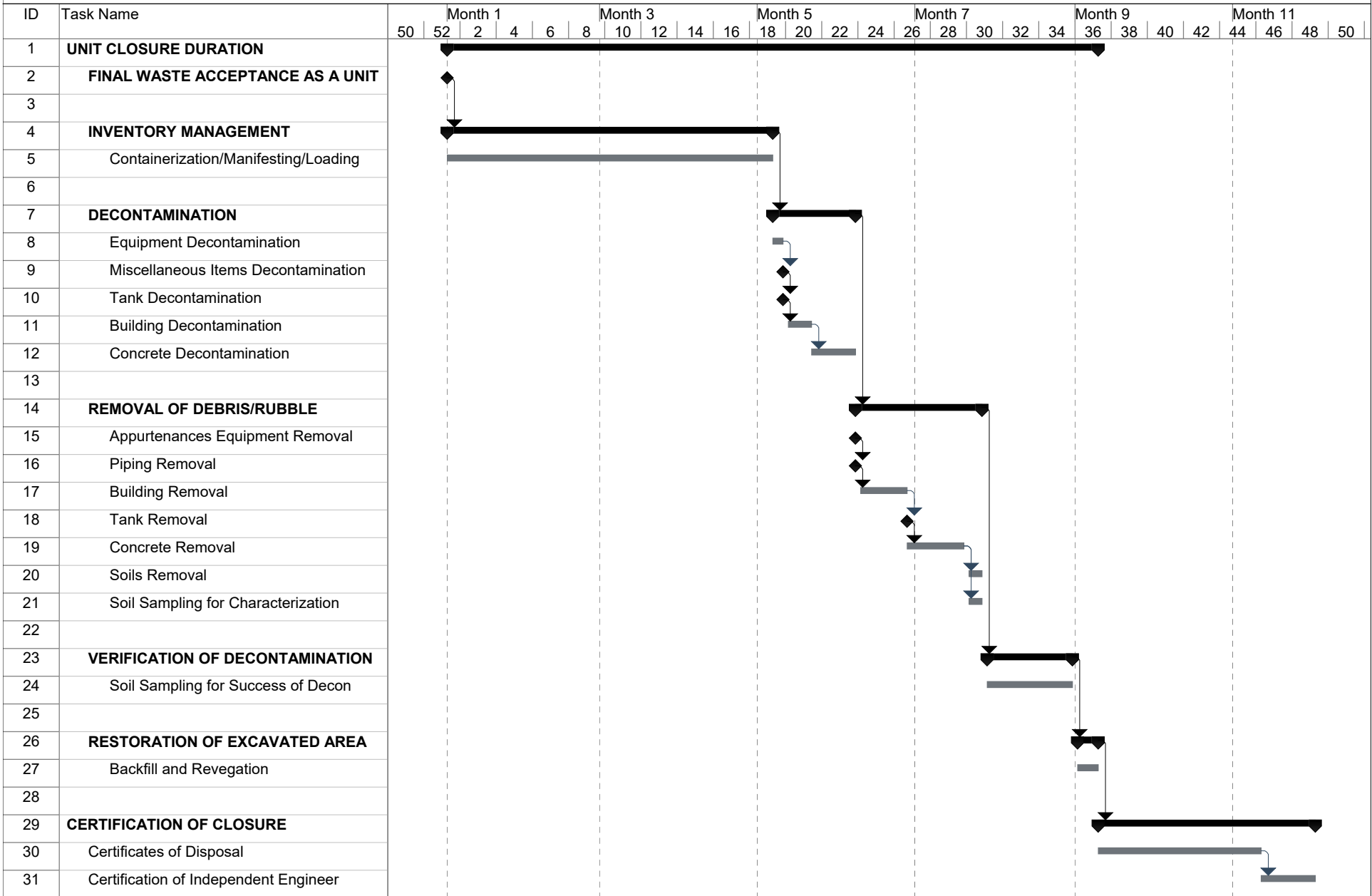
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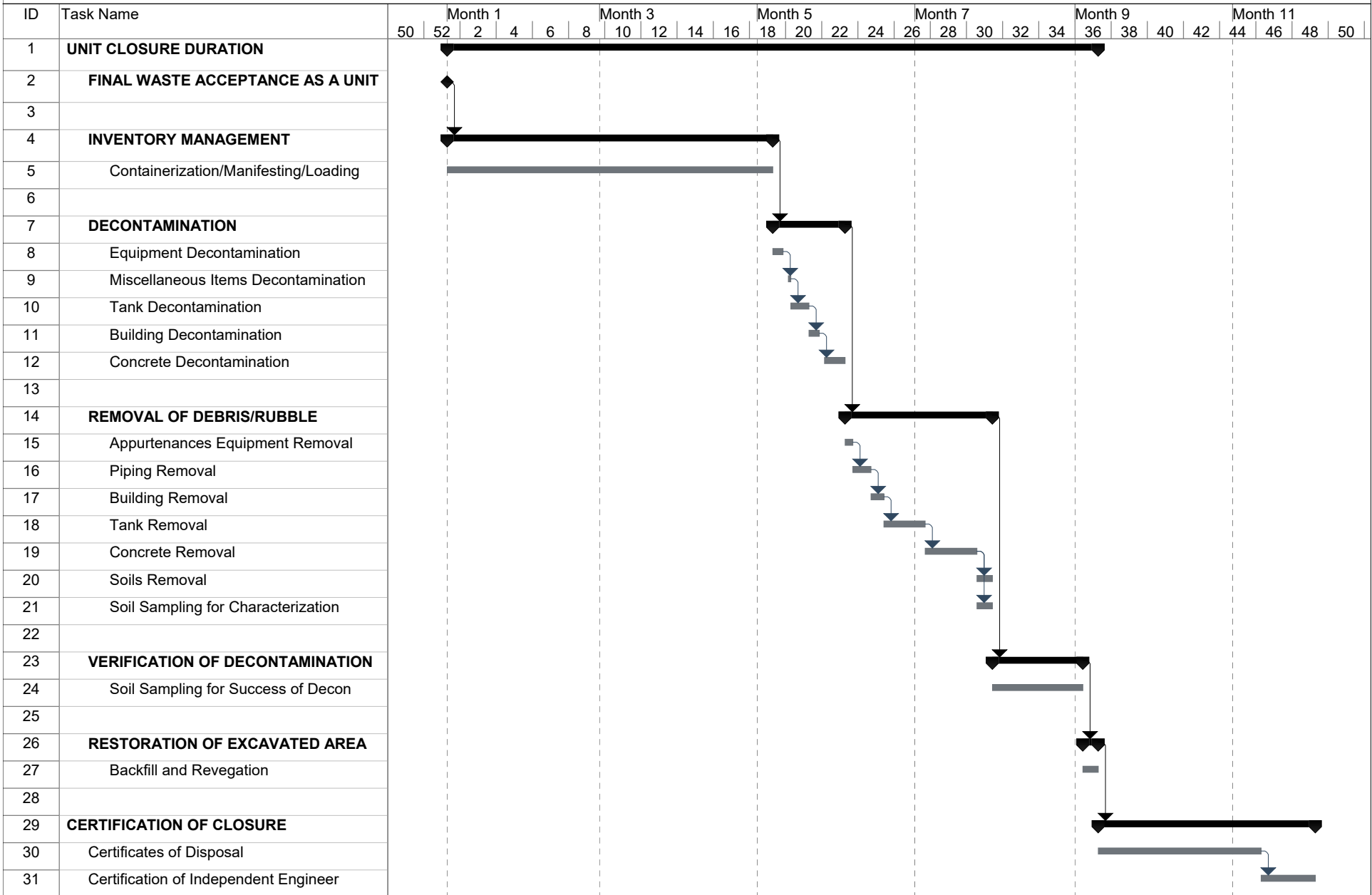
**FIGURE I-2.1  
FACILITY CLOSURE SCHEDULE  
CWM EMELLE FACILITY**



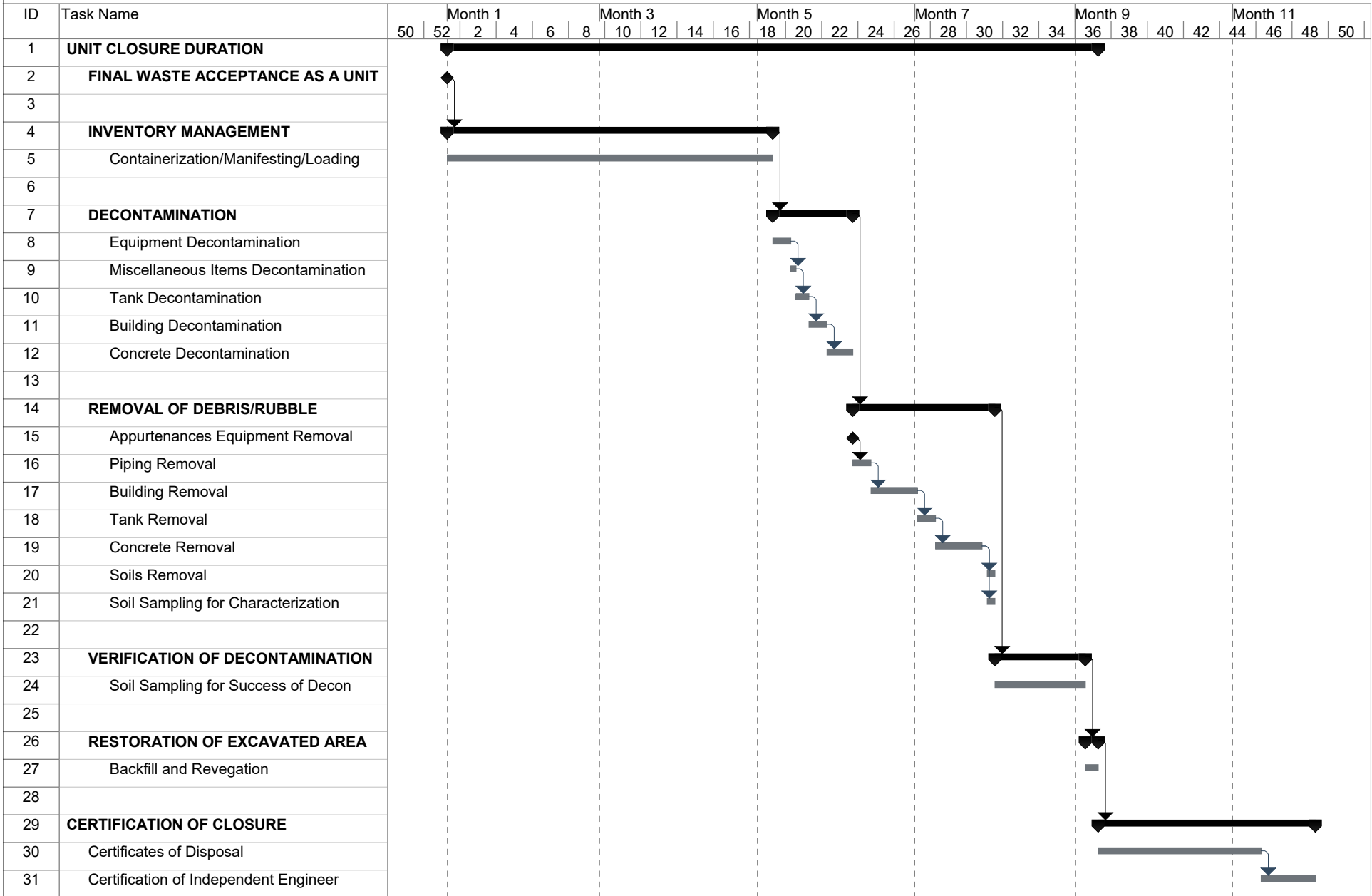
**FIGURE I-2.2  
CLOSURE SCHEDULE FOR UNIT 406  
CWM EMELLE FACILITY**



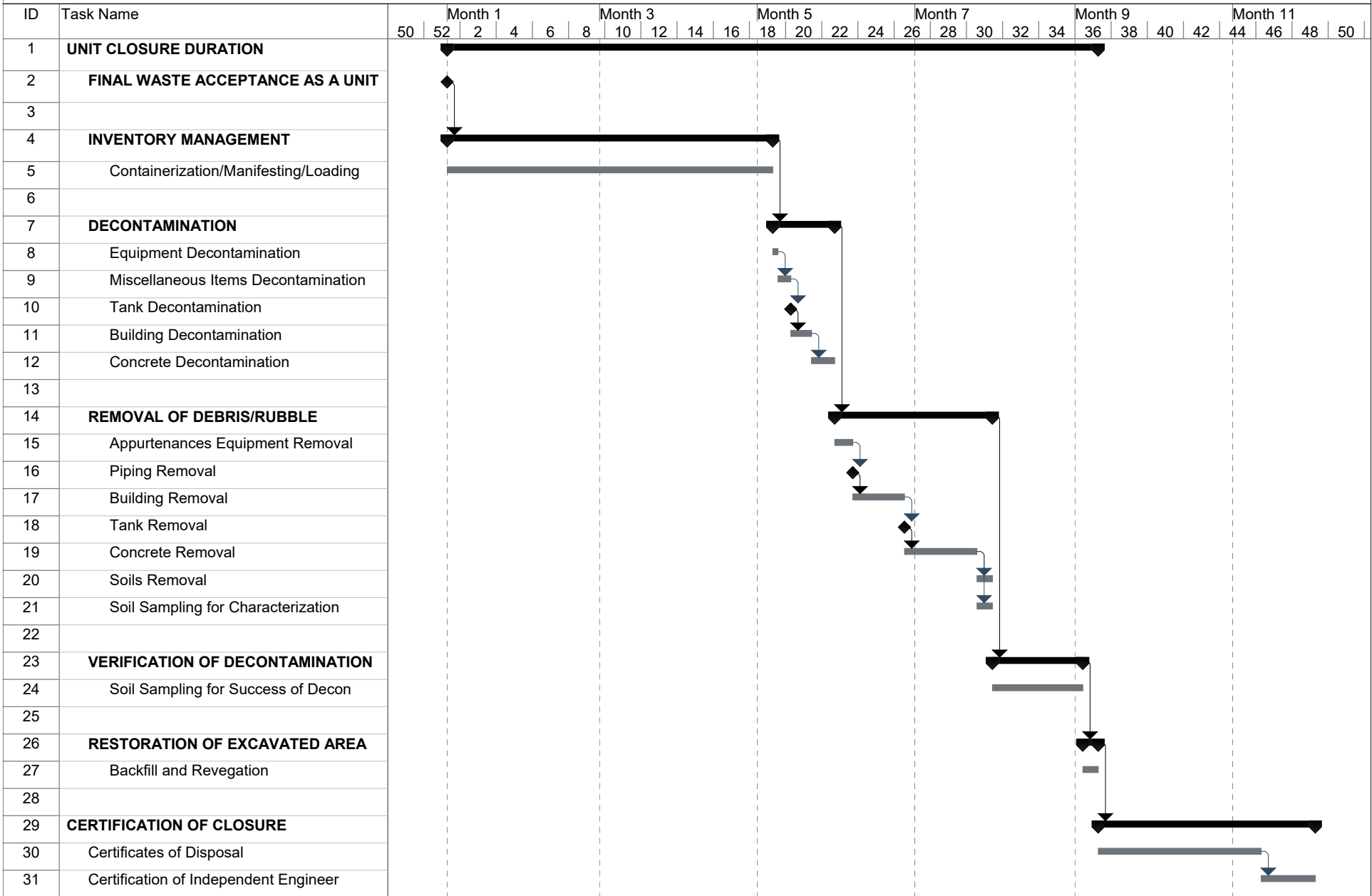
**FIGURE I-2.3  
CLOSURE SCHEDULE FOR UNIT 520  
CWM EMELLE FACILITY**



**FIGURE I-2.4  
CLOSURE SCHEDULE FOR UNIT 600  
CWM EMELLE FACILITY**

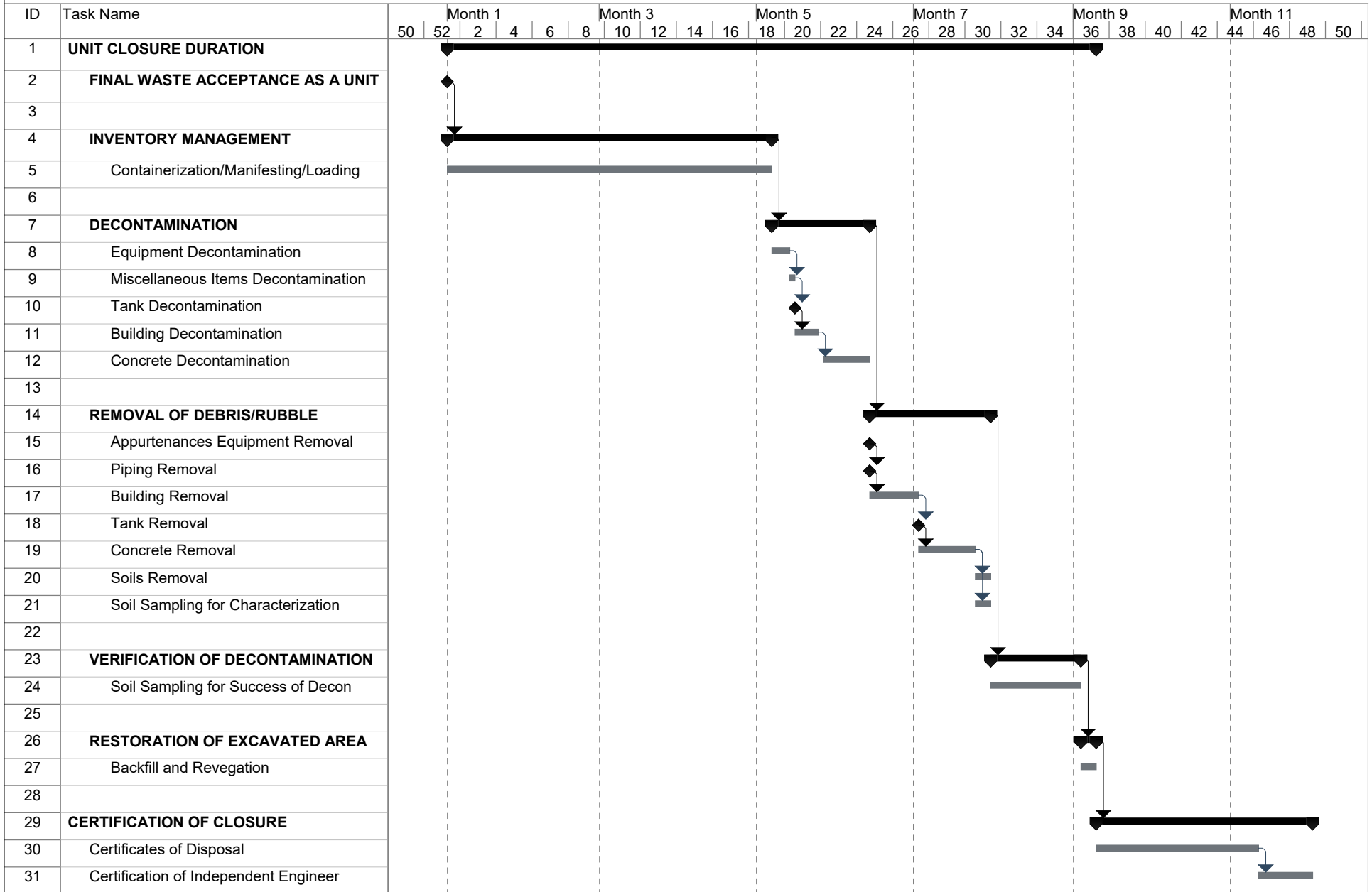


**FIGURE I-2.5  
CLOSURE SCHEDULE FOR UNIT 602  
CWM EMELLE FACILITY**

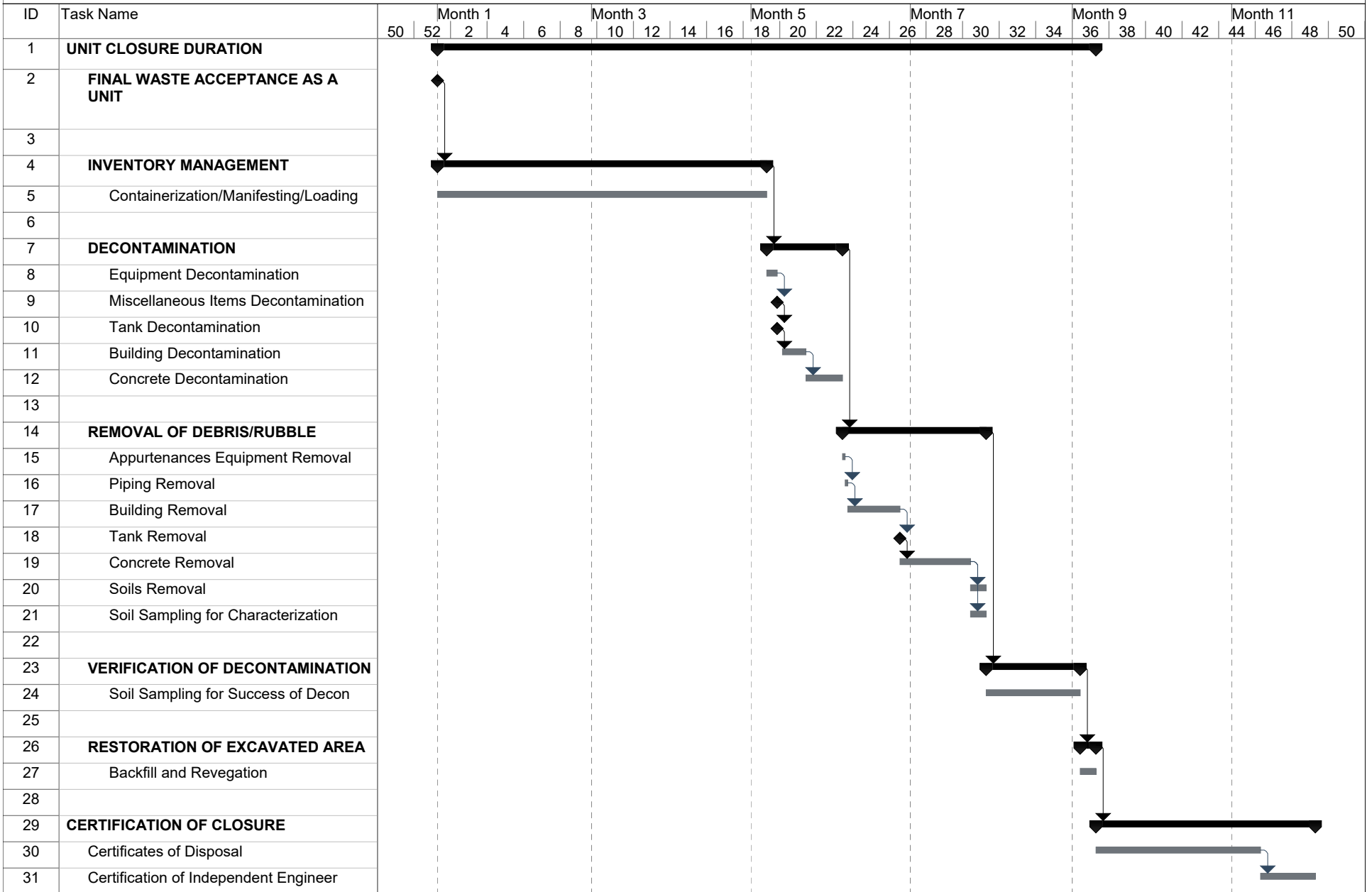




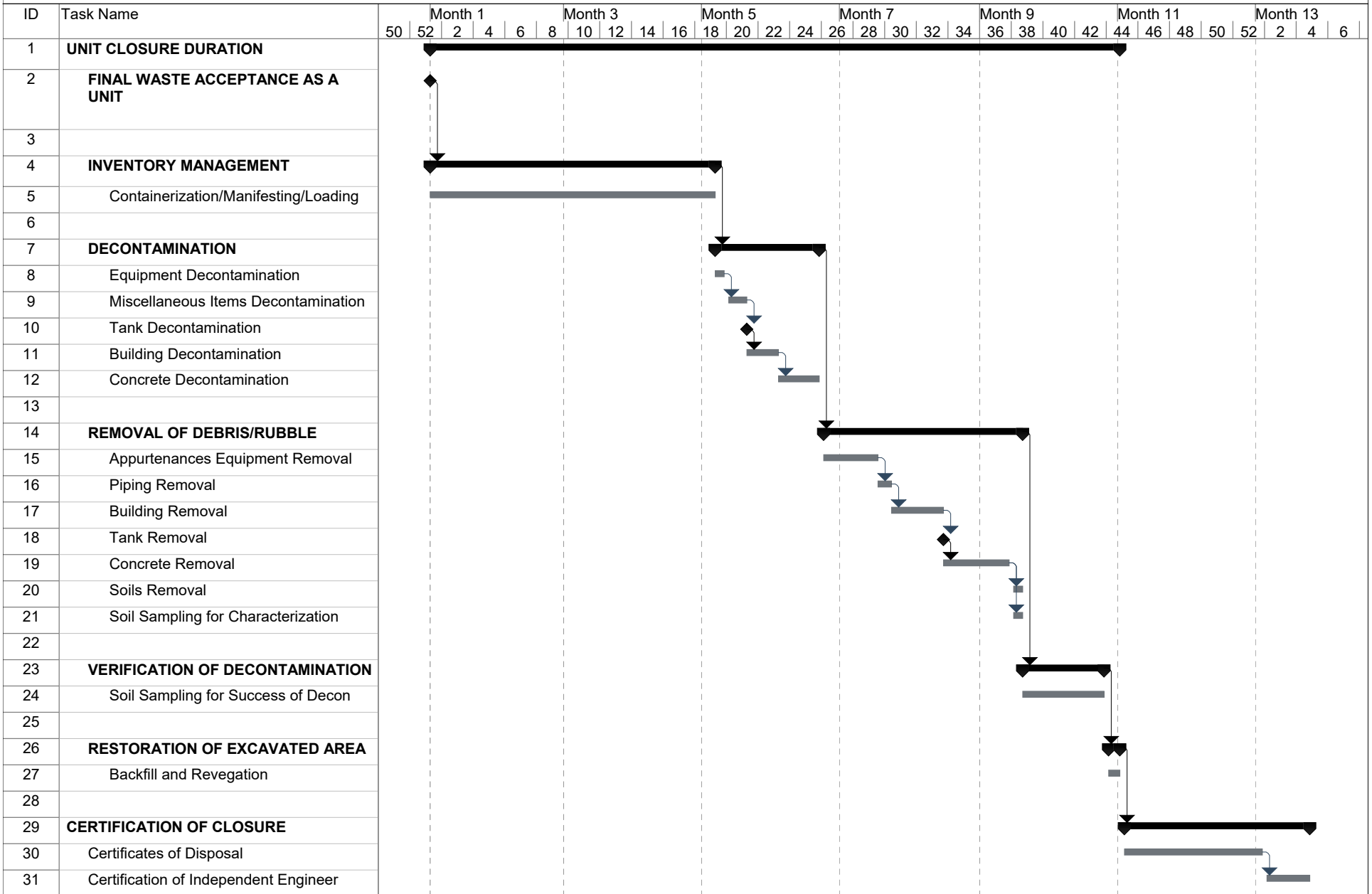
**FIGURE I-2.6  
CLOSURE SCHEDULE FOR UNIT 603  
CWM EMELLE FACILITY**



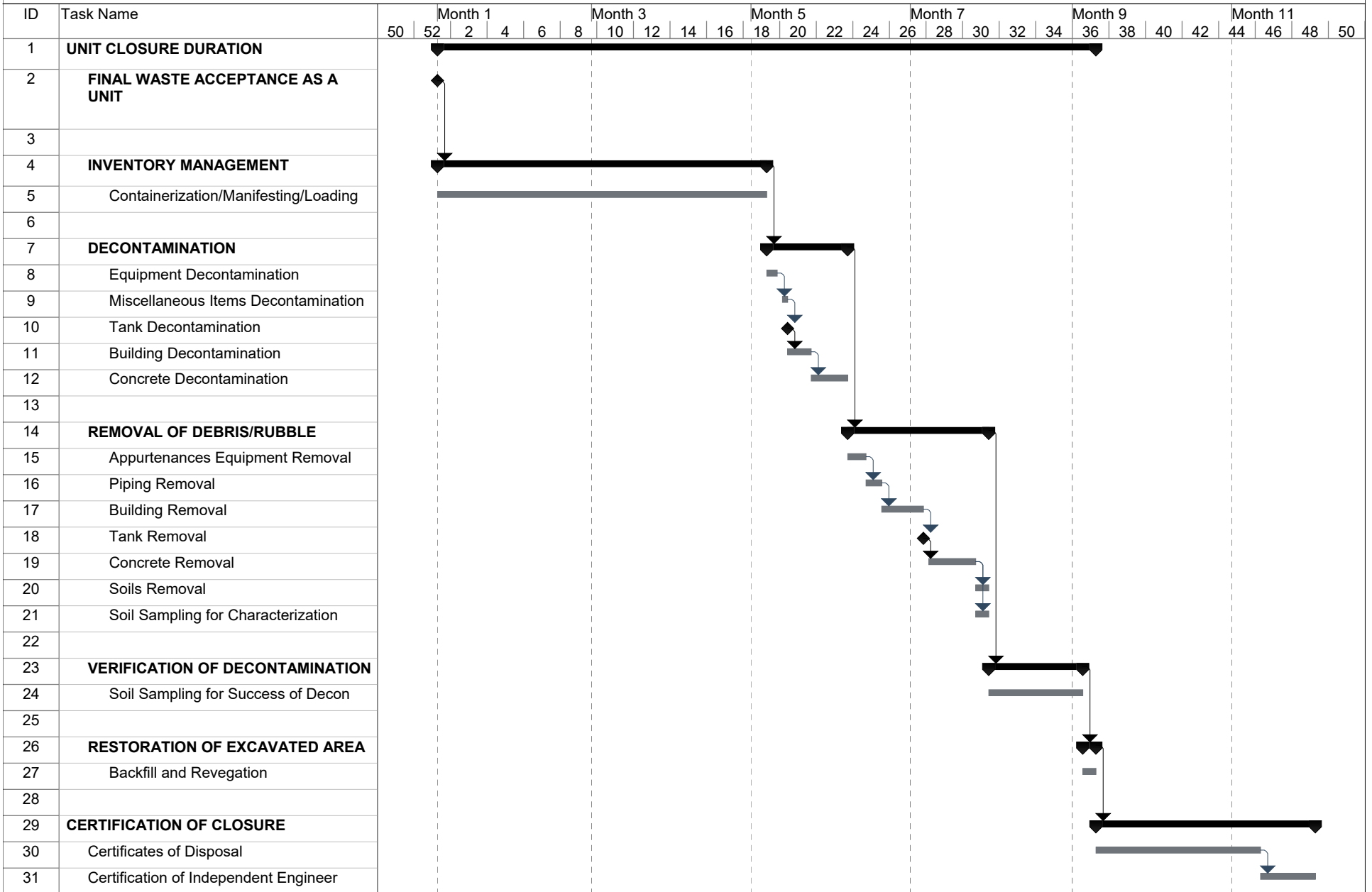
**FIGURE I-2.7  
CLOSURE SCHEDULE FOR UNIT 604  
CWM EMELLE FACILITY**



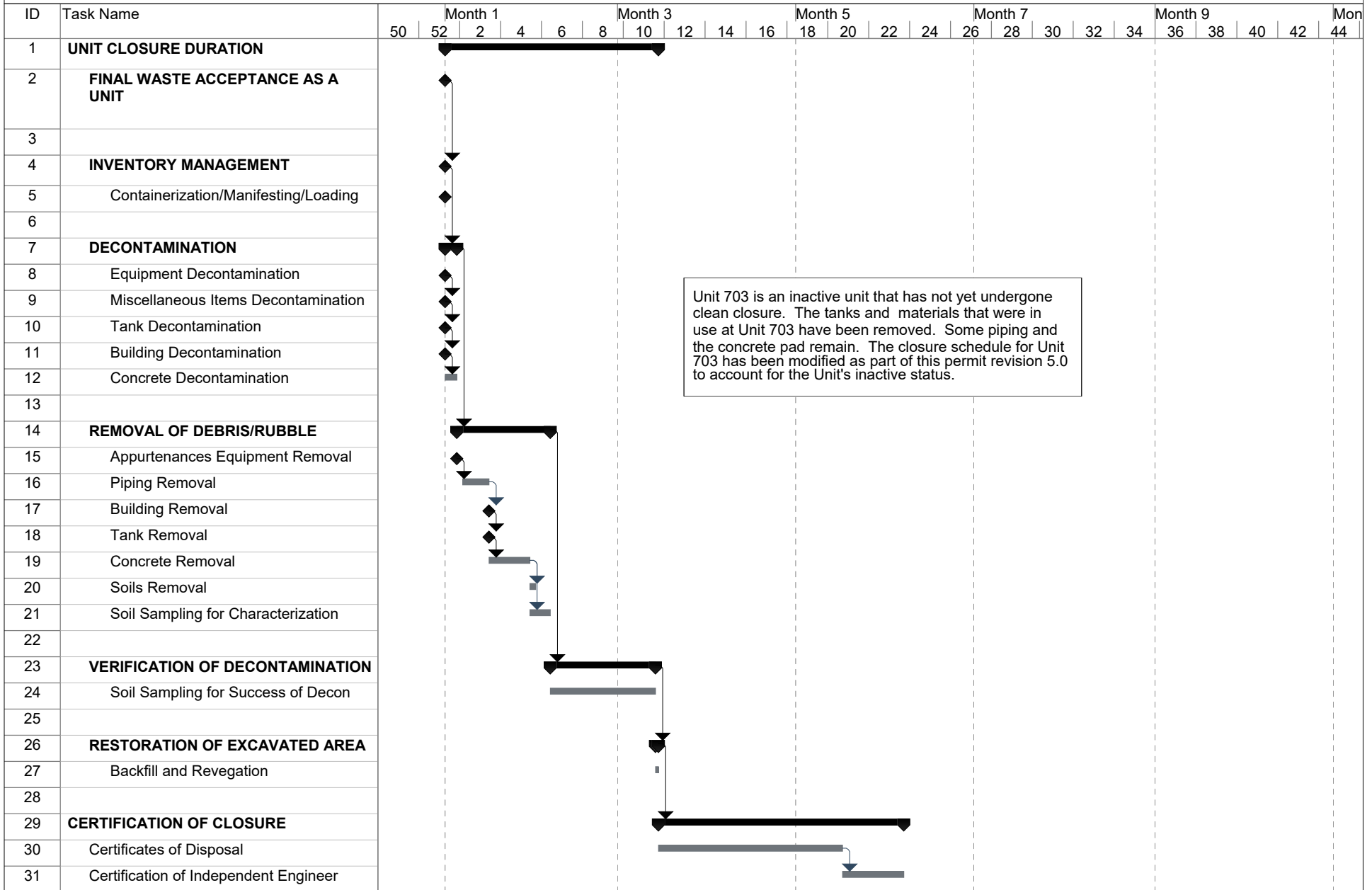
**FIGURE I-2.8  
CLOSURE SCHEDULE FOR UNIT 700  
CWM EMELLE FACILITY**



**FIGURE I-2.9  
CLOSURE SCHEDULE FOR UNIT 702  
CWM EMELLE FACILITY**

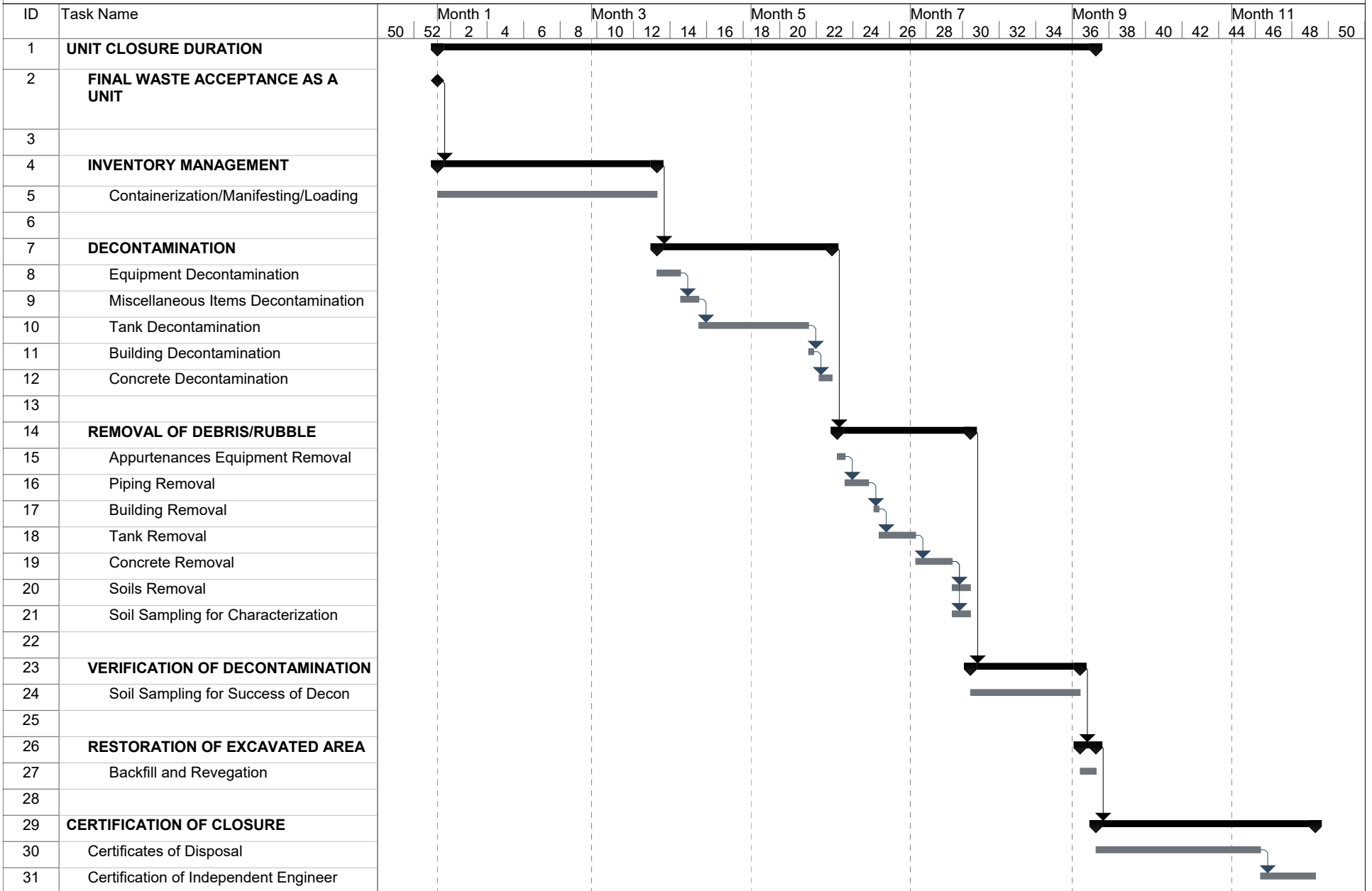


**FIGURE I-2.10  
CLOSURE SCHEDULE FOR UNIT 703  
CWM EMELLE FACILITY**

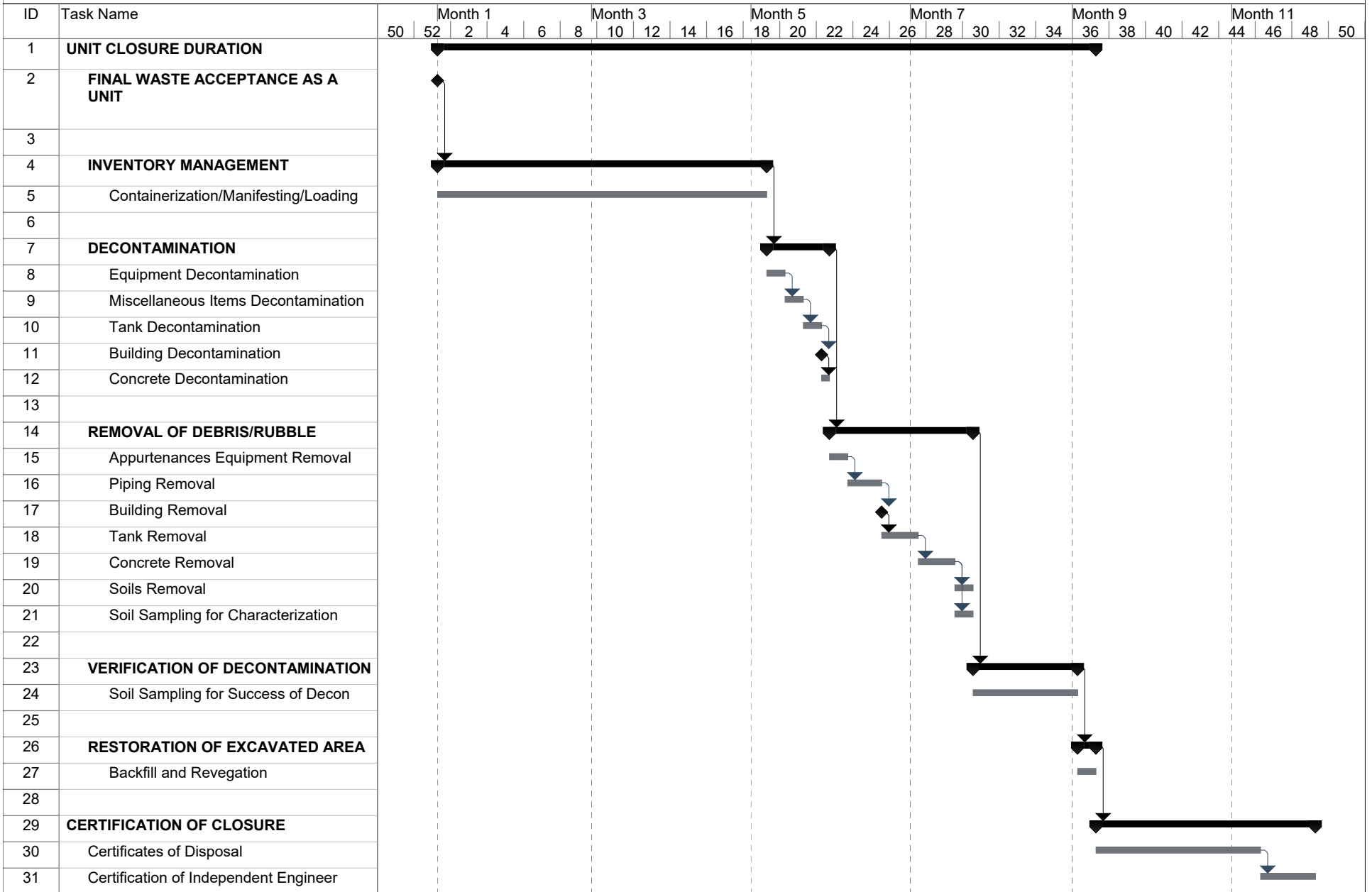


Unit 703 is an inactive unit that has not yet undergone clean closure. The tanks and materials that were in use at Unit 703 have been removed. Some piping and the concrete pad remain. The closure schedule for Unit 703 has been modified as part of this permit revision 5.0 to account for the Unit's inactive status.

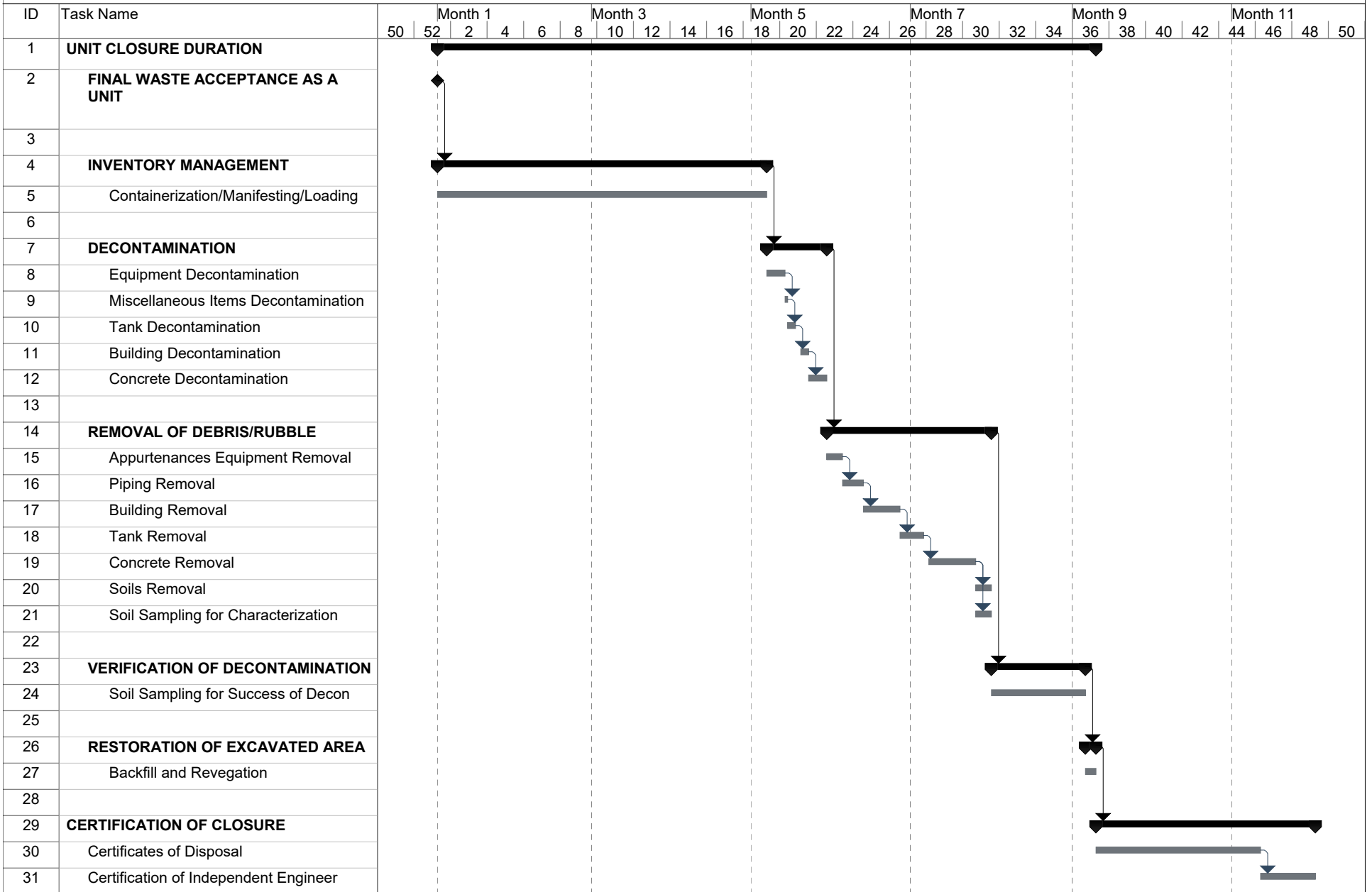
**FIGURE I-2.11  
CLOSURE SCHEDULE FOR UNIT 703A  
CWM EMELLE FACILITY**



**FIGURE I-2.12  
CLOSURE SCHEDULE FOR UNIT 708  
CWM EMELLE FACILITY**

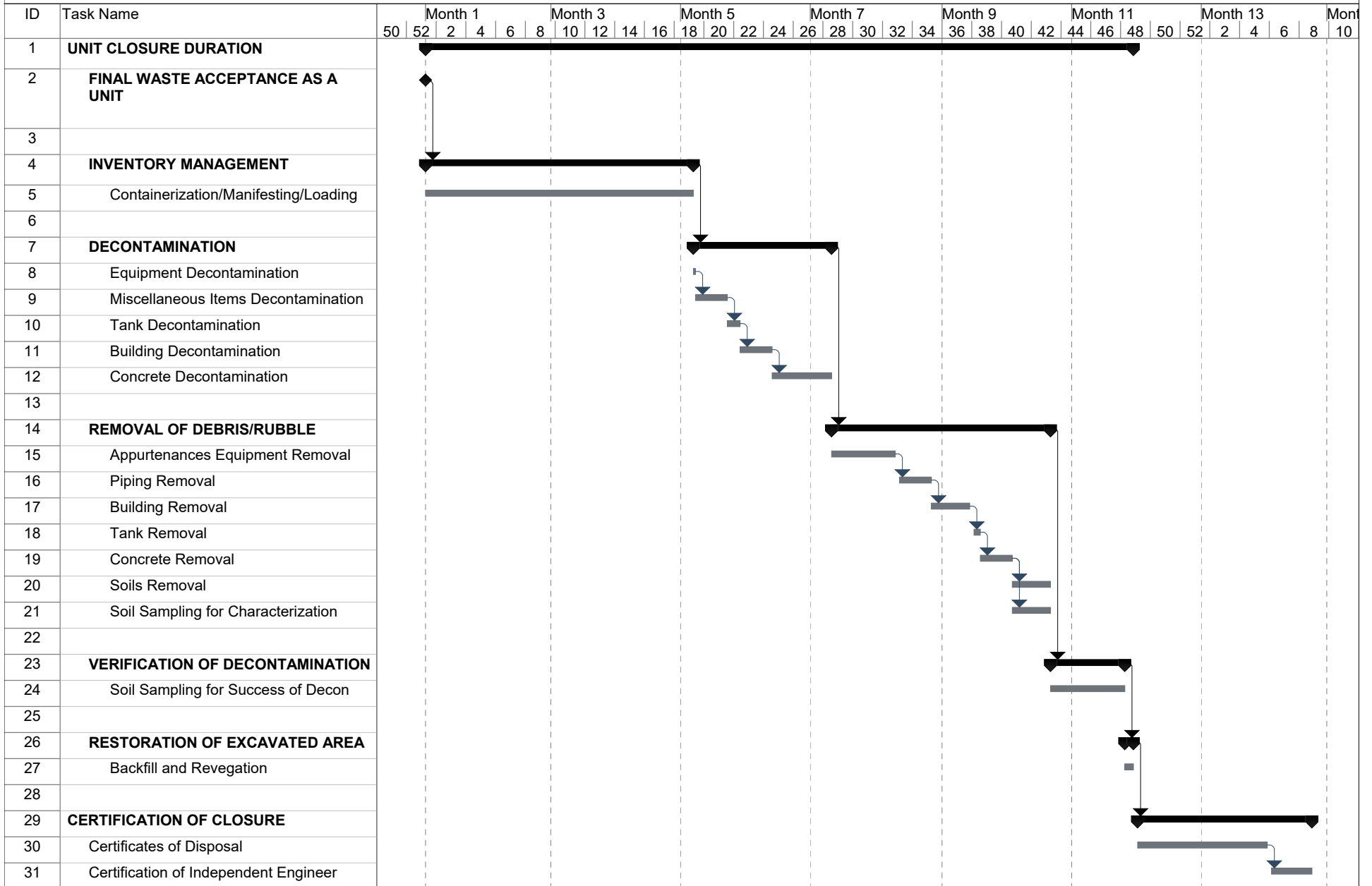


**FIGURE I-2.13  
CLOSURE SCHEDULE FOR UNIT 900  
CWM EMELLE FACILITY**

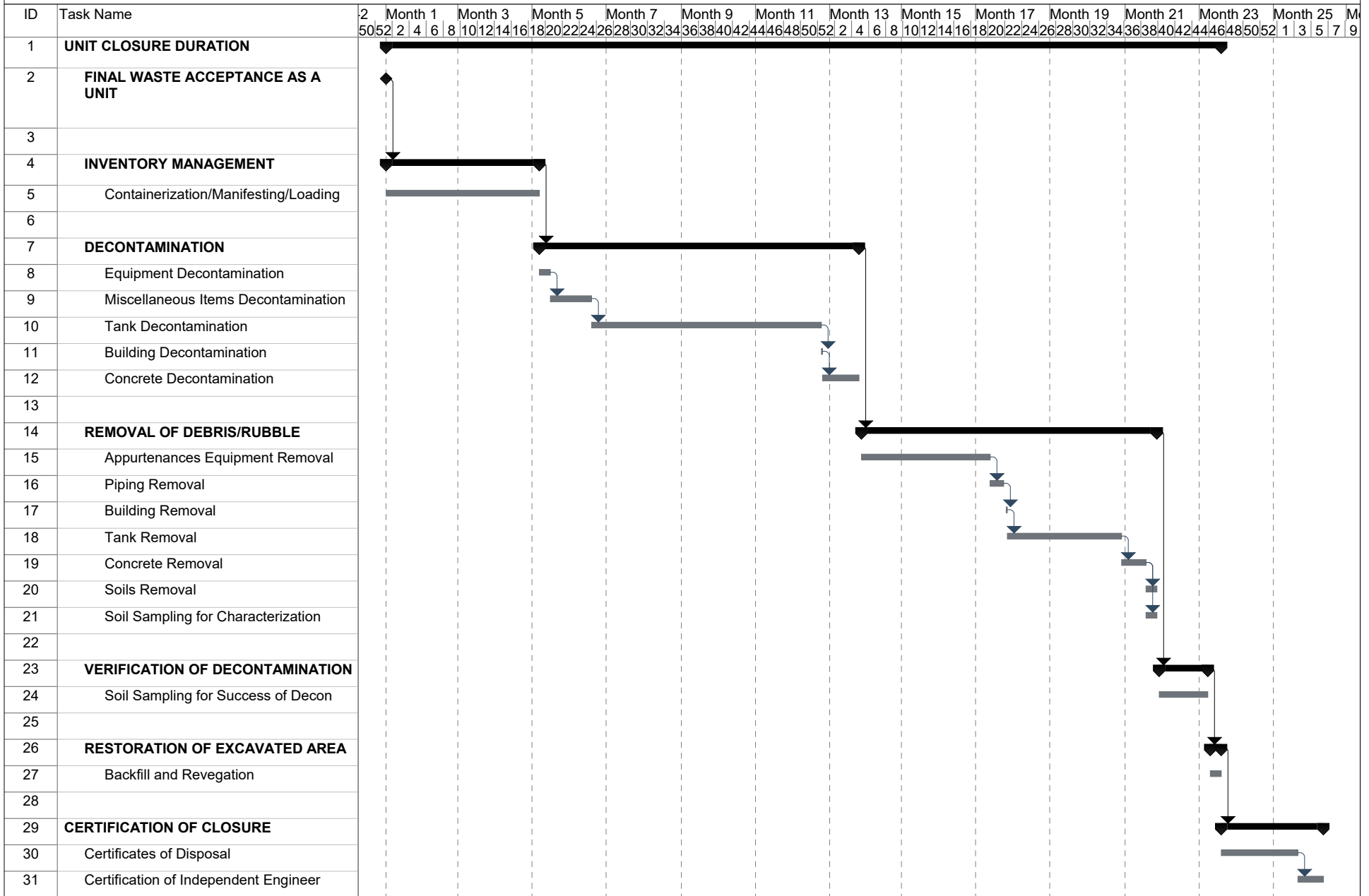




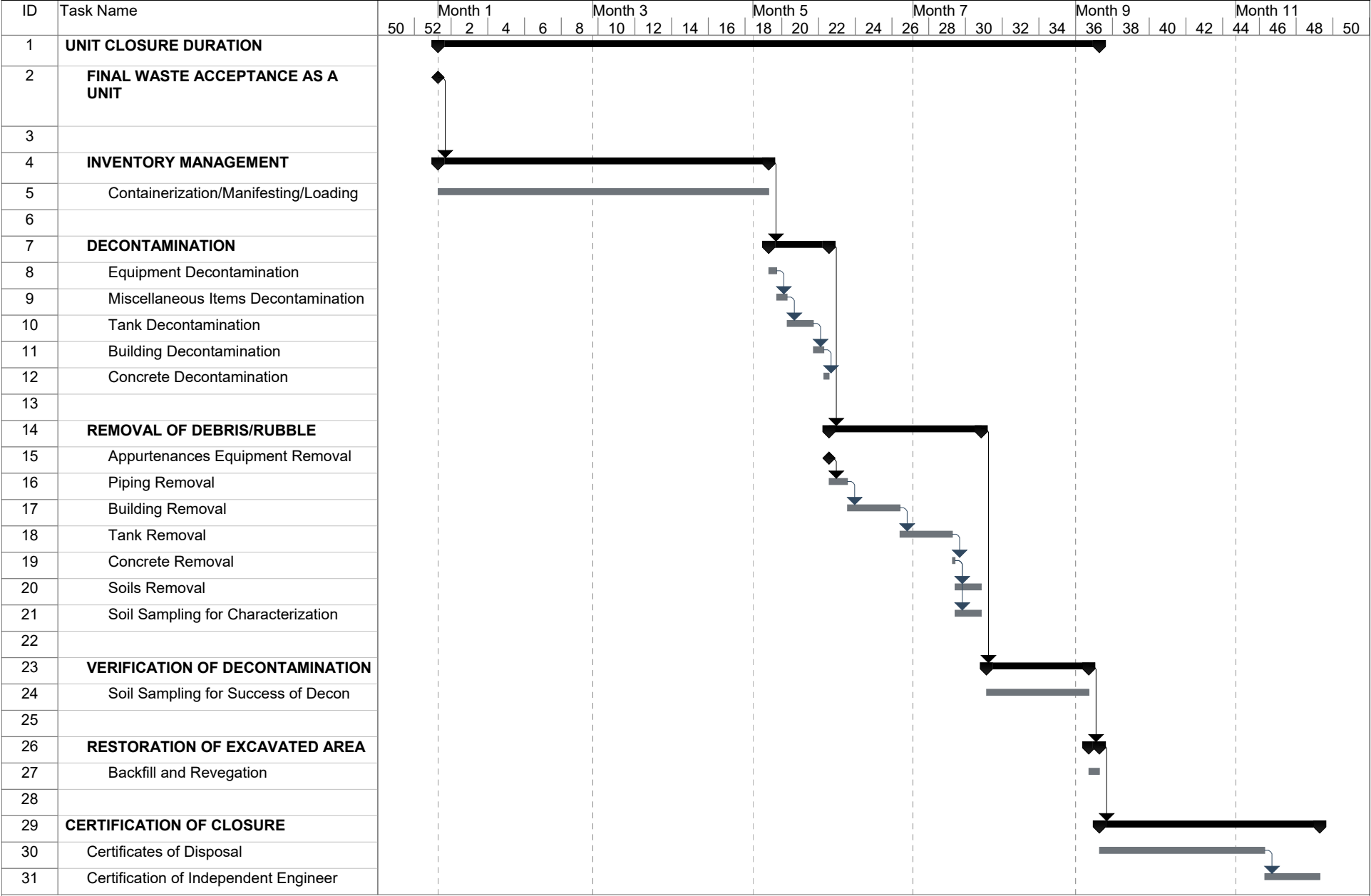
**FIGURE I-2.14  
CLOSURE SCHEDULE FOR UNIT 1200A  
CWM EMELLE FACILITY**



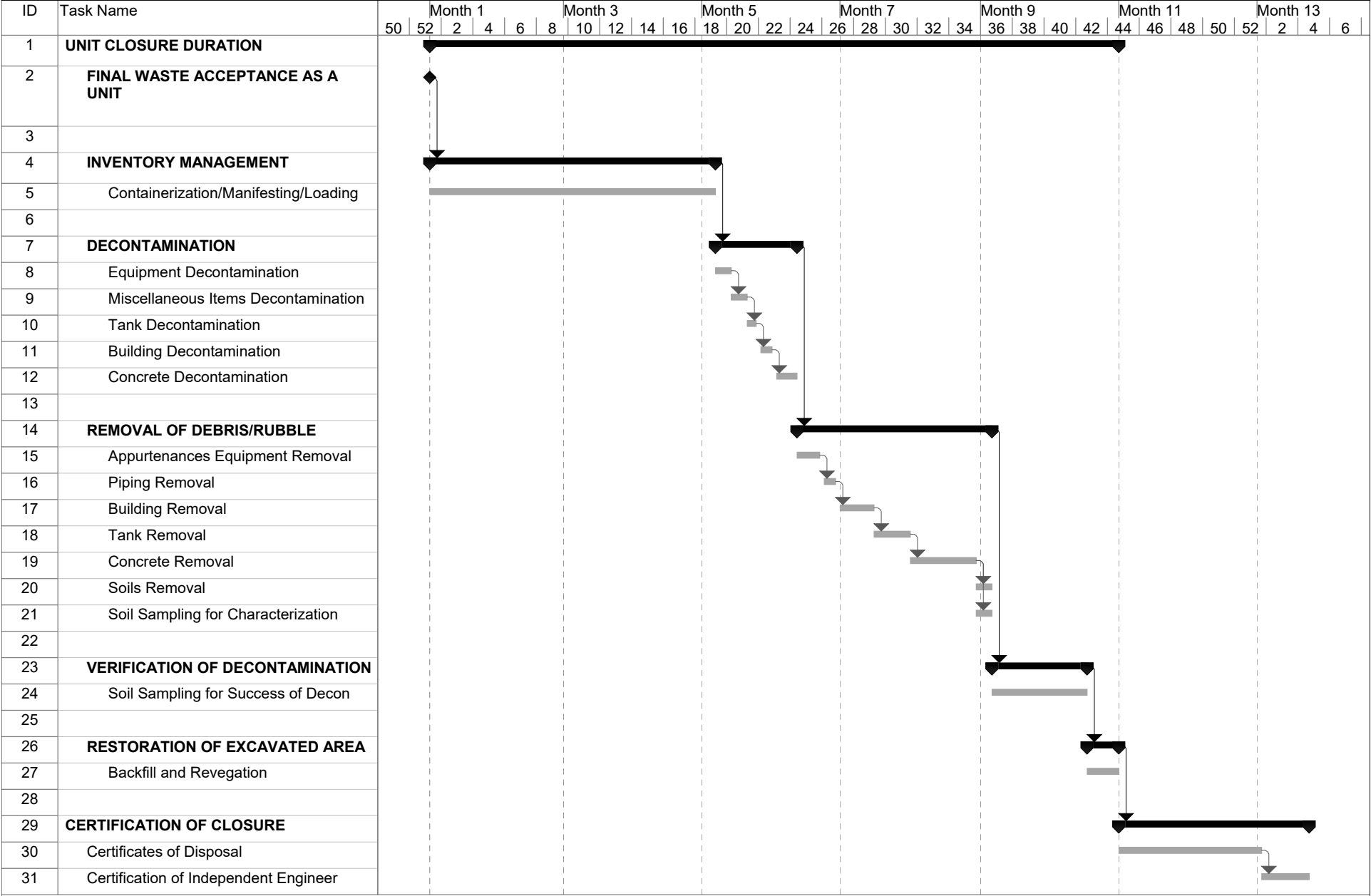
**FIGURE I-2.15  
CLOSURE SCHEDULE FOR UNIT 1400  
CWM EMELLE FACILITY**



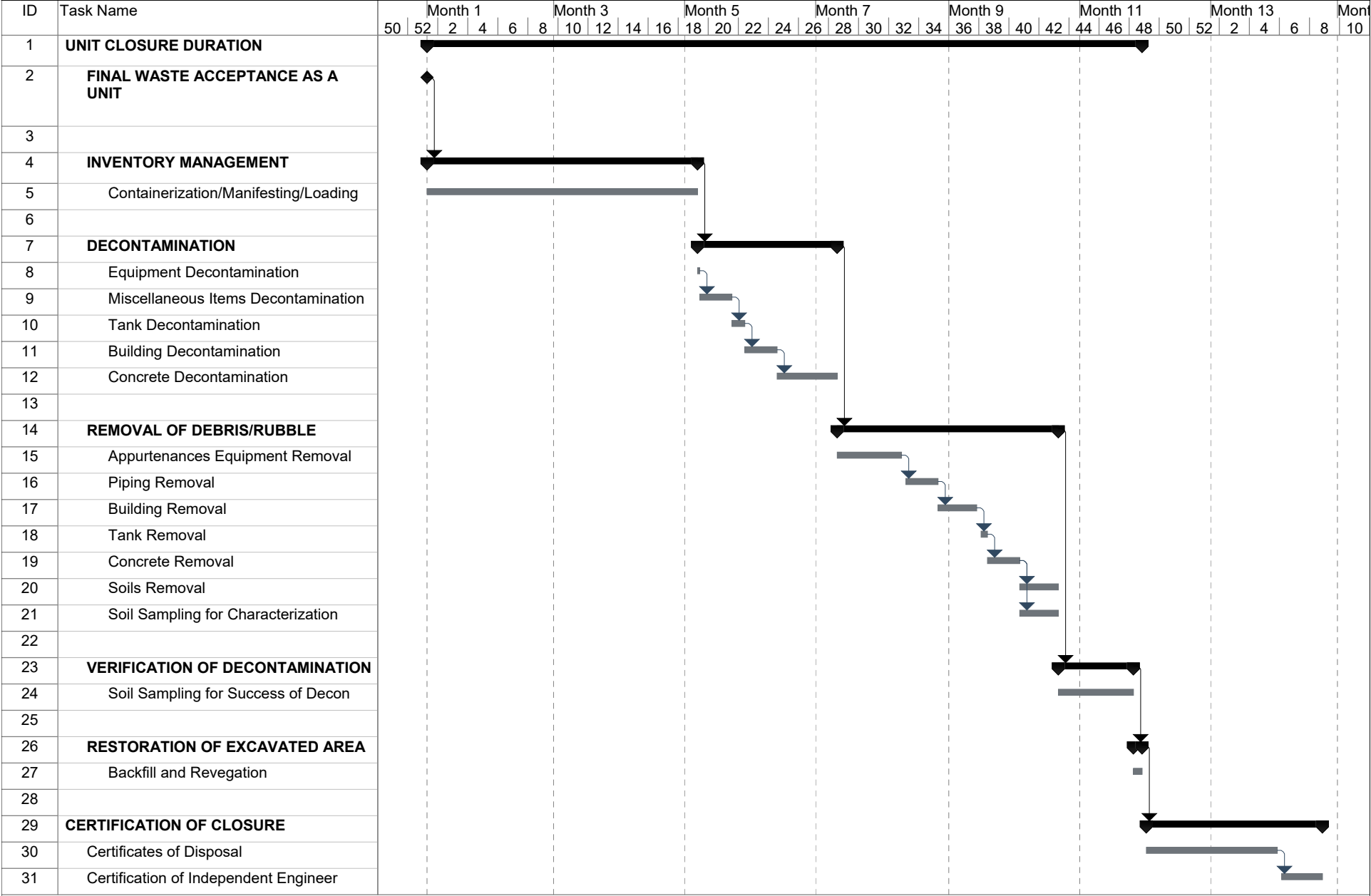
**FIGURE I-2.16  
CLOSURE SCHEDULE FOR UNIT 1700  
CWM EMELLE FACILITY**



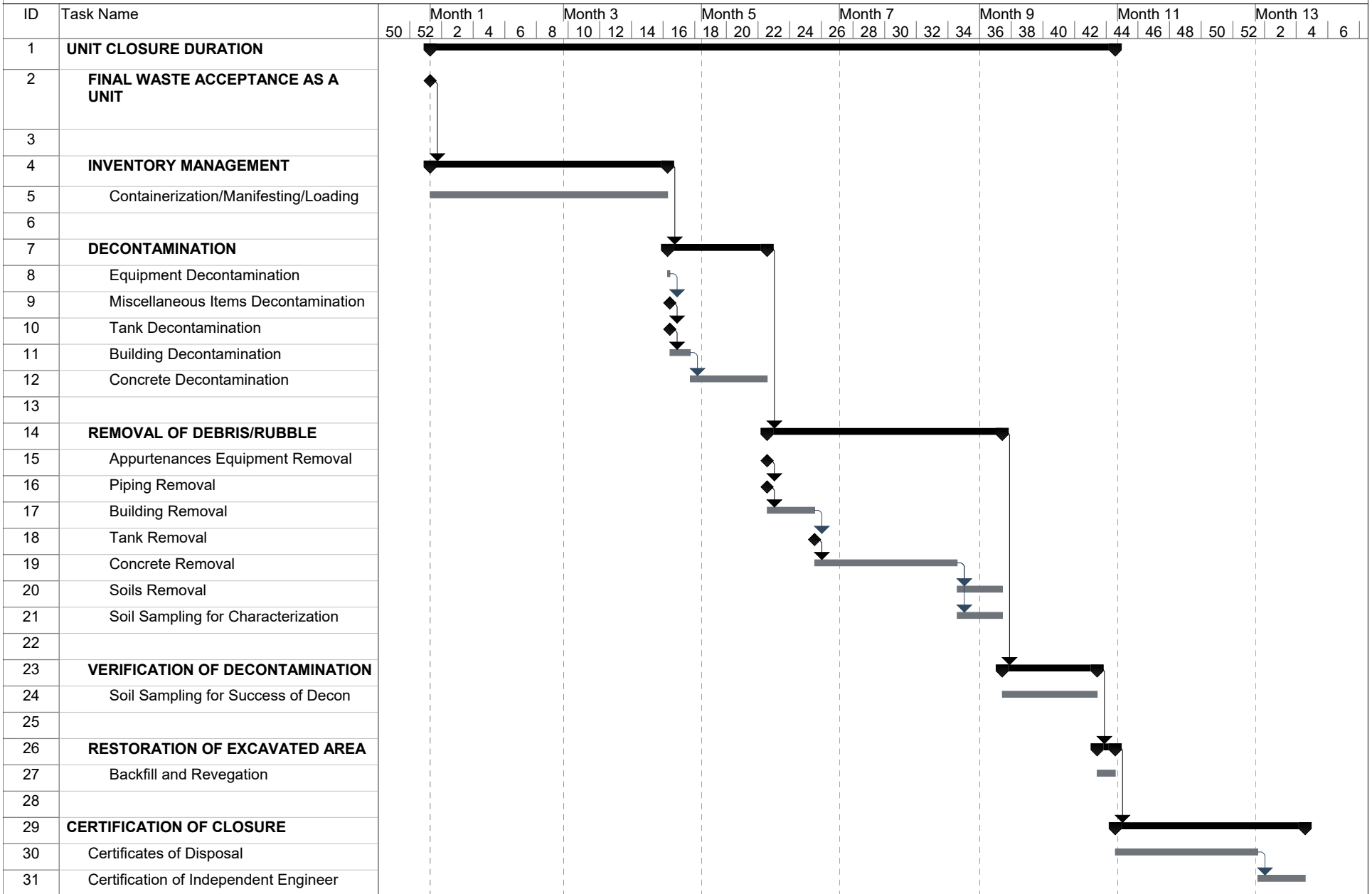
**FIGURE I-2.17  
CLOSURE SCHEDULE FOR UNIT 2000  
CWM EMELLE FACILITY**



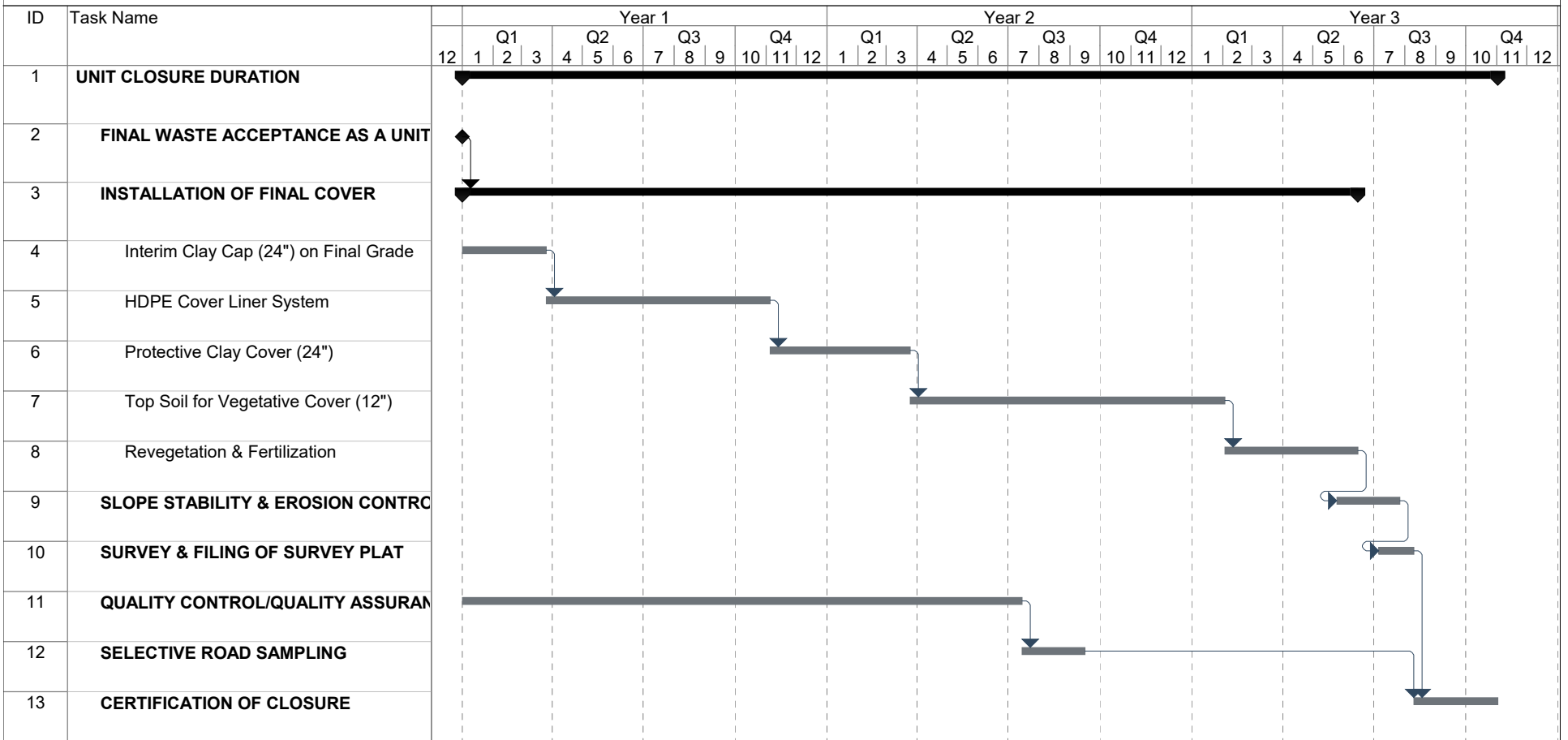
**FIGURE I-2.18  
CLOSURE SCHEDULE FOR UNIT 2001  
CWM EMELLE FACILITY**



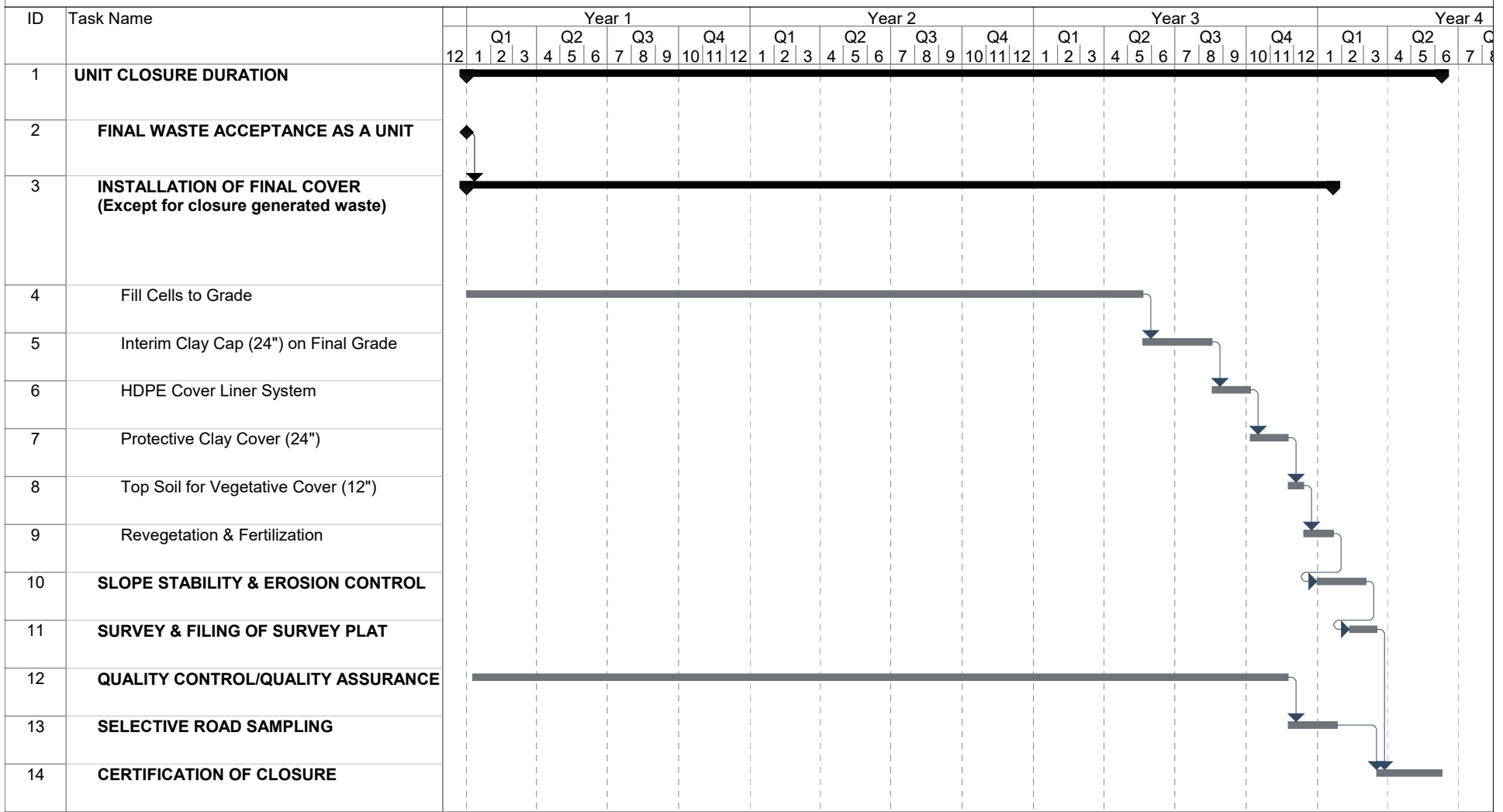
**FIGURE I-2.19  
CLOSURE SCHEDULE FOR UNIT 2200  
CWM EMELLE FACILITY**



**FIGURE I-2.20  
CLOSURE SCHEDULE FOR LANDFILL TRENCH 22**

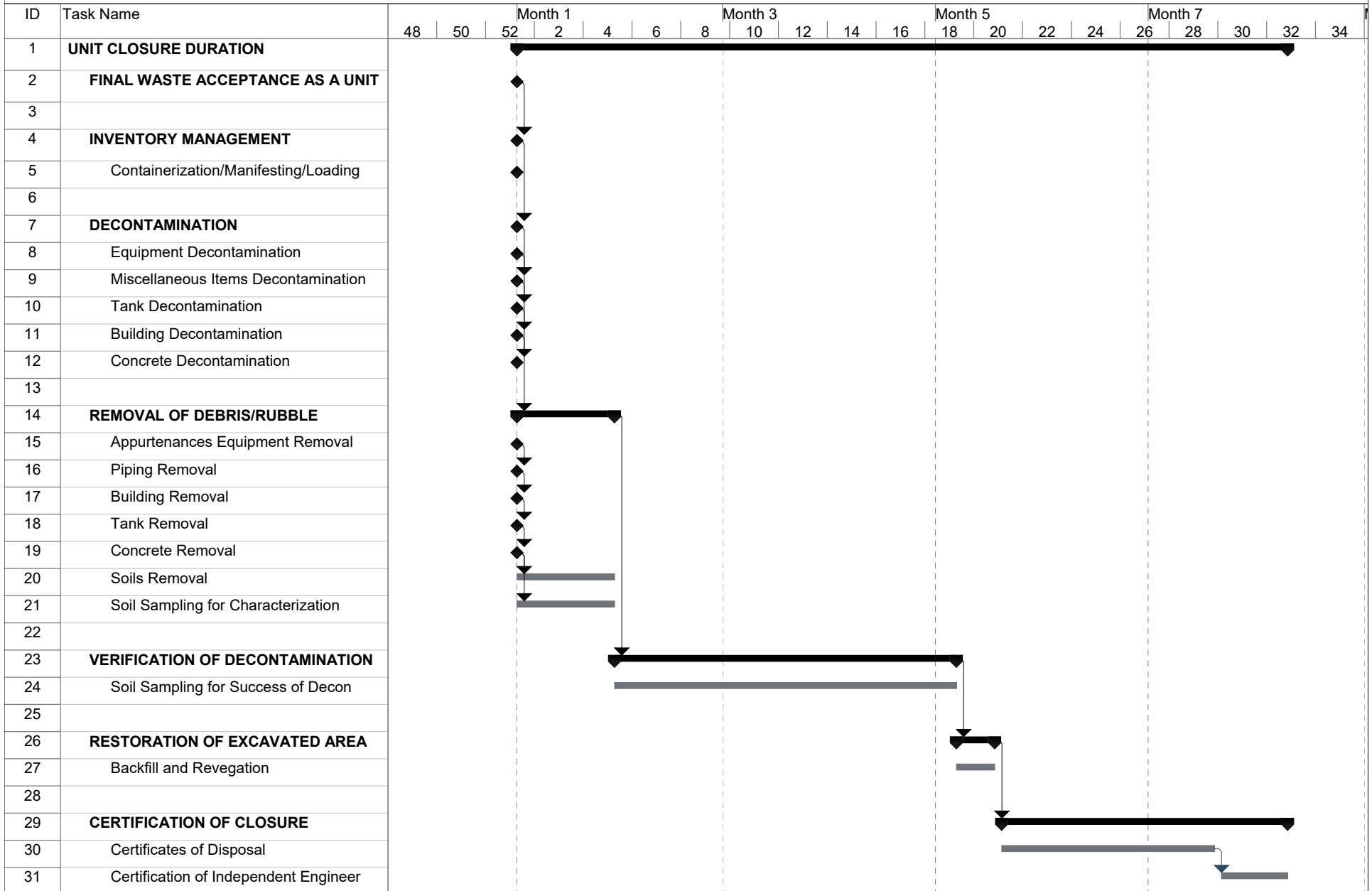


**FIGURE I-2.21  
CLOSURE SCHEDULE FOR LANDFILL TRENCH 23**





**FIGURE I-2.22  
CLOSURE SCHEDULE FOR MISCELLANEOUS NON-REGULATED UNITS  
CWM EMELLE FACILITY**



# APPENDIX I-3

## SECTION I

### SOIL SAMPLING AND ANALYSIS INFORMATION

Revision No.

5.0

**APPENDIX I-3**  
**SECTION I**  
**SOIL SAMPLING AND ANALYSIS INFORMATION**

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**Table I-3.1** Sampling Frequencies and Analytical Protocol for Clean Closure Verification

## **LIST OF DOCUMENTS**

**Document 1** "Student's T-test Statistical Method" (excerpt from: 40 CFR 264 and ADEM Administrative Code Rule 335-14-5 – Appendix IV)

# APPENDIX I-3

## SECTION I

### SOIL SAMPLING AND ANALYSIS INFORMATION

#### I-3-1 Introduction

5 This Appendix provides documentation to support the sampling plan described in Subsection I-1e(3) of Section I. Table I-3.1 in this Appendix provides the following for each unit:

- area subject to verification sampling, (i.e., total area of the unit limits or boundaries in square feet);
- grid spacing (in feet) for the sampling grid;
- 10 • estimated number of discrete and composite screen samples to be collected for each unit;
- estimated number of discrete and composite verification samples to be collected for each unit/area; and
- type of laboratory analyses to be performed for the samples from each unit/area.

15 The grid spacings and the estimated number of discrete verification samples are calculated from the procedures as described in Subsection I-1e(3)(a) of Section I. The types of analyses for each unit/area are dependent on the type of waste the unit manages. Analytical results from the verification soil samples will be evaluated to verify that the closure procedures have been successful in removing constituent concentrations in excess of the highest concentration of the  
20 respective constituent found in background soils for all of the 40 CFR 264 Appendix IX and ADEM Administrative Code Rule 335-14-5 – Appendix IX hazardous constituents that were present in the screen sample. Analytical data for the background samples can be found in Table I-4.1 in Appendix I-4 to this Closure Plan.

25 In addition to Table I-3.1, this Appendix includes support documentation for the statistical methods used (Document 1). The chain-of-custody and soil sampling procedures to be used will follow the latest version of U.S. EPA, Region IV, Science and Ecosystem Support Division Operating Procedures on Soil Sampling (SESDPROC-300) and Sample and Evidence Management (SESDPROC-005).

30

[End of Appendix I-3 Text]

**APPENDIX I-3**  
**SECTION I**  
**SOIL SAMPLING AND ANALYSIS INFORMATION**

**TABLES**

TABLE I-3.1

**SAMPLING FREQUENCIES AND ANALYTICAL PROTOCOL  
FOR CLEAN CLOSURE VERIFICATION  
CHEMICAL WASTE MANAGEMENT, INC., EMELLE, ALABAMA FACILITY**

Unit Number	Area Subject to Verification Sampling (square feet)	Screen Sampling		Verification Sampling <sup>1</sup>			Assumed Type of Analyses for the Verification Samples
		Discrete Samples (quantity)	Composite Samples (quantity)	Grid Spacing <sup>2</sup> (feet)	Discrete Samples (quantity)	Composite Samples (quantity)	
406	9,400	3	1	15	40	8	Metals, Volatiles, PCBs
520	3,000	4	1	15	13	3	Volatiles, PCBs
600	20,700	6	2	23	40	8	Metals, Volatiles, PCBs
602	15,500	4	1	20	40	8	Metals, Volatiles, PCBs
603	16,300	6	2	20	40	8	Metals, Volatiles, PCBs
604	11,100	4	1	17	40	8	Metals, Volatiles, PCBs
700	40,600	11	3	32	40	8	Metals, Volatiles, PCBs
702	24,800	7	2	25	40	8	Metals, Volatiles, PCBs
703	5,300	4	1	15	24	5	Metals, Volatiles, PCBs
703A	5,300	4	1	15	24	5	Metals, Semi-volatiles, PCBs
708	1,000	2	1	15	4	1	Metals, Volatiles
900	5,300	4	1	15	24	5	Metals
1200A	62,500	16	4	40	40	8	Metals, Volatiles, Semi-vols, PCBs
1400	68,600	18	5	41	40	8	Metals, Semi-volatiles
1700 <sup>3,4,5</sup>	4,440	3	3	15	27	6	Metals, Semi-volatiles
2000	21,300	7	2	25	40	8	Metals, Semi-volatiles, PCBs
2200	50,600	13	4	36	40	8	Metals, Volatiles, PCBs
300 <sup>6</sup>	510 linear feet	–	–	–	10	3	Metals, Volatiles, PCBs
606 <sup>6</sup>	400 linear feet	–	–	–	8	2	Metals, Volatiles, PCBs
Roadways <sup>7</sup>	35,400 linear feet	–	–	–	177	36	Metals, Volatiles, PCBs
PK-700 <sup>8</sup>	122,500	31	7	55	40	8	Metals, Vols, Semi-vols, PCBs
PK-1000 <sup>8</sup>	247,500	62	13	79	40	8	Metals, Vols, Semi-vols, PCBs

**Notes:**

- 1) The grid spacing and quantity of discrete verification samples is calculated in accordance with the "systematic grid" and the "stratified random" sampling techniques which are described in Subsection I-1e(3) of the Application. (Except that the number of discrete verification samples shall not be more than one sample per every 225 sf of area subject to verification sampling).
- 2) Grid spacing shall not be less than 15 feet.
- 3) One composite screen sample will be collected and analyzed for each 1700 unit (3 separate units).
- 4) The grid spacing shown will be used for each 1700 unit (3 separate units).
- 5) Two (2) composite verification samples will be collected and analyzed for each 1700 unit (3 separate units).
- 6) The non-regulated Facility maintenance buildings (i.e., Units 300 & 606) will be sampled around the perimeter only.
- 7) The Facility roadways exiting the land disposal units will be sampled every 200 linear feet.
- 8) The non-regulated truck parking areas PK-700 and PK-1000 will be sampled by the "systematic grid" techniques.
- 9) SW-846 Method 3540C and Method 8082 shall be used for PCB extraction and analysis while analyzing verification samples.

**APPENDIX I-3**

**DOCUMENT 1**

**40 CFR 264 APPENDIX IV AND  
ADEM ADMINISTRATIVE CODE RULE 335-14-5-APPENDIX IV  
STUDENT'S T-TEST STATISTICAL METHOD**



**Pt. 264, App. IV**

$$s^2 = \frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 \cdots + (X_n - \bar{X})^2}{n - 1}$$

where "n" denotes the number of observations in the set of data.

The t-test uses these data summary measures to calculate a t-statistic (t\*) and a comparison t-statistic (t<sub>c</sub>). The t\* value is compared to the t<sub>c</sub> value and a conclusion reached as to whether there has been a statistically significant change in any indicator parameter.

The t-statistic for all parameters except pH and similar monitoring parameters is:

$$t^* = \frac{X_m - \bar{X}_s}{\sqrt{\frac{S_m^2}{n_m} + \frac{S_b^2}{n_b}}}$$

If the value of this t-statistic is negative then there is no significant difference between the monitoring data and background data. It should be noted that significantly small negative values may be indicative of a failure of the assumption made for test validity or errors have been made in collecting the background data.

The t-statistic (t<sub>c</sub>), against which t\* will be compared, necessitates finding t<sub>b</sub> and t<sub>m</sub> from standard (one-tailed) tables where, t<sub>b</sub>=t-tables with (n<sub>b</sub>-1) degrees of freedom, at the 0.05 level of significance. t<sub>m</sub>=t-tables with (n<sub>m</sub>-1) degrees of freedom, at the 0.05 level of significance.

Finally, the special weightings W<sub>b</sub> and W<sub>m</sub> are defined as:

$$W_B = \frac{S_b^2}{n_b} \quad \text{and} \quad W_m = \frac{S_m^2}{n_m}$$

and so the comparison t-statistic is:

$$t_c = \frac{W_b t_b + W_m t_m}{W_b + W_m}$$

The t-statistic (t\*) is now compared with the comparison t-statistic (t<sub>c</sub>) using the following decision-rule:

If t\* is equal to or larger than t<sub>c</sub>, then conclude that there most likely has been a significant increase in this specific parameter. If t\* is less than t<sub>c</sub>, then conclude that most likely there has not been a change in this specific parameter.

The t-statistic for testing pH and similar monitoring parameters is constructed in the same manner as previously described except

**APPENDIX IV TO PART 264—COCHRAN'S APPROXIMATION TO THE BEHRENS-FISHER STUDENTS' T-TEST**

Using all the available background data (n<sub>b</sub> readings), calculate the background mean (X<sub>b</sub>) and background variance (s<sub>b</sub><sup>2</sup>). For the single monitoring well under investigation (n<sub>m</sub> reading), calculate the monitoring mean (X<sub>m</sub>) and monitoring variance (s<sub>m</sub><sup>2</sup>).

For any set of data (X<sub>1</sub>, X<sub>2</sub>, . . . , X<sub>n</sub>) the mean is calculated by:

$$\bar{X} = \frac{X_1 + X_2 \cdots + X_n}{n}$$

and the variance is calculated by:

the negative sign (if any) is discarded and the caveat concerning the negative value is ignored. The standard (two-tailed) tables are used in the construction  $t_c$  for pH and similar monitoring parameters.

If  $t^*$  is equal to or larger than  $t_c$ , then conclude that there most likely *has been a significant increase* (if the initial  $t^*$  had been negative, this would imply a significant decrease). If  $t^*$  is less than  $t_c$ , then conclude that there most likely has been no change.

A further discussion of the test may be found in *Statistical Methods* (6th Edition, Section 4.14) by G. W. Snedecor and W. G. Cochran, or *Principles and Procedures of Statistics* (1st Edition, Section 5.8) by R. G. D. Steel and J. H. Torrie.

STANDARD T—TABLES 0.05 LEVEL OF SIGNIFICANCE

Degrees of freedom	t-values (one-tail)	t-values (two-tail)
1 .....	6.314	12.706
2 .....	2.920	4.303
3 .....	2.353	3.182
4 .....	2.132	2.776
5 .....	2.015	2.571
6 .....	1.943	2.447
7 .....	1.895	2.365
8 .....	1.860	2.306
9 .....	1.833	2.262
10 .....	1.812	2.228
11 .....	1.796	2.201
12 .....	1.782	2.179
13 .....	1.771	2.160
14 .....	1.761	2.145
15 .....	1.753	2.131
16 .....	1.746	2.120
17 .....	1.740	2.110
18 .....	1.734	2.101
19 .....	1.729	2.093
20 .....	1.725	2.086
21 .....	1.721	2.080
22 .....	1.717	2.074
23 .....	1.714	2.069
24 .....	1.711	2.064
25 .....	1.708	2.060
30 .....	1.697	2.042
40 .....	1.684	2.021

Adopted from Table III of "Statistical Tables for Biological, Agricultural, and Medical Research" (1947, R. A. Fisher and F. Yates).

[47 FR 32367, July 26, 1982]

# APPENDIX I-4

## SECTION I

### BACKGROUND ANALYTICAL INFORMATION

Revision No.

5.0

# APPENDIX I-4

## SECTION I

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<b>Table I-4.1</b>	Existing Background Sample Analytical Results for 40 CRF 264 Appendix IX Constituents
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**SECTION I**  
**BACKGROUND ANALYTICAL INFORMATION**

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**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
Acenaphthalene	82-32-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Acenaphthylene	208-96-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Acetone	67-64-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Acetophenone	98-86-2	ug/kg	NA	NA	---	---	---	---	---	---	---
Acetonitrile	75-05-8	ug/kg	NA	NA	---	---	---	---	---	---	---
2-Acetylaminofluorene	53-96-3	ug/kg	NA	NA	---	---	---	---	---	---	---
Acrolein	107-02-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Acrylonitrile	107-13-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Aldrin	309-00-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Allyl chloride	107-05-1	ug/kg	NA	NA	---	---	---	---	---	---	---
4-Aminobiphenyl	92-67-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Aniline	62-53-3	ug/kg	NA	NA	---	---	---	---	---	---	---
Anthracene	120-12-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Antimony	(Total)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aramite	140-57-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Arsenic	(Total)	mg/kg	10	12	3	2	1	NA	ND	BMDL	ND
Barium	(Total)	mg/kg	28	53	23	23	1360	ND	29	42	20
Benzene	71-43-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzo[a]anthracene	56-55-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzo[b]fluoranthene	205-99-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzo[k]fluoranthene	207-08-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzo[ghi]perylene	191-24-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzo[a]pyrene	50-32-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Benzyl alcohol	100-51-6	ug/kg	ND	ND	---	---	---	---	---	---	---
Beryllium	(Total)	mg/kg	0.49	0.85	NA	NA	NA	NA	0.44	0.81	0.43
alpha-BHC	319-84-6	ug/kg	ND	ND	---	---	---	---	---	---	---
beta-BHC	319-85-7	ug/kg	ND	ND	---	---	---	---	---	---	---

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
delta-BHC	319-86-8	ug/kg	ND	ND	---	---	---	---	---	---	---
gamma-BHC	58-89-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Bis(2-chloroethoxy) methane	111-91-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Bis(2-chloroethyl) ether	111-44-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Bis(2-chloro-1-methyl-ethyl) ether	108-60-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Bromodichloromethane	75-27-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Bromoform	75-25-2	ug/kg	ND	ND	---	---	---	---	---	---	---
4-Bromophenyl phenyl ether	101-55-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Butyl benzyl phthalate	85-68-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Cadmium	(Total)	mg/kg	0.34	0.54	NA	NA	NA	NA	ND	5.1	1.9
Carbon disulfide	75-15-0	ug/kg	ND	ND	---	---	---	---	---	---	---
Carbon tetrachloride	56-23-5	ug/kg	ND	ND	---	---	---	---	---	---	---
Chlordane	57-74-9	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Chloroaniline	106-47-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Chlorobenzene	108-90-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Chlorobenzilate	510-15-6	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Chloro-m-cresol	59-50-7	ug/kg	NA	NA	---	---	---	---	---	---	---
Chloroethane	75-00-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Chloroform	67-66-3	ug/kg	ND	ND	---	---	---	---	---	---	---
2-Chloronaphthalene	91-58-7	ug/kg	ND	ND	---	---	---	---	---	---	---
2-Chlorophenol	95-57-8	ug/kg	ND	ND	---	---	---	---	---	---	---
4-Chlorophenyl phenyl ether	7005-72-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Chloroprene	126-99-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Chromium	(Total)	mg/kg	27	49	17	6.3	12	ND	11	26	10
Chrysene	218-01-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Cobalt	(Total)	mg/kg	4	3.4	NA	NA	NA	20	2.6	4.1	BMDL

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
Copper	(Total)	mg/kg	7.9	7.7	NA	NA	NA	ND	9	13	7.8
m-Cresol	108-39-4	ug/kg	ND	ND	---	---	---	---	---	---	---
0-Cresol	95-48-7	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Cresol	106-44-5	ug/kg	ND	ND	---	---	---	---	---	---	---
Cyanide	57-12-5	ug/kg	ND	ND	---	---	---	---	---	---	---
2,4-Dichloro-phenoxyacetic acid	94-75-7	ug/kg	NA	NA	---	---	---	---	---	---	---
4,4'-DDD	75-54-8	ug/kg	ND	ND	---	---	---	---	---	---	---
4,4'-DDE	72-55-9	ug/kg	ND	ND	---	---	---	---	---	---	---
4,4'-DDT	50-29-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Diallate	2303-16-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Dibenz[a,h]anthracene	53-70-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Dibenzofuran	132-64-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Dibromochloromethane	124-48-1	ug/kg	ND	ND	---	---	---	---	---	---	---
1,2-Dibromo-3-chloro-propane	96-12-8	ug/kg	NA	NA	---	---	---	---	---	---	---
1,2-Dibromoethane	106-93-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Di-n-butyl phthalate	84-74-2	ug/kg	ND	ND	---	---	---	---	---	---	---
0-Dichlorobenzene	95-50-1	ug/kg	ND	ND	---	---	---	---	---	---	---
m-Dichlorobenzene	541-73-1	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Dichlorobenzene	106-46-7	ug/kg	ND	ND	---	---	---	---	---	---	---
3,3'-Dichlorobenzidine	91-94-1	ug/kg	ND	ND	---	---	---	---	---	---	---
trans-1,4-Dichloro-2-butene	110-57-6	ug/kg	NA	NA	---	---	---	---	---	---	---
Dichlorodifluoromethane	75-71-8	ug/kg	NA	NA	---	---	---	---	---	---	---
1,1-Dichloroethane	75-34-3	ug/kg	ND	ND	---	---	---	---	---	---	---
1,2-Dichloroethane	107-06-2	ug/kg	ND	ND	---	---	---	---	---	---	---
1,1-Dichloroethylene	75-35-4	ug/kg	ND	ND	---	---	---	---	---	---	---
trans-1,2-Dichloroethylene	156-60-5	ug/kg	ND	ND	---	---	---	---	---	---	---
2,4-Dichlorophenol	120-83-2	ug/kg	ND	ND	---	---	---	---	---	---	---



**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
2,6-Dichlorophenol	87-65-0	ug/kg	NA	NA	---	---	---	---	---	---	---
1,2-Dichloropropane	78-87-5	ug/kg	ND	ND	---	---	---	---	---	---	---
cis-1,3-Dichloropropene	10061-01-5	ug/kg	ND	ND	---	---	---	---	---	---	---
trans-1,3-Dichloropropene	10061-02-6	ug/kg	ND	ND	---	---	---	---	---	---	---
Dieldrin	60-57-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Diethyl phthalate	84-66-2	ug/kg	ND	ND	---	---	---	---	---	---	---
0,0-Diethyl 0-2-pyrazinyl phosphoro-thioate	297-97-2	ug/kg	NA	NA	---	---	---	---	---	---	---
Dimethoate	60-51-5	ug/kg	NA	NA	---	---	---	---	---	---	---
p-(Dimethylamino) azobenzene	60-11-7	ug/kg	NA	NA	---	---	---	---	---	---	---
7,12-Dimethylbenz[a] anthracene	57-97-6	ug/kg	NA	NA	---	---	---	---	---	---	---
3,3'-Dimethylbenzidine	119-93-7	ug/kg	NA	NA	---	---	---	---	---	---	---
alpha,alpha-Dimethyl-phenethylamine	122-09-8	ug/kg	NA	NA	---	---	---	---	---	---	---
2,4-Dimethylphenol	105-67-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Dimethyl phthalate	131-11-3	ug/kg	ND	ND	---	---	---	---	---	---	---
m-Dinitrobenzene	99-65-0	ug/kg	NA	NA	---	---	---	---	---	---	---
4,6-Dinitro-o-cresol	534-52-1	ug/kg	ND	ND	---	---	---	---	---	---	---
2,4-Dinitrophenol	51-28-5	ug/kg	ND	ND	---	---	---	---	---	---	---
2,4-Dinitrotoluene	121-14-2	ug/kg	ND	ND	---	---	---	---	---	---	---
2,6-Dinitrotoluene	606-20-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Dinoseb	88-85-7	ug/kg	NA	NA	---	---	---	---	---	---	---
Di-n-octyl phthalate	117-84-0	ug/kg	ND	ND	---	---	---	---	---	---	---
1,4-Dioxane	123-91-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Diphenylamine	122-39-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Disulfoton	298-04-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Endosulfan I	959-98-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Endosulfan II	33213-65-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Endosulfan sulfate	1031-07-8	ug/kg	ND	ND	---	---	---	---	---	---	---

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
Endrin	72-20-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Endrin aldehyde	7421-93-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Ethylbenzene	100-41-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Ethyl methacrylate	97-63-2	ug/kg	NA	NA	---	---	---	---	---	---	---
Ethyl methanesulfonate	62-50-0	ug/kg	NA	NA	---	---	---	---	---	---	---
Famphur	52-85-7	ug/kg	NA	NA	---	---	---	---	---	---	---
Fluoranthene	206-44-0	ug/kg	ND	ND	---	---	---	---	---	---	---
Fluorene	86-73-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Heptachlor	76-44-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Heptachlor epoxide	1024-57-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Hexachlorobenzene	118-74-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Hexachlorobutadiene	87-68-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Hexachlorocyclopentadiene	77-47-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Hexachloroethane	67-72-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Hexachlorophene	70-30-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Hexachloropropene	1888-71-7	ug/kg	NA	NA	---	---	---	---	---	---	---
2-Hexanone	591-78-6	ug/kg	ND	ND	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	ND	ND	---	---	---	---	---	---	---
Isobutyl alcohol	78-63-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Isodrin	465-73-6	ug/kg	NA	NA	---	---	---	---	---	---	---
Isophorone	78-59-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Isosafrole	120-58-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Kepone	143-50-0	ug/kg	NA	NA	---	---	---	---	---	---	---
Lead	(Total)	mg/kg	4.5	6.1	6	12	6	NA	ND	BMDL	ND
Mercury	(Total)	mg/kg	ND	ND	NA	NA	NA	NA	ND	ND	ND
Methacrylonitrile	126-98-7	ug/kg	NA	NA	---	---	---	---	---	---	---
Methapyrilene	91-80-5	ug/kg	NA	NA	---	---	---	---	---	---	---

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
Methoxychlor	72-43-5	ug/kg	ND	ND	---	---	---	---	---	---	---
Methyl bromide	74-83-9	ug/kg	ND	ND	---	---	---	---	---	---	---
Methyl chloride	74-87-3	ug/kg	ND	ND	---	---	---	---	---	---	---
3-Methylcholanthrene	56-49-5	ug/kg	NA	NA	---	---	---	---	---	---	---
Methylene bromide	74-95-3	ug/kg	NA	NA	---	---	---	---	---	---	---
Methylene chloride	75-09-2	ug/kg	ND	ND	---	---	---	---	---	---	---
Methyl ethyl ketone	78-93-3	ug/kg	ND	ND	---	---	---	---	---	---	---
Methyl iodide	74-88-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Methyl methacrylate	80-62-6	ug/kg	NA	NA	---	---	---	---	---	---	---
Methyl methanesulfonate	66-27-3	ug/kg	NA	NA	---	---	---	---	---	---	---
2-Methylnaphthalene	91-57-6	ug/kg	ND	ND	---	---	---	---	---	---	---
Methyl parathion	298-00-0	ug/kg	NA	NA	---	---	---	---	---	---	---
4-Methyl-2-pentanone	108-10-1	ug/kg	ND	ND	---	---	---	---	---	---	---
Naphthalene	91-20-3	ug/kg	ND	ND	---	---	---	---	---	---	---
1,4-Naphthoquinone	130-15-4	ug/kg	NA	NA	---	---	---	---	---	---	---
1-Naphthalamine	134-32-7	ug/kg	NA	NA	---	---	---	---	---	---	---
2-Naphthylamine	91-59-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Nickel	(Total)	mg/kg	12	13	8	6.3	5.2	NA	9.4	15	6.8
o-Nitroaniline	88-74-4	ug/kg	ND	ND	---	---	---	---	---	---	---
m-Nitroaniline	99-09-2	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Nitroaniline	100-01-6	ug/kg	ND	ND	---	---	---	---	---	---	---
Nitrobenzene	98-95-3	ug/kg	ND	ND	---	---	---	---	---	---	---
0-Nitrophenol	88-75-5	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Nitrophenol	100-02-7	ug/kg	ND	ND	---	---	---	---	---	---	---
4-Nitroquinoline 1-oxide	56-57-5	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosodi-n-butyl-amine	924-16-3	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosodiethylamine	55-18-5	ug/kg	NA	NA	---	---	---	---	---	---	---

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<b><u>40 CFR 264 APPENDIX IX CONSTITUENTS</u></b>			<b><u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u></b>								
<b>COMMON NAME</b>	<b>CAS RN</b>	<b>UNITS</b>	<b>BG-1</b>	<b>BG-2</b>	<b>BG-3</b>	<b>BG-4</b>	<b>BG-5</b>	<b>BG-6</b>	<b>BG-7</b>	<b>BG-8</b>	<b>BG-9</b>
N-Nitrosodimethylamine	62-75-9	ug/kg	ND	ND	---	---	---	---	---	---	---
N-Nitrosodiphenylamine	86-30-6	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosodipropylamine	621-64-7	ug/kg	ND	ND	---	---	---	---	---	---	---
N-Nitrosomethylethyl-amine	10595-95-6	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosomorpholine	59-89-2	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosopiperidine	100-75-4	ug/kg	NA	NA	---	---	---	---	---	---	---
N-Nitrosopyrrolidine	930-55-2	ug/kg	NA	NA	---	---	---	---	---	---	---
5-Nitro-o-toluidine	99-55-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Parathion	56-38-2	ug/kg	NA	NA	---	---	---	---	---	---	---
Polychlorinated biphenyls	Various	ug/kg	ND	ND	---	---	---	---	---	---	---
Polychlorinated dibenzo-p-dioxins	Various	ug/kg	NA	NA	---	---	---	---	---	---	---
Polychlorinated dibenzofurans	Various	ug/kg	NA	NA	---	---	---	---	---	---	---
Pentachlorobenzene	608-93-5	ug/kg	NA	NA	---	---	---	---	---	---	---
Pentachloroethane	76-01-7	ug/kg	NA	NA	---	---	---	---	---	---	---
Pentachloronitrobenzene	82-68-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Pentachlorophenol	87-86-5	ug/kg	ND	ND	---	---	---	---	---	---	---
Phenacetin	62-44-2	ug/kg	NA	NA	---	---	---	---	---	---	---
Phenanthrene	85-01-8	ug/kg	ND	ND	---	---	---	---	---	---	---
Phenol	108-95-2	ug/kg	ND	ND	---	---	---	---	---	---	---
p-Phenylenediamine	106-50-3	ug/kg	NA	NA	---	---	---	---	---	---	---
Phorate	298-02-2	ug/kg	NA	NA	---	---	---	---	---	---	---
2-Picoline	109-06-8	ug/kg	NA	NA	---	---	---	---	---	---	---
Pronamide	23950-58-5	ug/kg	NA	NA	---	---	---	---	---	---	---
Propionitrile	107-12-0	ug/kg	NA	NA	---	---	---	---	---	---	---
Pyrene	129-00-0	ug/kg	ND	ND	---	---	---	---	---	---	---
Pyridine	110-86-1	ug/kg	NA	NA	---	---	---	---	---	---	---
Safrole	94-59-7	ug/kg	NA	NA	---	---	---	---	---	---	---

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>									
<b>COMMON NAME</b>	<b>CAS RN</b>	<b>UNITS</b>	<b>BG-1</b>	<b>BG-2</b>	<b>BG-3</b>	<b>BG-4</b>	<b>BG-5</b>	<b>BG-6</b>	<b>BG-7</b>	<b>BG-8</b>	<b>BG-9</b>	
Selenium	(Total)	mg/kg	ND	ND	2	1	0.5	NA	ND	ND	ND	
Silver	(Total)	mg/kg	ND	ND	NA	NA	NA	NA	NA	NA	NA	
Silvex	93-72-1	ug/kg	NA	NA	---	---	---	---	---	---	---	
Styrene	100-42-5	ug/kg	ND	ND	---	---	---	---	---	---	---	
Sulfide	18496-25-8	ug/kg	ND	ND	---	---	---	---	---	---	---	
2,4,5-Trichlorophenoxyacetic acid	93-76-5	ug/kg	NA	NA	---	---	---	---	---	---	---	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	ug/kg	NA	NA	---	---	---	---	---	---	---	
1,2,4,5-Tetrachlorobenzene	95-94-3	ug/kg	NA	NA	---	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	NA	NA	---	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	ND	ND	---	---	---	---	---	---	---	
Tetrachloroethylene	127-18-4	ug/kg	ND	ND	---	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	58-90-2	ug/kg	NA	NA	---	---	---	---	---	---	---	
Tetraethyl dithiopyrophosphate	3689-24-5	ug/kg	NA	NA	---	---	---	---	---	---	---	
Thallium	(Total)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Tin	(Total)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Toluene	108-88-3	ug/kg	ND	ND	---	---	---	---	---	---	---	
0-Toluidine	95-53-4	ug/kg	NA	NA	---	---	---	---	---	---	---	
Toxaphene	8001-35-2	ug/kg	ND	ND	---	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	120-82-1	ug/kg	ND	ND	---	---	---	---	---	---	---	
1,1,1-Trichloroethane	71-55-6	ug/kg	ND	ND	---	---	---	---	---	---	---	
1,1,2-Trichloroethane	79-00-5	ug/kg	ND	ND	---	---	---	---	---	---	---	
Trichloroethylene	79-01-6	ug/kg	ND	ND	---	---	---	---	---	---	---	
Trichlorofluoromethane	75-69-4	ug/kg	NA	NA	---	---	---	---	---	---	---	
2,4,5-Trichlorophenol	95-95-4	ug/kg	ND	ND	---	---	---	---	---	---	---	
2,4,6-Trichlorophenol	88-06-2	ug/kg	ND	ND	---	---	---	---	---	---	---	
1,2,3-Trichloropropane	96-18-4	ug/kg	NA	NA	---	---	---	---	---	---	---	
0,0,0-Triethylphosphorothioate	126-68-1	ug/kg	NA	NA	---	---	---	---	---	---	---	

**TABLE I-4.1**  
**EXISTING BACKGROUND SAMPLE ANALYTICAL RESULTS**  
**for 40 CFR 264 APPENDIX IX CONSTITUENTS**  
**CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

<u>40 CFR 264 APPENDIX IX CONSTITUENTS</u>			<u>BACKGROUND SAMPLE ANALYTICAL RESULTS</u>								
COMMON NAME	CAS RN	UNITS	BG-1	BG-2	BG-3	BG-4	BG-5	BG-6	BG-7	BG-8	BG-9
sym-Trinitrobenzene	99-35-4	ug/kg	NA	NA	---	---	---	---	---	---	---
Vanadium	(Total)	mg/kg	20	39	NA	NA	NA	ND	13	28	13
Vinyl acetate	108-05-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Vinyl chloride	75-01-4	ug/kg	ND	ND	---	---	---	---	---	---	---
Xylene (total)	1330-20-7	ug/kg	ND	ND	---	---	---	---	---	---	---
Zinc	(Total)	mg/kg	50	55	NA	NA	NA	ND	36	64	26

**Notes:**  
NA - Not Analyzed  
ND - Not Detected  
BMDL - Below Method Detection Limit  
--- Data Not Available

Note: In the context of this table, ND and BMDL have the same meaning.

**APPENDIX I-5**

**SECTION I**

**BASIS FOR CLOSURE AND POST-CLOSURE COST  
ESTIMATES**

Revision No.

5.0

**APPENDIX I-5**  
**SECTION I**  
**BASIS FOR CLOSURE AND POST-CLOSURE COST**  
**ESTIMATES**

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<b>Table I-5.2</b>	Tank Capacity and Surface Area Summary

## **LIST OF FIGURES**

<b>Figure I-5.1</b>	Facility Roadways Addressed During Final Closure
---------------------	--

**APPENDIX I-5**  
**SECTION I**  
**BASIS FOR CLOSURE AND POST-CLOSURE COST**  
**ESTIMATES**

5 **I-5-1 Introduction**

This Appendix describes the basis and assumptions used in calculating the clean closure cost estimates provided in Appendix I-6 of Section I of this Plan. All closure cost estimates assume that the closure activities are performed by a third-party contractor, in accordance with 40 CFR 264.142(a)(2) and ADEM Administrative Code Rule 335-14-5-.08(3)(a)2. The unit costs are based on 2021 dollars, and no salvage credits are taken.

The closure and post-closure cost estimates for the Facility were prepared using the following resources:

- 15 • HeavyBid software version 2021, by Heavy Construction Systems Specialists, Inc. (HCSS) was used to compile closure and post-closure activities and calculate costs estimates;
- Unit rates (e.g., material costs, other direct costs, etc.) are based off of recent costs from third-party pricing gathered by Jacobs from previous and current projects;
- 20 • On-site leachate treatment costs are based on current operating costs (includes labor and materials) of the leachate treatment unit;
- Labor rates are based on the federal labor rates ([www.sam.gov](http://www.sam.gov)), as it pertains to the state, county, and trade classification. The following wage decision was used:
- 25 • General Decision Number: AL20210140 01/01/2021; Sumter County in Alabama;
- Table I-5.1 - Maximum Quantity of Waste On-Site and Disposal/Treatment Quantities;
- Table I-5.2 - Tank Capacity and Surface Area Summary; and
- Appendix D-1 RCRA Part B Permit Application Design Drawings.

30

## **I-5-2 Closure of Storage Units**

For the purpose of estimating closure costs, it is assumed that, at the time of final closure, all container management units, tank systems, and containment buildings are at maximum permitted capacity. Table I-5.1 provides the assumed maximum quantity of waste on-site for each unit in containers, tanks and containment buildings, once the closure activities begin. This table also includes the TSCA permitted quantities in each unit to demonstrate that this Closure Plan satisfies the requirements of 40 CFR 761.65(e). The volume (maximum waste quantity) used in the areas identified as containment buildings (i.e., Containment Area 1 in Unit 1200A), is the greater of the maximum volume stored in containers, maximum volume in mass, or a combination thereof.

In addition, Table I-5.1 provides the anticipated quantities associated with each on-site and off-site waste treatment and disposal alternative category. There are five (5) waste management categories considered (i.e., treatment and landfill, direct landfill, incineration, aqueous treatment, and leachate treatment) which are anticipated to be used by the Facility during operation and at closure. The quantities assigned to each category are based on percentages of waste received and managed by each category as derived from operating experience at the Facility.

Table I-5.2 provides the assumed maximum quantity of waste inventory within each tank and the surface area of each tank. For cost estimating purposes only, in accordance with ADEM Administrative Code Rule 335-14-5-.07(3), it is assumed that the tanks are at maximum capacity at the time of closure. The surface area for each tank is used to determine the quantity of residuals generated during cleansing and/or treatment.

## **I-5-3 Closure of Landfill Units**

The basis of estimate for landfill closure costs of Trench 22 (T-22) and Trench 23 (T-23) during this 10-year permit period is an unplanned closure of the facility. This conservatively assumes, for cost purposes, the most expensive scenario for closure of the facility. The most expensive point of closure for the landfills during the 10-year permit period is when T-22 is full at permitted capacity, but not yet closed, and Cell 1 of T-23 is partially filled. Closure of T-22 will begin in accordance with the approved Closure Plan and Cell 1 of T-23 will remain open to accept only the waste from closure of other facility units. T-23 will then be backfilled to ground surface with on-site soil and closed in accordance with the approved Closure Plan.

During this unplanned closure period, surface water and leachate will have to be managed. It is assumed that during the closure construction period, T-22 will be undergoing closure and Cell 1 of T-23 will be open (actively receiving waste from on-site closure activities) and exposed to precipitation. The estimate of leachate generated is based upon the following conservative

assumptions: a 256,308 square foot area of Cell 1 of T-23 is open and exposed to direct precipitation during backfilling operations for the cell, and approximately 45% (i.e., 5.5 months ÷ 12 months) of 55 inches of annual precipitation could collect during time required to close the landfill. While some of the precipitation will evaporate before infiltrating into the landfill and some will be absorbed into the waste, for the purpose of this Closure Plan it is assumed that all this water will reach the leachate collection system prior to entering the post-closure care period. While this is a conservative approximation, if the precipitation migrates through the cell more slowly, it will be removed during the post-closure care period. This precipitation will generate approximately 4,100,000 gallons of wastewater based on an estimated exposed area subject to infiltration of 256,308 square feet (i.e., 256,308 s.f. x 55" x 45% of year to close x 7.48 gal/ft.<sup>3</sup>).

After waste inventories and closure debris from all closed units that are destined for landfill disposal are placed in the on-site landfill, the trench will be closed by completing the final cover as described in this Closure Plan.

#### **I-5-4 Other Closure Cost Assumptions**

Costs and other assumptions used in the clean closure cost estimates which are not listed in the tables in this Appendix, are shown within the detailed line items of the clean closure cost estimates in Appendix I-6 of this Closure Plan. Some of the other assumptions used in the preparation of the cost estimates include the following:

- 10% of total area for each regulated non-disposal unit is assumed to be contaminated and will be excavated to a depth of twelve (12) inches;
- 5% of total area for non-regulated units (i.e., truck parking areas PK-700 and PK-1000, and the roadways indicated on Figure I-5.1) is assumed to be contaminated and will be excavated to a depth of six (6) inches;
- the cost for characterization of the waste inventories, contaminated soil removed during closure, and debris treatment residuals is included in the disposal cost of these items;
- the sampling time of one (1) hour per sample includes travel time and completion of chain of custody forms;
- the number of screening samples and verification samples to be collected at each unit is calculated as shown in Table I-3.1 in Appendix I-3 of this Plan;
- the roll-off and tanker rental and cleaning costs are included in the transportation cost;
- tanker trucks can transport 5,000 gallons of liquids;

- road trailer can transport one (1) roll-off box (4,040 gallons);
- leachate piping within the limits of landfill (i.e., piping from the leachate collection and removal systems to the riser pads) is considered part of the disposal unit and will remain in-place;
- 5       • leachate transfer piping outside of the limits of the landfill to the tanks in Unit 1700 are considered to be part of Unit 1700 and associated closure costs are included in Appendix I-6 of this Plan; and,
- 10       • the remaining underground pipe chase system and transfer piping, other than that described above, is considered to be part of Unit 1400 and associated closure costs are included in Appendix I-6 of this Plan.

The assumptions included herein and in the closure cost estimates in Appendix I-6 of this Plan are used for cost estimating purposes only and are not to be inferred as the only closure procedure or alternative.

15

[End of Appendix I-5 Text]

**APPENDIX I-5**  
**SECTION I**  
**BASIS FOR CLOSURE AND POST-CLOSURE COST**  
**ESTIMATES**

**TABLES**

**TABLE I-5.1  
MAXIMUM QUANTITY OF WASTE ON-SITE AND DISPOSAL/TREATMENT QUANTITIES  
CHEMICAL WASTE MANAGEMENT, INC., EMELLE FACILITY**

UNIT NO.	MAXIMUM ON-SITE INVENTORY QUANTITIES <sup>1</sup>							MANAGEMENT OF WASTE INVENTORY BY TREATMENT/DISPOSAL CATEGORIES				
	RCRA QUANTITIES ONLY					TCSA TOTAL gallons	LARGEST RCRA/TSCA TOTAL gallons	ONSITE	ONSITE	OFFSITE	OFFSITE	ONSITE
	CONTAINERS		CONTAIN- MENT BUILDING gallons	TANKS gallons	RCRA TOTAL gallons			TREATMENT & LANDFILL DISPOSAL	DIRECT LANDFILL DISPOSAL	INCINERATION gallons	AQUEOUS TREATMENT gallons	LEACHATE TREATMENT gallons
	DRUMS gallons	BULK gallons						gallons	gallons			
406	-	96,960	-	-	96,960	96,960	96,960	19,392	77,568	-	-	-
520	-	12,120	-	25,066	37,186	10,992	37,186	26,194	10,992	-	-	-
600	-	20,000	-	30,456	50,456	49,278	50,456	1,178	-	49,278	-	-
602	33,660	-	-	-	33,660	33,660	33,660	-	-	33,660	-	-
603	68,200	12,120	-	-	80,320	57,140	80,320	-	23,180	57,140	-	-
604	33,660	20,200	-	-	53,860	53,860	53,860	-	26,930	26,930	-	-
700	117,810	117,160	-	-	234,970	168,221	234,970	89,448	89,448	56,074	-	-
702	103,730	3,800	-	-	107,530	54,884	107,530	44,617	44,618	18,295	-	-
703A	-	10,000	-	-	10,000	10,000	10,000	-	-	10,000	-	-
708	-	-	-	5,734	5,734	-	5,734	-	-	-	5,734	-
900	-	-	-	10,014	10,014	-	10,014	1,001	-	-	9,013	-
1200A	-	24,240	150,146	41,200	215,586	215,586	215,586	174,386	41,200	-	-	-
1400	-	-	-	5,035,672	5,035,672	-	5,035,672	-	-	50,357	-	4,985,315
1700	-	-	-	104,016	104,016	-	104,016	-	-	10,402	-	93,614
2000	-	32,320	-	-	32,320	32,320	32,320	-	32,320	-	-	-
2200	-	872,640	-	-	872,640	872,640	872,640	174,528	610,848	87,264	-	-
<b>TOTALS</b>	<b>357,060</b>	<b>1,221,560</b>	<b>150,146</b>	<b>5,252,158</b>	<b>6,980,924</b>	<b>1,655,541</b>	<b>6,980,924</b>	<b>530,744</b>	<b>957,104</b>	<b>399,399</b>	<b>14,747</b>	<b>5,078,930</b>

<b>Percent of Total Permitted Waste Quantities</b>	8%	14%	6%	0%	73%
<b>Percent of Waste Quantities Received from Off-Site <sup>2</sup></b>	<b>28%</b>	<b>51%</b>	<b>18%</b>	<b>0%</b>	<b>0%</b>

**Notes:**

- 1) Quantities provided illustrate the maximum that can be placed in each unit and are not intended to preclude or limit the storage of various sizes of containers within each unit.
- 2) Does not include the Facility generated quantities (i.e., leachate quantities in Units 1400 & 1700).

**TABLE I-5.2**

**TANK CAPACITY AND SURFACE AREA SUMMARY  
CHEMICAL WASTE MANAGEMENT, INC.  
EMELLE, ALABAMA FACILITY**

TANK NUMBER	TANK DIMENSIONS			TOTAL CAPACITY <sup>1</sup> (gallons)	TOTAL SURFACE AREA (square feet)
	DIAMETER or LENGTH (feet)	SHELL or HEIGHT (feet)	DISH/CONE DEPTH (feet)		
<b>UNIT 520: CONTAINER &amp; TANK STORAGE</b>					
T-520	16.00	14.00	8.00	25,066	1,189
			Total	25,066	1,189
<b>UNIT 600: CONTAINER &amp; TANK MANAGEMENT</b>					
T-634	12.00	12.00	0.00	10,152	679
T-635	12.00	12.00	0.00	10,152	679
T-636	12.00	12.00	0.00	10,152	679
			Total	30,456	2,037
<b>UNIT 708: LABORATORY TANK STORAGE</b>					
T-725	4.00	10.67	0.00	1,003	159
T-726	8.00	12.58	0.00	4,731	417
				5,734	576
<b>UNIT 900: WHEEL WASH &amp; TANK STORAGE</b>					
T-901	6.00	8.00	3.00	1,903	219
T-902	6.00	8.00	3.00	1,903	219
T-903	3.00	40.00	3.46	3,104	417
T-904	3.00	40.00	3.46	3,104	417
			Total	10,014	1,272
<b>UNIT 1200A: CONTAINMENT BUILDING/CONTAINER &amp; TANK MANAGEMENT</b>					
T-1201A	20.67	12.00	12.00	20,802	1020
T-1202A	20.67	12.00	12.00	20,398	1020
			Total	41,200	2,040



**TABLE I-5.2**

**TANK CAPACITY AND SURFACE AREA SUMMARY  
CHEMICAL WASTE MANAGEMENT, INC.  
EMELLE, ALABAMA FACILITY**

TANK NUMBER	TANK DIMENSIONS			TOTAL CAPACITY <sup>1</sup> (gallons)	TOTAL SURFACE AREA (square feet)
	DIAMETER or LENGTH (feet)	SHELL or HEIGHT (feet)	DISH/CONE DEPTH (feet)		

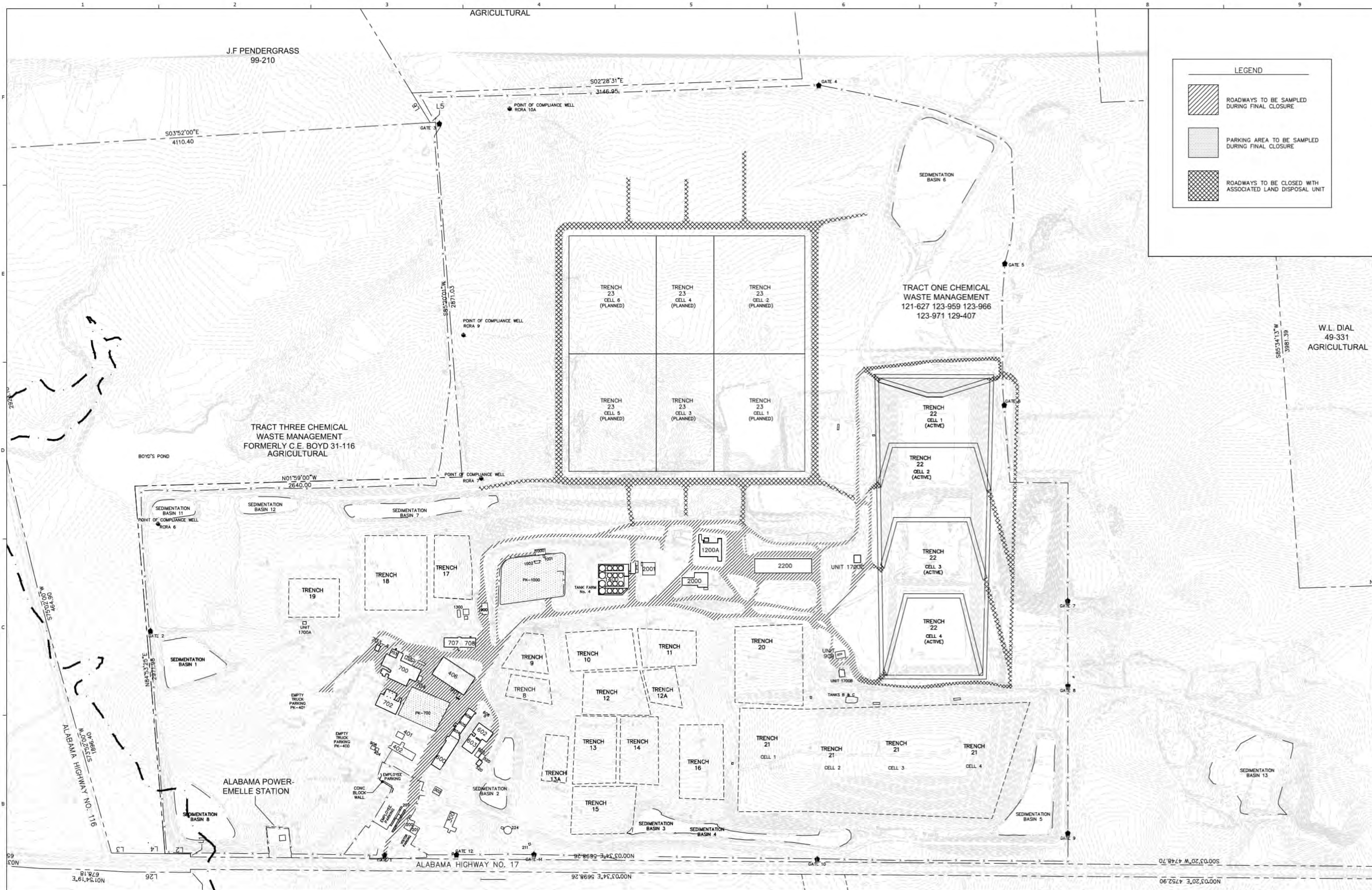
UNIT 1400: TANK MANAGEMENT					
T-1405	52.00	32.00	0.00	508,333	9,475
T-1406	52.00	32.00	0.00	508,333	9,475
T-1407	52.00	32.00	0.00	508,333	9,475
T-1408	52.00	32.00	0.00	508,333	9,475
T-1409	39.00	28.00	0.00	250,195	5,820
T-1410	39.00	28.00	0.00	250,195	5,820
T-1411	39.00	28.00	0.00	250,195	5,820
T-1412	39.00	28.00	0.00	250,195	5,820
T-1413	39.00	28.00	0.00	250,195	5,820
T-1414	39.00	28.00	0.00	250,195	5,820
T-1415	39.00	28.00	0.00	250,195	5,820
T-1416	39.00	28.00	0.00	250,195	5,820
T-1417	39.00	28.00	0.00	250,195	5,820
T-1418	39.00	28.00	0.00	250,195	5,820
T-1419	39.00	28.00	0.00	250,195	5,820
T-1420	39.00	28.00	0.00	250,195	5,820
			Total	5,035,672	107,740

UNIT 1700A, B & C: TANK STORAGE UNITS					
T-A	5.33	15.92	0.00	2,500	311
T-1701	12.00	30.00	0.00	25,379	1,357
T-1702	12.00	30.00	0.00	25,379	1,357
T-1703	12.00	30.00	0.00	25,379	1,357
T-1704	12.00	30.00	0.00	25,379	1,357
			Total	104,016	5,739

**Notes:**

1) Total capacity is based on the physical dimensions of the tank. This figure represents the maximum volume of waste that could be stored in the tank.

**APPENDIX I-5**  
**SECTION I**  
**BASIS FOR CLOSURE AND POST-CLOSURE COST**  
**ESTIMATES**  
  
**FIGURES**



**LEGEND**

- ROADWAYS TO BE SAMPLED DURING FINAL CLOSURE
- PARKING AREA TO BE SAMPLED DURING FINAL CLOSURE
- ROADWAYS TO BE CLOSED WITH ASSOCIATED LAND DISPOSAL UNIT

REV	DATE	DESCRIPTION
5.0	08/22	RCRA PART B PERMIT RENEWAL

**UNIT IDENTIFICATION LEGEND**

NO.	IDENTIFICATION	NO.	IDENTIFICATION	NO.	IDENTIFICATION
200	ADMINISTRATIVE OFFICE	*★ 600	TANK MANAGEMENT UNIT	*★ 900	WHEEL WASH & TANK STORAGE UNIT
201	ADMINISTRATIVE OFFICE	*★ 602	CONTAINER STORAGE UNIT	901	REFUELING STATION
207	GUARD HOUSE/SALES	*★ 603	CONTAINER STORAGE UNIT	908	TRANSPORTATION FUELING
224	FIRE SYSTEM PUMP HOUSE/TANK	*★ 604	CONTAINER MANAGEMENT UNIT	909	HEAVY EQUIPMENT FUELING
300	HEAVY EQUIPMENT MAINT.	605	CENTRAL INVENTORY	1000	BULK SAMPLING STATION
302	DOCUMENT STORAGE	606	FACILITY MAINTENANCE SHOP	1001	UNIT 1000 BREAKROOM/OFFICE/LAB
401	PAINT & WASH BUILDING	608	C.I. FLAMMABLE STORAGE BUILDING	1002	UNIT 1000 SHED
402	TRANSPORTATION SHOP	*★ 700	CONTAINER MANAGEMENT UNIT	*★ 1200A	CONTAINMENT BUILDING/ CONTAINER & TANK MANAGEMENT UNIT
404	SHOWER, LOCKER FACILITY & CAFETERIA	*★ 702	CONTAINER MANAGEMENT UNIT	1300	WHEEL WASH CLEAN WATER STORAGE
*★ 406	CONTAINER STORAGE UNIT	*★ 703	ORGANIC CONTAINER & TANK MANAGEMENT UNIT (INACTIVE)	*★ 1400	TANK MANAGEMENT UNIT
*★ 520	CONTAINER AND TANK MANAGEMENT UNIT	*★ 703A	CONTAINER MANAGEMENT UNIT	*★ 1700	LEACHATE TANK STORAGE UNITS (MULTIPLE LOCATIONS - A, B & C)
		704	AIR COMPRESSOR BUILDING		* TSCA REGULATED UNIT
		707	CONSOLIDATED TECH SERVICES BLDG.		*1 TSCA REGULATED UNIT - LOADING STATION ONLY
		*★ 708	LABORATORY & TANK STORAGE UNIT		* RCRA REGULATED UNIT

BY: COSNER  
 PLOT DATE: 7/22/2022  
 CREATED: 2/2/2021

**NOTES:**  
 1. TOPOGRAPHIC SURVEY FLOWN BY SOUTHERN RESOURCES  
 MAPPING DATED 1/19/2020 AND 5/14/2020.  
 2. FEMA 100 YEAR FLOOD PLAIN FIRM #01119C0075D EFFECTIVE 4/3/2012.



THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APPLICABLE OR COVERING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.  
 PROJECT NO: D3279702  
 DATE: AUGUST 2022  
 DISC. LEAD: MTF DESIGNER: MRC CHECKER: SBT  
 SHEET TITLE  
**FACILITY ROADWAYS ADDRESSED DURING FINAL CLOSURE**  
 SHEET **FIGURE I-5.1**

**APPENDIX I-6**

**SECTION I**

**CLEAN CLOSURE COST ESTIMATES**

Revision No.

5.0

**APPENDIX I-6**  
**SECTION I**  
**CLEAN CLOSURE COST ESTIMATES**

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- Table I-6.1** Summary of Clean Closure Cost Estimates  
**Table I-6.2** Determination of Clean Closure Cost Estimates

**HCSS HeavyBid Clean Closure Cost Report**

Cost Estimate Details for Regulated Units:

Unit 406, Unit 520, Unit 600, Unit 602, Unit 603, Unit 604, Unit 700, Unit 702, Unit 703 & 703A, Unit 708, Unit 900, Unit 1200A, Unit 1400, Unit 1700, Unit 2000, Unit 2200, Landfill Trench 22, and Landfill Trench 23

Cost Estimate Details for Units Not Regulated by RCRA:

Unit 300, Unit 606, Truck Parking Area PK - 700, Truck Parking Area PK – 1000, Facility Roadways, and Leachate Treatment Plant Unit 2001

# APPENDIX I-6

## SECTION I

### CLEAN CLOSURE COST ESTIMATES

#### I-6-1 Introduction

5 In accordance with 40 CFR 264.142(a)(2) and ADEM Administrative Code Rule  
335-14-5-.08(3)(a)2, the closure cost estimates in this Appendix assume that the closure  
activities will be performed by an independent third-party contractor. The basis, assumptions,  
and other specific cost information used in calculating the closure cost estimates are described  
in Appendix I-5.

10 The clean closure cost estimates for regulated SWMUs and other non-RCRA regulated areas  
and buildings at the facility are presented in Tables I-6.1 and I-6.2, followed by detailed  
estimates of direct costs from HCSS HeavyBid. Also presented in Table I-6.1, is the  
post-closure cost estimate for the Facility and the total dollar amount to be guaranteed by the  
15 financial assurance mechanism. Details of the cost estimates for post-closure care are provided  
in Appendix I-7.

The direct costs calculated by the HCSS HeavyBid software are raw direct costs and do not  
include markups for labor overhead (i.e., benefits), home office/job office overhead, other  
20 general and administrative costs, other engineering costs, profit, or contingency. These  
additional markups are added to the direct costs as shown in Table I-6.2. Table I-6.1 provides a  
simplified summary presentation of the column "Total Clean Closure Cost" as presented in  
Table I-6.2.

**APPENDIX I-6**  
**SECTION I**  
**CLEAN CLOSURE COST ESTIMATES**

**TABLES**

TABLE I-6.1

**SUMMARY OF CLEAN CLOSURE COST ESTIMATES  
CHEMICAL WASTE MANAGEMENT, INC.  
EMELLE, ALABAMA FACILITY**

**REGULATED UNITS**

<b>Unit Name/Description</b>	<b>Total Clean Closure Cost (2021 Dollars)</b>
Unit 406	\$266,939
Unit 520 Containers	\$50,360
Unit 520 Tanks	\$83,260
Unit 600 Containers	\$76,099
Unit 600 Tanks	\$460,162
Unit 602	\$564,378
Unit 603	\$571,806
Unit 604	\$316,190
Unit 700	\$1,114,254
Unit 702	\$866,850
Unit 703 & 703A	\$126,120
Unit 708	\$76,501
Unit 900	\$176,763
Unit 1200A Containers	\$19,315
Unit 1200A Containment	\$1,082,941
Unit 1200A Tanks	\$263,448
Unit 1400	\$5,112,604
Unit 1700	\$278,001
Unit 2000	\$368,486
Unit 2200	\$1,762,977
Landfill Trench 22	\$8,811,654
Landfill Trench 23	\$9,957,107
<b>Total for Regulated Units</b>	<b>\$32,406,216</b>

**MISCELLANEOUS NON-REGULATED AREAS**

<b>Unit Name/Description</b>	<b>Total Clean Closure Cost (2021 Dollars)</b>
Unit 300	\$8,390
Unit 606	\$6,135
PK 700	\$69,821
PK 1000	\$121,934
Roadways	\$321,118
<b>Subtotal</b>	<b>\$527,397</b>

**AREAS REGULATED BY CLEAN WATER ACT/NPDES**

<b>Unit Name/Description</b>	<b>Total Clean Closure Cost (2021 Dollars)</b>
New Leachate Treatment Plant - Unit 2001:	
Unit 2001 - Leachate Treatment Building	\$140,232
Unit 2001 - Chemical Storage Building	\$710,784
Unit 2001 - Tanks	\$2,040,491
Disposal of Non-Itemized Process Equipment (10% of subtotal for Unit 2001)	\$289,151
<b>Subtotal</b>	<b>\$3,180,658</b>

<b>Total for Non-RCRA Regulated Units</b>	<b>\$3,708,055</b>
---	--------------------

<b>TOTAL CLEAN CLOSURE COST FOR ENTIRE FACILITY (Based on 2021 Dollars)</b>	<b>\$36,114,272</b>
---	---------------------

<b>TOTAL POST-CLOSURE COST FOR ENTIRE FACILITY (Based on 2021 Dollars)</b>	<b>\$13,781,261</b>
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<b>TOTAL FINANCIAL ASSURANCE REQUIREMENT (Based on 2021 Dollars)</b>	<b>\$49,895,533</b>
--	---------------------





# Cost Report

Jacobs Engineering

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21-280

CWM: Emelle Clean Closure

12/10/2021 12:35 PM

**Biditem**

**Unit 406**

**10**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	15,427.40	7,936.74	23,364.14	21,236.73	0.00	9,645.34	93,804.81	8,837.80	0.00	0.00	156,888.82
Total	15,427.40	7,936.74	23,364.14	21,236.73	0.00	9,645.34	93,804.81	8,837.80	0.00	0.00	156,888.82

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	963.4400	0.0010	963.4400	162.8423	16.0128	24.2507	0.0056

**Activity: 10**      **Removal of Waste (CS-03)**      **Quantity: 9408.00**      **Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	206.93	113.67	320.60	59.12	0.00	177.60	0.00	0.00	0.00	0.00	557.32

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0404	0.0004	2,500.0000	100.9035	0.3763	25,000.0000	0.0000	1,480.9736

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	15.0500	625.1163	0.0016	21.3023	0.0220

Calendar: 510    5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\*    Prod: UH 2500    Eff: 100.00    Crew Hrs: 3.76    Labor Pcs: 4.00    Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	15.05	MH	10.00	109.00	10.90	164.05
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.76	HR	15.72	100.00	15.72	59.12
9STGEN	Sm Tools - General	1.00	15.05	MH	0.90	100.00	0.90	13.55
LFORMN	Laborer-Foreman	1.00	3.76	MH	14.00	110.00	23.34	87.75
LGEN	Laborer-General	3.00	11.29	MH	12.00	110.00	20.62	232.85

**Activity: 20**      **Demo and Removal of Pads (CS-04)**      **Quantity: 9628.00**      **Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	3,617.87	1,959.54	5,577.41	8,754.11	0.00	650.87	0.00	0.00	0.00	0.00	14,982.39

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	1.4885	0.0067	149.9999	223.2787	6.4187	1,499.9992	0.0007	2,334.1892

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	256.7500	37.4995	0.0267	21.7231	0.3758

Calendar: 510    5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\*    Prod: US 1500    Eff: 100.00    Crew Hrs: 64.19    Labor Pcs: 4.00    Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	256.75	MH	1.50	109.00	1.64	419.79
8DEMO10	Breaker Attach Excavator H140S	1.00	64.19	HR	31.39	100.00	31.39	2,014.99
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	64.19	HR	83.58	100.00	83.58	5,365.26
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	64.19	HR	15.72	100.00	15.72	1,009.26
8TRKWTR02	Water Tank and Trailer 500 G	1.00	64.19	HR	5.68	100.00	5.68	364.60
9STGEN	Sm Tools - General	1.00	256.75	MH	0.90	100.00	0.90	231.08
LFORMN	Laborer-Foreman	1.00	64.19	MH	14.00	110.00	23.34	1,498.00

LGEN	Laborer-General	2.00	128.37	MH	12.00	110.00	20.62	2,647.57
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	64.19	MH	13.24	110.00	22.31	1,431.84

**Activity: 22 Load Rollofs (CS-04) Quantity: 285.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.16	1.16	3.31	5.25	0.00	0.38	0.00	25.00	0.00	0.00	33.94
Total	615.09	329.23	944.32	1,496.06	0.00	108.38	0.00	7,125.00	0.00	0.00	9,673.76

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.5627	0.0500	20.0000	171.2547	1.4250	200.0000	0.0050	6,788.6035

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
42.7500	6.6667	0.1500	22.0894	2.1582

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 20 Eff: 100.00 Crew Hrs: 14.25 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	42.75	MH	1.50	109.00	1.64	69.90
5DH80	Rolloff Bin Delivery	1.00	15.00	EA	250.00	100.00	250.00	3,750.00
5DH81	Bin Rental	15.00	75.00	DY	25.00	100.00	25.00	1,875.00
5TRKBT	Bin Truck	1.00	12.00	HR	125.00	100.00	125.00	1,500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	14.25	HR	83.58	100.00	83.58	1,191.07
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	14.25	HR	15.72	100.00	15.72	224.05
8TRKWTR02	Water Tank and Trailer 500 G	1.00	14.25	HR	5.68	100.00	5.68	80.94
9STGEN	Sm Tools - General	1.00	42.75	MH	0.90	100.00	0.90	38.48
LFORMN	Laborer-Foreman	1.00	14.25	MH	14.00	110.00	23.34	332.55
LGEN	Laborer-General	1.00	14.25	MH	12.00	110.00	20.62	293.90
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	14.25	MH	13.24	110.00	22.31	317.87

**Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	86.33	46.20	132.53	183.57	0.00	15.21	0.00	0.00	0.00	0.00	331.31
Total	86.33	46.20	132.53	183.57	0.00	15.21	0.00	0.00	0.00	0.00	331.31

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
316.1000	2.0000	0.5000	158.0500	0.2000	5.0000	0.2000	1,656.5500

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6.0000	0.1667	6.0000	22.0883	86.3300

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 2 Eff: 100.00 Crew Hrs: 2.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	6.00	MH	1.50	109.00	1.64	9.81
8TRKGS05	Boom Truck 28,000# Cap	1.00	2.00	HR	67.10	100.00	67.10	134.20
8TRKGS10	Flatbed Truck 15K 200HP	1.00	2.00	HR	24.68	100.00	24.69	49.37
9STGEN	Sm Tools - General	1.00	6.00	MH	0.90	100.00	0.90	5.40
LFORMN	Laborer-Foreman	1.00	2.00	MH	14.00	110.00	23.34	46.67
LGEN	Laborer-General	1.00	2.00	MH	12.00	110.00	20.63	41.25
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	2.00	MH	13.24	110.00	22.31	44.61

**Activity: 40 Removal of Soil(CS-06) Quantity: 36.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.40	1.28	3.68	5.83	0.00	0.42	0.00	20.83	0.00	0.00	30.77
Total	86.33	46.20	132.53	209.98	0.00	15.21	0.00	750.00	0.00	0.00	1,107.72

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
9.5142	0.0556	18.0000	171.2550	0.2000	180.0000	0.0056	5,538.6000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6.0000	6.0000	0.1667	22.0883	2.3981

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 2 Eff: 100.00 Crew Hrs: 2.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	6.00	MH	1.50	109.00	1.64	9.81
5DH80	Rolloff Bin Delivery	1.00	2.00	EA	250.00	100.00	250.00	500.00
5DH81	Bin Rental	2.00	10.00	DY	25.00	100.00	25.00	250.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	2.00	HR	83.58	100.00	83.59	167.17
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.00	HR	15.72	100.00	15.73	31.45
8TRKWTR02	Water Tank and Trailer 500 G	1.00	2.00	HR	5.68	100.00	5.68	11.36
9STGEN	Sm Tools - General	1.00	6.00	MH	0.90	100.00	0.90	5.40
LFORMN	Laborer-Foreman	1.00	2.00	MH	14.00	110.00	23.34	46.67
LGEN	Laborer-General	1.00	2.00	MH	12.00	110.00	20.63	41.25
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	2.00	MH	13.24	110.00	22.31	44.61

Activity: 50 Backfill and Grading (BF-01) Quantity: 402.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	0.00	0.00	0.00	12.45
Total	1,268.56	659.79	1,928.35	2,864.47	0.00	212.31	0.00	0.00	0.00	0.00	5,005.13

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	24.0000	286.1385	1.6750	240.0000	0.0042	2,988.1373

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
83.7500	4.8000	0.2083	23.0251	3.1556

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 16.75 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	83.75	MH	1.50	109.00	1.63	136.93
8BDZR05	Bulldozer Cat D5K2 XL	1.00	16.75	HR	53.11	100.00	53.11	889.61
8BHLD426	BHL Cat 420E 1.25CY	1.00	16.75	HR	35.85	100.00	35.85	600.54
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	16.75	HR	60.65	100.00	60.65	1,015.82
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	16.75	HR	15.72	100.00	15.72	263.36
8TRKWTR02	Water Tank and Trailer 500 G	1.00	16.75	HR	5.68	100.00	5.68	95.14
9STGEN	Sm Tools - General	1.00	83.75	MH	0.90	100.00	0.90	75.38
LFORMN	Laborer-Foreman	1.00	16.75	MH	14.00	110.00	23.34	390.90
LGEN	Laborer-General	1.00	16.75	MH	12.00	110.00	20.62	345.46
OPDZ9	Op Eng 3- Dozer to D9	1.00	16.75	MH	16.59	110.00	26.85	449.73
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	16.75	MH	13.24	110.00	22.31	373.63
OPROLL	Op Eng - Rollers	1.00	16.75	MH	13.02	110.00	22.01	368.63

Activity: 60 Decontamination (DC-01) Quantity: 9628.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.82	0.00	0.00	0.00	0.00	2.63
Total	6,269.69	3,470.63	9,740.32	7,669.42	0.00	7,873.06	0.00	0.00	0.00	0.00	25,282.80

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8082	0.0080	125.0000	226.0301	7.7024	1,250.0000	0.0008	3,282.4574

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
462.1400	20.8335	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 77.02 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	12.00	ROLL	185.00	109.00	201.65	2,419.80
31PPE003	Level C Supplies	1.00	462.14	MH	10.00	109.00	10.90	5,037.33
8CONCEQ42	Pressure Washer 3,000psi	1.00	77.02	HR	6.07	100.00	6.07	467.36
8GEN100	Generator 125 KW	1.00	77.02	HR	47.42	100.00	47.42	3,652.44
8TRKGS10	Flatbed Truck 15K 200HP	1.00	77.02	HR	24.68	100.00	24.68	1,901.16
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	77.02	HR	15.72	100.00	15.72	1,210.99
8TRKWTR02	Water Tank and Trailer 500 G	1.00	77.02	HR	5.68	100.00	5.68	437.47
9STGEN	Sm Tools - General	1.00	462.14	MH	0.90	100.00	0.90	415.93
LFORMN	Laborer-Foreman	1.00	77.02	MH	14.00	110.00	23.34	1,797.41
LGEN	Laborer-General	5.00	385.12	MH	12.00	110.00	20.62	7,942.91

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,960.00	757.85	2,717.85	0.00	0.00	590.00	16,508.05	0.00	0.00	0.00	19,815.90
Total	1,960.00	757.85	2,717.85	0.00	0.00	590.00	16,508.05	0.00	0.00	0.00	19,815.90

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	60.0000	0.0167	60.0000	45.2975	1,960.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	50.00	MH	10.00	109.00	10.90	545.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	19.00	EA	158.36	100.00	158.36	3,008.84
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	812.00	EA	13.73	100.00	13.73	11,148.76
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	9.00	EA	188.83	100.00	188.83	1,699.47
9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
X122	→ Field Technician	1.00	50.00	MH	28.00	110.00	42.46	2,122.96
X124	→ Chemist	1.00	10.00	MH	42.00	100.00	59.49	594.89

Activity: 80 Transportation (TR-01) Quantity: 9628.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.11
Total	39.60	22.27	61.87	0.00	0.00	2.70	0.00	962.80	0.00	0.00	1,027.37

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	3.0000	3,209.3333	0.0003	20.6233	0.0041

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ01	Transportation - Liquid	1.00	9,628.00	GAL	0.10	100.00	0.10	962.80
9STGEN	Sm Tools - General	1.00	3.00	MH	0.90	100.00	0.90	2.70
LGEN	→ Laborer-General	1.00	3.00	MH	12.00	110.00	20.62	61.87

Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	802.00	CY	96.38	100.00	96.38	77,296.76

**Activity: 120 Tank Systems Certification of Closure (TS\_09 -1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem** **Unit 520 Containers**  
**20** Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3,296.03	1,782.63	5,078.66	5,575.15	0.00	2,553.83	13,038.88	3,254.50	0.00	0.00	29,501.02
Total	3,296.03	1,782.63	5,078.66	5,575.15	0.00	2,553.83	13,038.88	3,254.50	0.00	0.00	29,501.02

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	232.4700	0.0043	232.4700	126.9025	14.1783	21.8465	0.0211

**Activity: 10 Removal of Waste (CS-03) Quantity: 2010.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	44.13	24.24	68.37	12.58	0.00	38.00	0.00	0.00	0.00	0.00	118.95

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0403	0.0004	2,500.0000	100.6841	0.0804	25,000.0000	0.0000	1,479.4776

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	3.2100	626.1682	0.0016	21.2991	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 0.80 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	3.22	MH	10.00	109.00	10.90	35.10
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	0.80	HR	15.72	100.00	15.73	12.58
9STGEN	Sm Tools - General	1.00	3.22	MH	0.90	100.00	0.90	2.90
LFORMN	Laborer-Foreman	1.00	0.80	MH	14.00	110.00	23.34	18.67
LGEN	Laborer-General	3.00	2.41	MH	12.00	110.00	20.62	49.70

**Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 2542.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	955.24	517.38	1,472.62	2,311.61	0.00	171.85	0.00	0.00	0.00	0.00	3,956.08

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	1.4887	0.0067	149.9997	223.3019	1.6947	1,499.9970	0.0007	2,334.4250

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	67.7900	37.4982	0.0267	21.7233	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500 Eff: 100.00 Crew Hrs: 16.95 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	67.79	MH	1.50	109.00	1.64	110.84
8DEMO10	Breaker Attach Excavator H140S	1.00	16.95	HR	31.39	100.00	31.39	532.08
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	16.95	HR	83.58	100.00	83.58	1,416.75
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	16.95	HR	15.72	100.00	15.72	266.50
8TRKWTR02	Water Tank and Trailer 500 G	1.00	16.95	HR	5.68	100.00	5.68	96.28
9STGEN	Sm Tools - General	1.00	67.79	MH	0.90	100.00	0.90	61.01
LFORMN	Laborer-Foreman	1.00	16.95	MH	14.00	110.00	23.34	395.56
LGEN	Laborer-General	2.00	33.89	MH	12.00	110.00	20.62	698.97
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	16.95	MH	13.24	110.00	22.31	378.09

Activity: 22 Load Rollofs (CS-04) Quantity: 66.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.38	0.00	45.45	0.00	0.00	60.11
Total	237.40	127.09	364.49	577.43	0.00	25.10	0.00	3,000.00	0.00	0.00	3,967.02

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2715	0.0833	12.0000	171.2582	0.5500	120.0000	0.0083	7,212.7636

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
16.5000	4.0000	0.2500	22.0903	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 5.50 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	9.90	MH	1.50	109.00	1.64	16.19
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00
5DH81	Bin Rental	15.00	60.00	DY	25.00	100.00	25.00	1,500.00
5TRKBT	Bin Truck	1.00	4.00	HR	125.00	100.00	125.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	5.50	HR	83.58	100.00	83.58	459.71
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.50	HR	15.72	100.00	15.72	86.48
8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.50	HR	5.68	100.00	5.68	31.24
9STGEN	Sm Tools - General	1.00	9.90	MH	0.90	100.00	0.90	8.91
LFORMN	Laborer-Foreman	1.00	5.50	MH	14.00	110.00	23.34	128.36
LGEN	Laborer-General	1.00	5.50	MH	12.00	110.00	20.63	113.44
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.50	MH	13.24	110.00	22.31	122.69

Activity: 50 Backfill and Grading (BF-01) Quantity: 91.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.15	1.64	4.80	7.12	0.00	0.53	0.00	0.00	0.00	0.00	12.45
Total	287.04	149.31	436.35	648.14	0.00	48.06	0.00	0.00	0.00	0.00	1,132.55

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9175	0.0417	23.9998	286.0168	0.3792	239.9979	0.0042	2,986.9188

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
18.9500	4.8021	0.2082	23.0264	3.1543

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 23.9998 Eff: 100.00 Crew Hrs: 3.79 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	18.96	MH	1.50	109.00	1.64	31.00
8BDZR05	Bulldozer Cat D5K2 XL	1.00	3.79	HR	53.11	100.00	53.11	201.29
8BHL426	BHL Cat 420E 1.25CY	1.00	3.79	HR	35.85	100.00	35.85	135.88

8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	3.79	HR	60.65	100.00	60.65	229.85
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.79	HR	15.72	100.00	15.72	59.59
8TRKWTR02	Water Tank and Trailer 500 G	1.00	3.79	HR	5.68	100.00	5.68	21.53
9STGEN	Sm Tools - General	1.00	18.96	MH	0.90	100.00	0.90	17.06
LFORMN	Laborer-Foreman	1.00	3.79	MH	14.00	110.00	23.34	88.46
LGEN	Laborer-General	1.00	3.79	MH	12.00	110.00	20.63	78.17
OPDZ9	Op Eng 3- Dozer to D9	1.00	3.79	MH	16.59	110.00	26.85	101.76
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3.79	MH	13.24	110.00	22.31	84.55
OPROLL	Op Eng - Rollers	1.00	3.79	MH	13.02	110.00	22.01	83.41

Activity: 60 Decontamination (DC-01) Quantity: 2542.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.88	0.00	0.00	0.00	0.00	2.69
Total	1,655.42	916.37	2,571.79	2,025.39	0.00	2,246.32	0.00	0.00	0.00	0.00	6,843.50

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8085	0.0080	125.0000	226.0612	2.0336	1,250.0000	0.0008	3,365.2144

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
122.0200	20.8327	0.0480	21.0768	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 20.34 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	4.00	ROLL	185.00	109.00	201.65	806.60
31PPE003	Level C Supplies	1.00	122.01	MH	10.00	109.00	10.90	1,329.91
8CONCEQ42	Pressure Washer 3,000psi	1.00	20.34	HR	6.07	100.00	6.07	123.42
8GEN100	Generator 125 KW	1.00	20.34	HR	47.42	100.00	47.42	964.56
8TRKGS10	Flatbed Truck 15K 200HP	1.00	20.34	HR	24.68	100.00	24.68	502.07
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	20.34	HR	15.72	100.00	15.72	319.81
8TRKWTR02	Water Tank and Trailer 500 G	1.00	20.34	HR	5.68	100.00	5.68	115.53
9STGEN	Sm Tools - General	1.00	122.01	MH	0.90	100.00	0.90	109.81
LFORMN	Laborer-Foreman	1.00	20.34	MH	14.00	110.00	23.34	474.68
LGEN	Laborer-General	5.00	101.68	MH	12.00	110.00	20.62	2,097.11

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	103.60	40.81	144.41	0.00	0.00	23.60	316.72	0.00	0.00	0.00	484.73
Total	103.60	40.81	144.41	0.00	0.00	23.60	316.72	0.00	0.00	0.00	484.73

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3.0000	0.3333	3.0000	48.1367	103.6000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	2.00	MH	10.00	109.00	10.90	21.80
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	2.00	EA	158.36	100.00	158.36	316.72
9STGEN	Sm Tools - General	1.00	2.00	MH	0.90	100.00	0.90	1.80
X122	→ Field Technician	1.00	2.00	MH	28.00	110.00	42.46	84.92
X124	→ Chemist	1.00	1.00	MH	42.00	100.00	59.49	59.49

Activity: 80 Transportation (TR-01) Quantity: 2545.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.11
Total	13.20	7.43	20.63	0.00	0.00	0.90	0.00	254.50	0.00	0.00	276.03

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
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1.0000	2,545.0000	0.0004	20.6300	0.0052
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ01	Transportation - Liquid	1.00	2,545.00	GAL	0.10	100.00	0.10	254.50
9STGEN	Sm Tools - General	1.00	1.00	MH	0.90	100.00	0.90	0.90
LGEN	→ Laborer-General	1.00	1.00	MH	12.00	110.00	20.63	20.63

Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	132.00	CY	96.38	100.00	96.38	12,722.16

**Biditem**  
**30**

**Unit 520 Tanks**

Takeoff Qty: 1.000 LS  
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	7,313.90	3,693.34	11,007.24	7,763.61	0.00	5,880.91	19,424.91	4,227.52	0.00	0.00	48,304.19
Total	7,313.90	3,693.34	11,007.24	7,763.61	0.00	5,880.91	19,424.91	4,227.52	0.00	0.00	48,304.19

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	424.8600	0.0024	424.8600	113.6944	17.2148	25.9079	0.0131

Activity: 10 Removal of Waste (TS-03) Quantity: 25131.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.02	0.00	0.01	0.00	0.04	0.00	0.00	0.10
Total	418.00	227.86	645.86	459.35	0.00	354.00	0.00	1,080.00	0.00	0.00	2,539.21

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0440	0.0004	2,513.1000	110.5210	1.0000	25,131.0000	0.0000	2,539.2100

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	30.0000	837.7000	0.0012	21.5287	0.0166

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 1 Eff: 100.00 Crew Hrs: 10.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	30.00	MH	10.00	109.00	10.90	327.00
5VTRK	Vac Truck	1.00	8.00	HR	135.00	100.00	135.00	1,080.00
8GEN050	Generator 45 KW	1.00	10.00	HR	18.78	100.00	18.78	187.83
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	10.00	HR	11.43	100.00	11.43	114.29
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	10.00	HR	15.72	100.00	15.72	157.23
9STGEN	Sm Tools - General	1.00	30.00	MH	0.90	100.00	0.90	27.00
LFORMN	Laborer-Foreman	1.00	10.00	MH	14.00	110.00	23.34	233.37
LGEN	Laborer-General	2.00	20.00	MH	12.00	110.00	20.62	412.49

Activity: 20 Tank System Purging (TS-03) Quantity: 25066.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.09
Total	330.00	181.26	511.26	355.14	0.00	1,480.12	0.00	0.00	0.00	0.00	2,346.52

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0346	0.0002	4,177.6667	144.4000	0.6000	41,776.6667	0.0000	3,910.8667

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	24.0000	1,044.4167	0.0010	21.3025	0.0132

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 6 Eff: 100.00 Crew Hrs: 6.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	376.00	LB	2.75	109.00	3.00	1,127.06
31PPE003	Level C Supplies	1.00	29.92	MH	10.00	109.00	10.90	326.13
8GEN050	Generator 45 KW	1.00	6.00	HR	18.78	100.00	18.78	112.70
8TRKGS10	Flatbed Truck 15K 200HP	1.00	6.00	HR	24.68	100.00	24.68	148.10
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.00	HR	15.72	100.00	15.72	94.34
9STGEN	Sm Tools - General	1.00	29.92	MH	0.90	100.00	0.90	26.93
LFORMN	Laborer-Foreman	1.00	6.00	MH	14.00	110.00	23.34	140.02
LGEN	Laborer-General	3.00	18.00	MH	12.00	110.00	20.62	371.24

Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 65.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.64	0.35	0.99	0.95	0.00	0.54	0.00	0.00	0.00	0.00	2.49
Total	41.80	22.79	64.59	61.74	0.00	35.40	0.00	0.00	0.00	0.00	161.73

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.9435	0.0154	65.0000	126.3300	0.1000	650.0000	0.0015	1,617.3000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3.0000	21.6667	0.0462	21.5300	0.6431

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 1 Eff: 100.00 Crew Hrs: 1.00 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	3.00	MH	10.00	109.00	10.90	32.70
8COMPR04	Compressor 185 CFM 80HP	1.00	1.00	HR	15.81	100.00	15.81	15.81
8GEN050	Generator 45 KW	1.00	1.00	HR	18.78	100.00	18.78	18.78
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	1.00	HR	11.43	100.00	11.43	11.43
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.00	HR	15.72	100.00	15.72	15.72
9STGEN	Sm Tools - General	1.00	3.00	MH	0.90	100.00	0.90	2.70
LFORMN	Laborer-Foreman	1.00	1.00	MH	14.00	110.00	23.34	23.34
LGEN	Laborer-General	2.00	2.00	MH	12.00	110.00	20.63	41.25

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	695.64	379.52	1,075.16	1,420.99	0.00	126.75	0.00	0.00	0.00	0.00	2,622.90
Total	695.64	379.52	1,075.16	1,420.99	0.00	126.75	0.00	0.00	0.00	0.00	2,622.90

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2,496.1500	10.0000	0.1000	249.6150	1.0000	1.0000	1.0000	2,622.9000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
50.0000	0.0200	50.0000	21.5032	695.6400

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 1 Eff: 100.00 Crew Hrs: 10.00 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	50.00	MH	1.50	109.00	1.64	81.75
8COMPR04	Compressor 185 CFM 80HP	1.00	10.00	HR	15.81	100.00	15.81	158.10
8GEN050	Generator 45 KW	1.00	10.00	HR	18.78	100.00	18.78	187.83
8TRKGS05	Boom Truck 28,000# Cap	1.00	10.00	HR	67.10	100.00	67.10	670.99
8TRKGS10	Flatbed Truck 15K 200HP	1.00	10.00	HR	24.68	100.00	24.68	246.84
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	10.00	HR	15.72	100.00	15.72	157.23

9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
LFORMN	Laborer-Foreman	1.00	10.00	MH	14.00	110.00	23.34	233.37
LGEN	Laborer-General	3.00	30.00	MH	12.00	110.00	20.62	618.73
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	10.00	MH	13.24	110.00	22.31	223.06

Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 1637.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	615.06	333.13	948.19	1,487.89	0.00	110.67	0.00	0.00	0.00	0.00	2,546.75

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4881	0.0067	149.9991	223.2192	1.0913	1,499.9908	0.0007	2,333.5991

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
43.6500	37.5029	0.0267	21.7226	0.3757

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1499.9908 Eff: 100.00 Crew Hrs: 10.91 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	43.66	MH	1.50	109.00	1.63	71.38
8DEMO10	Breaker Attach Excavator H140S	1.00	10.91	HR	31.39	100.00	31.39	342.48
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	10.91	HR	83.58	100.00	83.58	911.90
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	10.91	HR	15.72	100.00	15.72	171.54
8TRKWTR02	Water Tank and Trailer 500 G	1.00	10.91	HR	5.68	100.00	5.68	61.97
9STGEN	Sm Tools - General	1.00	43.66	MH	0.90	100.00	0.90	39.29
LFORMN	Laborer-Foreman	1.00	10.91	MH	14.00	110.00	23.34	254.60
LGEN	Laborer-General	2.00	21.83	MH	12.00	110.00	20.62	450.23
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	10.91	MH	13.24	110.00	22.31	243.36

Activity: 52 Load Rollofs (TS-07) Quantity: 43.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.59	1.92	5.52	8.74	0.00	0.38	0.00	52.33	0.00	0.00	66.96
Total	154.53	82.71	237.24	375.85	0.00	16.36	0.00	2,250.00	0.00	0.00	2,879.45

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2579	0.0833	12.0001	171.0965	0.3583	120.0011	0.0083	8,035.7492

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10.7400	4.0037	0.2498	22.0894	3.5937

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0001 Eff: 100.00 Crew Hrs: 3.58 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	6.45	MH	1.50	109.00	1.64	10.55
5DH80	Rolloff Bin Delivery	1.00	3.00	EA	250.00	100.00	250.00	750.00
5DH81	Bin Rental	15.00	45.00	DY	25.00	100.00	25.00	1,125.00
5TRKBT	Bin Truck	1.00	3.00	HR	125.00	100.00	125.00	375.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	3.58	HR	83.58	100.00	83.58	299.23
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.58	HR	15.72	100.00	15.72	56.29
8TRKWTR02	Water Tank and Trailer 500 G	1.00	3.58	HR	5.68	100.00	5.68	20.33
9STGEN	Sm Tools - General	1.00	6.45	MH	0.90	100.00	0.90	5.81
LFORMN	Laborer-Foreman	1.00	3.58	MH	14.00	110.00	23.34	83.54
LGEN	Laborer-General	1.00	3.58	MH	12.00	110.00	20.63	73.84
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3.58	MH	13.24	110.00	22.31	79.86

Activity: 60 Removal of Soil (TS-08) Quantity: 4.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	14.09	7.63	21.72	26.25	0.00	2.54	0.00	93.75	0.00	0.00	144.25
Total	56.36	30.53	86.89	104.98	0.00	10.14	0.00	375.00	0.00	0.00	577.01

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
47.9675	0.2500	4.0000	191.8700	0.1000	40.0000	0.0250	5,770.1000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
4.0000	1.0000	1.0000	21.7225	14.0900

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 1 Eff: 100.00 Crew Hrs: 1.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	4.00	MH	1.50	109.00	1.64	6.54
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.00	HR	83.58	100.00	83.58	83.58
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.00	HR	15.72	100.00	15.72	15.72
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.00	HR	5.68	100.00	5.68	5.68
9STGEN	Sm Tools - General	1.00	4.00	MH	0.90	100.00	0.90	3.60
LFORMN	Laborer-Foreman	1.00	1.00	MH	14.00	110.00	23.34	23.34
LGEN	Laborer-General	2.00	2.00	MH	12.00	110.00	20.63	41.25
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.00	MH	13.24	110.00	22.30	22.30

Activity: 70 Backfill and Grading (BF-01) Quantity: 42.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	0.00	0.00	0.00	12.45
Total	132.54	68.93	201.47	299.27	0.00	22.19	0.00	0.00	0.00	0.00	522.93

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	24.0000	286.1371	0.1750	240.0000	0.0042	2,988.1714

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
8.7500	4.8000	0.2083	23.0251	3.1557

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 1.75 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	8.75	MH	1.50	109.00	1.64	14.31
8BDZR05	Bulldozer Cat D5K2 XL	1.00	1.75	HR	53.11	100.00	53.11	92.94
8BHLD426	BHL Cat 420E 1.25CY	1.00	1.75	HR	35.85	100.00	35.85	62.74
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	1.75	HR	60.65	100.00	60.65	106.13
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.75	HR	15.72	100.00	15.73	27.52
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.75	HR	5.68	100.00	5.68	9.94
9STGEN	Sm Tools - General	1.00	8.75	MH	0.90	100.00	0.90	7.88
LFORMN	Laborer-Foreman	1.00	1.75	MH	14.00	110.00	23.34	40.84
LGEN	Laborer-General	1.00	1.75	MH	12.00	110.00	20.62	36.09
OPDZ9	Op Eng 3- Dozer to D9	1.00	1.75	MH	16.59	110.00	26.85	46.99
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.75	MH	13.24	110.00	22.31	39.04
OPROLL	Op Eng - Rollers	1.00	1.75	MH	13.02	110.00	22.01	38.51

Activity: 80 Decontamination (DC-01) Quantity: 4015.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.87	0.00	0.00	0.00	0.00	2.68
Total	2,614.57	1,447.31	4,061.88	3,198.40	0.00	3,483.88	0.00	0.00	0.00	0.00	10,744.16

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
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1.8083	0.0080	125.0000	226.0361	3.2120	1,250.0000	0.0008	3,345.0062
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Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
192.7200	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 32.12 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	6.00	ROLL	185.00	109.00	201.65	1,209.90
31PPE003	Level C Supplies	1.00	192.71	MH	10.00	109.00	10.90	2,100.54
8CONCEQ42	Pressure Washer 3,000psi	1.00	32.12	HR	6.07	100.00	6.07	194.90
8GEN100	Generator 125 KW	1.00	32.12	HR	47.42	100.00	47.42	1,523.19
8TRKGS10	Flatbed Truck 15K 200HP	1.00	32.12	HR	24.68	100.00	24.68	792.85
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	32.12	HR	15.72	100.00	15.72	505.02
8TRKWTR02	Water Tank and Trailer 500 G	1.00	32.12	HR	5.68	100.00	5.68	182.44
9STGEN	Sm Tools - General	1.00	192.71	MH	0.90	100.00	0.90	173.44
LFORMN	Laborer-Foreman	1.00	32.12	MH	14.00	110.00	23.34	749.58
LGEN	Laborer-General	5.00	160.60	MH	12.00	110.00	20.62	3,312.30

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	952.00	373.09	1,325.09	0.00	0.00	239.60	2,943.93	0.00	0.00	0.00	4,508.62
Total	952.00	373.09	1,325.09	0.00	0.00	239.60	2,943.93	0.00	0.00	0.00	4,508.62

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	47.3246	952.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	20.00	MH	10.00	109.00	10.90	218.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	7.00	EA	158.36	100.00	158.36	1,108.52
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	17.00	EA	13.73	100.00	13.73	233.41
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	4.00	EA	188.83	100.00	188.83	755.32
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
9STGEN	Sm Tools - General	1.00	24.00	MH	0.90	100.00	0.90	21.60
X122	→ Field Technician	1.00	20.00	MH	28.00	110.00	42.46	849.18
X124	→ Chemist	1.00	8.00	MH	42.00	100.00	59.49	475.91

Activity: 100 Transportation (TR-01) Quantity: 4210.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.13
Total	26.40	14.85	41.25	0.00	0.00	1.80	0.00	522.52	0.00	0.00	565.57

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.0000	2,105.0000	0.0005	20.6250	0.0063

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ01	Transportation - Liquid	1.00	4,210.00	GAL	0.10	100.00	0.10	421.00
5TRKST01	Transportation - Bulk Solid	1.00	18.00	MI	5.64	100.00	5.64	101.52

9STGEN	Sm Tools - General	1.00	2.00	MH	0.90	100.00	0.90	1.80
LGEN	→ Laborer-General	1.00	2.00	MH	12.00	110.00	20.63	41.25

**Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	171.00	CY	96.38	100.00	96.38	16,480.98

**Activity: 120 Tank Systems Certification of Closure (TS\_09-1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**Unit 600 Containers**

**40**

Takeoff Qty: 1.000 LS  
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	43.16	23.11	66.27	99.30	0.00	7.61	33,400.00	12,250.00	0.00	0.00	45,823.18
Total	43.16	23.11	66.27	99.30	0.00	7.61	33,400.00	12,250.00	0.00	0.00	45,823.18

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	3.0000	0.3333	3.0000	15,274.3933	14.3867	22.0900	1.0000

**Activity: 10 Demolition and Removal of Pads (CS-04) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	43.16	23.11	66.27	99.30	0.00	7.61	0.00	625.00	0.00	0.00	798.18
Total	43.16	23.11	66.27	99.30	0.00	7.61	0.00	625.00	0.00	0.00	798.18

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	165.5700	1.0000	1.0000	165.5700	0.1000	10.0000	0.1000	7,981.8000

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	3.0000	0.3333	3.0000	22.0900	43.1600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 1 Eff: 100.00 Crew Hrs: 1.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	3.00	MH	1.50	109.00	1.64	4.91
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00
5TRKBT	Bin Truck	1.00	2.00	HR	125.00	100.00	125.00	250.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.00	HR	83.58	100.00	83.58	83.58
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.00	HR	15.72	100.00	15.72	15.72
9STGEN	Sm Tools - General	1.00	3.00	MH	0.90	100.00	0.90	2.70
LFORMN	Laborer-Foreman	1.00	1.00	MH	14.00	110.00	23.34	23.34
LGEN	Laborer-General	1.00	1.00	MH	12.00	110.00	20.63	20.63

OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.00	MH	13.24	110.00	22.30	22.30
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<b>Activity: 20</b>	<b>Transportation (TR-01)</b>						<b>Quantity: 20000.00</b>	<b>Unit: GAL</b>		
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	1,500.00	MI	7.75	100.00	7.75	11,625.00

<b>Activity: 30</b>	<b>Treatment and Disposal (TD-01)</b>						<b>Quantity: 20000.00</b>	<b>Unit: GAL</b>		
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD02	Treat & Dispose - Liquid Waste	1.00	20,000.00	GAL	1.67	100.00	1.67	33,400.00

**Biditem**  
**50**

**Unit 600 Tanks**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	33,377.64	17,782.69	51,160.33	51,283.23	0.00	26,742.48	104,538.70	35,018.08	0.00	0.00	268,742.82
Total	33,377.64	17,782.69	51,160.33	51,283.23	0.00	26,742.48	104,538.70	35,018.08	0.00	0.00	268,742.82

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	2,265.7400	0.0004	2,265.7400	118.6115	14.7315	22.5800	0.0023

<b>Activity: 10</b>	<b>Removal of Waste (TS-03)</b>						<b>Quantity: 30971.00</b>	<b>Unit: GAL</b>		
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.01	0.00	0.05	0.00	0.00	0.09
Total	376.20	205.08	581.28	413.42	0.00	318.60	0.00	1,620.00	0.00	0.00	2,933.30

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0321	0.0003	3,441.2222	110.5222	0.9000	34,412.2222	0.0000	3,259.2222

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	27.0000	1,147.0741	0.0009	21.5289	0.0121

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 9 Eff: 100.00 Crew Hrs: 9.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	27.00	MH	10.00	109.00	10.90	294.30
5VTRK	Vac Truck	1.00	12.00	HR	135.00	100.00	135.00	1,620.00
8GEN050	Generator 45 KW	1.00	9.00	HR	18.78	100.00	18.78	169.05
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	9.00	HR	11.43	100.00	11.43	102.86
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	9.00	HR	15.72	100.00	15.72	141.51
9STGEN	Sm Tools - General	1.00	27.00	MH	0.90	100.00	0.90	24.30
LFORMN	Laborer-Foreman	1.00	9.00	MH	14.00	110.00	23.34	210.04
LGEN	Laborer-General	2.00	18.00	MH	12.00	110.00	20.62	371.24

<b>Activity: 20</b>	<b>Tank System Purging (TS-03)</b>						<b>Quantity: 30456.00</b>	<b>Unit: GAL</b>		
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.09
Total	385.00	211.47	596.47	414.33	0.00	1,699.81	0.00	0.00	0.00	0.00	2,710.61

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0332	0.0002	4,350.8571	144.4000	0.7000	43,508.5714	0.0000	3,872.3000

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	1,087.7143	0.0009	21.3025	0.0126

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 7 Eff: 100.00 Crew Hrs: 7.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	456.85	LB	2.75	109.00	3.00	1,369.41
31PPE003	Level C Supplies	1.00	28.00	MH	10.00	109.00	10.90	305.20
8GEN050	Generator 45 KW	1.00	7.00	HR	18.78	100.00	18.78	131.48
8TRKGS10	Flatbed Truck 15K 200HP	1.00	7.00	HR	24.68	100.00	24.68	172.79
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	7.00	HR	15.72	100.00	15.72	110.06
9STGEN	Sm Tools - General	1.00	28.00	MH	0.90	100.00	0.90	25.20
LFORMN	Laborer-Foreman	1.00	7.00	MH	14.00	110.00	23.34	163.36
LGEN	Laborer-General	3.00	21.00	MH	12.00	110.00	20.62	433.11

Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 514.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.08	0.04	0.13	0.12	0.00	0.07	0.00	0.00	0.00	0.00	0.31
Total	41.80	22.79	64.59	61.74	0.00	35.40	0.00	0.00	0.00	0.00	161.73

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2458	0.0019	514.0000	126.3300	0.1000	5,140.0000	0.0002	1,617.3000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3.0000	171.3333	0.0058	21.5300	0.0813

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 1 Eff: 100.00 Crew Hrs: 1.00 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	3.00	MH	10.00	109.00	10.90	32.70
8COMPR04	Compressor 185 CFM 80HP	1.00	1.00	HR	15.81	100.00	15.81	15.81
8GEN050	Generator 45 KW	1.00	1.00	HR	18.78	100.00	18.78	18.78
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	1.00	HR	11.43	100.00	11.43	11.43
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.00	HR	15.72	100.00	15.72	15.72
9STGEN	Sm Tools - General	1.00	3.00	MH	0.90	100.00	0.90	2.70
LFORMN	Laborer-Foreman	1.00	1.00	MH	14.00	110.00	23.34	23.34
LGEN	Laborer-General	2.00	2.00	MH	12.00	110.00	20.63	41.25

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 350.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.98	2.17	6.14	8.12	0.00	0.36	0.00	0.00	0.00	0.00	14.63
Total	1,391.28	759.05	2,150.33	2,841.98	0.00	126.75	0.00	0.00	0.00	0.00	5,119.06

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2637	0.0571	17.5000	249.6155	2.0000	175.0000	0.0057	2,559.5300

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
100.0000	3.5000	0.2857	21.5033	3.9751

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 2 Eff: 100.00 Crew Hrs: 20.00 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	50.00	MH	1.50	109.00	1.64	81.75
8COMPR04	Compressor 185 CFM 80HP	1.00	20.00	HR	15.81	100.00	15.81	316.20
8GEN050	Generator 45 KW	1.00	20.00	HR	18.78	100.00	18.78	375.66
8TRKGS05	Boom Truck 28,000# Cap	1.00	20.00	HR	67.10	100.00	67.10	1,341.98
8TRKGS10	Flatbed Truck 15K 200HP	1.00	20.00	HR	24.68	100.00	24.68	493.68
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	20.00	HR	15.72	100.00	15.72	314.46
9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
LFORMN	Laborer-Foreman	1.00	20.00	MH	14.00	110.00	23.34	466.74



LGEN	Laborer-General	3.00	60.00	MH	12.00	110.00	20.62	1,237.47
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	20.00	MH	13.24	110.00	22.31	446.12

Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 21088.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.70	1.09	0.00	0.08	0.00	0.36	0.00	0.00	2.22
Total	9,508.74	5,150.18	14,658.92	23,006.97	0.00	1,710.64	0.00	7,500.00	0.00	0.00	46,876.53

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7861	0.0080	125.0000	223.2661	16.8704	1,250.0000	0.0008	2,778.6259

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
674.8100	31.2503	0.0320	21.7230	0.4509

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 168.70 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	674.81	MH	1.50	109.00	1.63	1,103.31
5DH80	Rolloff Bin Delivery	1.00	20.00	EA	250.00	100.00	250.00	5,000.00
5DH81	Bin Rental	20.00	100.00	DY	25.00	100.00	25.00	2,500.00
8DEMO10	Breaker Attach Excavator H140S	1.00	168.70	HR	31.39	100.00	31.39	5,295.66
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	168.70	HR	83.58	100.00	83.58	14,100.62
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	168.70	HR	15.72	100.00	15.72	2,652.47
8TRKWTR02	Water Tank and Trailer 500 G	1.00	168.70	HR	5.68	100.00	5.68	958.22
9STGEN	Sm Tools - General	1.00	674.81	MH	0.90	100.00	0.90	607.33
LFORMN	Laborer-Foreman	1.00	168.70	MH	14.00	110.00	23.34	3,936.94
LGEN	Laborer-General	2.00	337.41	MH	12.00	110.00	20.62	6,958.91
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	168.70	MH	13.24	110.00	22.31	3,763.07

Activity: 60 Removal of Soil (TS-08) Quantity: 72.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.70	2.54	7.24	8.75	0.00	0.85	0.00	20.83	0.00	0.00	37.67
Total	338.18	183.17	521.35	629.92	0.00	60.84	0.00	1,500.00	0.00	0.00	2,712.11

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.9899	0.0833	12.0000	191.8783	0.6000	120.0000	0.0083	4,520.1833

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
24.0000	3.0000	0.3333	21.7229	4.6969

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 6.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	24.00	MH	1.50	109.00	1.64	39.24
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00
5DH81	Bin Rental	4.00	20.00	DY	25.00	100.00	25.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	6.00	HR	83.58	100.00	83.58	501.50
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.00	HR	15.72	100.00	15.72	94.34
8TRKWTR02	Water Tank and Trailer 500 G	1.00	6.00	HR	5.68	100.00	5.68	34.08
9STGEN	Sm Tools - General	1.00	24.00	MH	0.90	100.00	0.90	21.60
LFORMN	Laborer-Foreman	1.00	6.00	MH	14.00	110.00	23.34	140.02
LGEN	Laborer-General	2.00	12.00	MH	12.00	110.00	20.62	247.49
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	6.00	MH	13.24	110.00	22.31	133.84

Activity: 70 Backfill and Grading (BF-01) Quantity: 543.00 Unit: CY

Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.29
Total	1,713.88	891.40	2,605.28	3,870.02	0.00	286.76	0.00	2,081.96	0.00	0.00	8,844.02

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9250	0.0417	24.0000	286.2011	2.2625	240.0000	0.0042	3,908.9591

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
113.1500	4.7989	0.2084	23.0250	3.1563

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 22.63 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	113.12	MH	1.50	109.00	1.63	184.95
5TRKED	Trucking - End Dump	1.00	22.63	HR	92.00	100.00	92.00	2,081.96
8BDZR05	Bulldozer Cat D5K2 XL	1.00	22.63	HR	53.11	100.00	53.11	1,201.90
8BHL426	BHL Cat 420E 1.25CY	1.00	22.63	HR	35.85	100.00	35.85	811.35
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	22.63	HR	60.65	100.00	60.65	1,372.42
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	22.63	HR	15.72	100.00	15.72	355.81
8TRKWTR02	Water Tank and Trailer 500 G	1.00	22.63	HR	5.68	100.00	5.68	128.54
9STGEN	Sm Tools - General	1.00	113.12	MH	0.90	100.00	0.90	101.81
LFORMN	Laborer-Foreman	1.00	22.63	MH	14.00	110.00	23.34	528.11
LGEN	Laborer-General	1.00	22.63	MH	12.00	110.00	20.62	466.74
OPDZ9	Op Eng 3- Dozer to D9	1.00	22.63	MH	16.59	110.00	26.85	607.60
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	22.63	MH	13.24	110.00	22.31	504.79
OPROLL	Op Eng - Rollers	1.00	22.63	MH	13.02	110.00	22.01	498.04

Activity: 80 Decontamination (DC-01) Quantity: 25162.00 Unit: SF

U. Cost	0.65	0.36	1.01	0.80	0.00	0.87	0.00	0.00	0.00	0.00	2.68
Total	16,385.56	9,070.34	25,455.90	20,044.85	0.00	21,913.68	0.00	0.00	0.00	0.00	67,414.43

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0390	20.1296	1,250.0000	0.0008	3,349.0199

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,207.7800	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 201.30 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	38.00	ROLL	185.00	109.00	201.65	7,662.70
31PPE003	Level C Supplies	1.00	1,207.71	MH	10.00	109.00	10.90	13,164.04
8CONCEQ42	Pressure Washer 3,000psi	1.00	201.30	HR	6.07	100.00	6.07	1,221.49
8GEN100	Generator 125 KW	1.00	201.30	HR	47.42	100.00	47.42	9,546.05
8TRKGS10	Flatbed Truck 15K 200HP	1.00	201.30	HR	24.68	100.00	24.68	4,968.89
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	201.30	HR	15.72	100.00	15.72	3,165.04
8TRKWTR02	Water Tank and Trailer 500 G	1.00	201.30	HR	5.68	100.00	5.68	1,143.38
9STGEN	Sm Tools - General	1.00	1,207.71	MH	0.90	100.00	0.90	1,086.94
LFORMN	Laborer-Foreman	1.00	201.30	MH	14.00	110.00	23.34	4,697.73
LGEN	Laborer-General	5.00	1,006.48	MH	12.00	110.00	20.62	20,758.17

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

U. Cost	1,960.00	757.85	2,717.85	0.00	0.00	590.00	10,153.08	0.00	0.00	0.00	13,460.93
Total	1,960.00	757.85	2,717.85	0.00	0.00	590.00	10,153.08	0.00	0.00	0.00	13,460.93

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
60.0000	0.0167	60.0000	45.2975	1,960.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	50.00	MH	10.00	109.00	10.90	545.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	33.00	EA	158.36	100.00	158.36	5,225.88
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	2.00	EA	359.21	100.00	359.21	718.42
4LAB03	Chlorinated herbicides (EPA 515)	1.00	2.00	EA	219.07	100.00	219.07	438.14
4LAB04	Cyanide (SW 9010)	1.00	2.00	EA	54.93	100.00	54.93	109.86
4LAB05	Metals (SW 6010)	1.00	98.00	EA	13.73	100.00	13.73	1,345.54
4LAB06	Total dissolved sulfide (SW 9030)	1.00	2.00	EA	17.77	100.00	17.77	35.54
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	10.00	EA	188.83	100.00	188.83	1,888.30
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	2.00	EA	195.70	100.00	195.70	391.40
9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
X122	→ Field Technician	1.00	50.00	MH	28.00	110.00	42.46	2,122.96
X124	→ Chemist	1.00	10.00	MH	42.00	100.00	59.49	594.89

Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,316.12	0.00	0.00	22,316.12
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,316.12	0.00	0.00	22,316.12

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ01	Transportation - Liquid	1.00	26,704.00	GAL	0.10	100.00	0.10	2,670.40
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	2,500.00	MI	7.75	100.00	7.75	19,375.00
5TRKST01	Transportation - Bulk Solid	1.00	48.00	MI	5.64	100.00	5.64	270.72

Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	94,385.62	0.00	0.00	0.00	94,385.62
Total	0.00	0.00	0.00	0.00	0.00	0.00	94,385.62	0.00	0.00	0.00	94,385.62

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	472.00	CY	96.38	100.00	96.38	45,491.36
4TD02	Treat & Dispose - Liquid Waste	1.00	29,278.00	GAL	1.67	100.00	1.67	48,894.26

Activity: 120 Tank Systems Certification of Closure (TS\_09-1) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**Unit 602**

# 60

Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	20,834.64	10,880.05	31,714.69	30,248.50	0.00	13,588.44	219,150.56	39,969.96	0.00	0.00	334,672.15
Total	20,834.64	10,880.05	31,714.69	30,248.50	0.00	13,588.44	219,150.56	39,969.96	0.00	0.00	334,672.15

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	1,350.5400	0.0007	1,350.5400	247.8062	15.4269	23.4830	0.0036

**Activity: 10 Removal of Waste (CS-03) Quantity: 12870.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	283.12	155.50	438.62	80.97	0.00	242.96	0.00	0.00	0.00	0.00	762.55

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0404	0.0004	2,500.0000	100.9305	0.5148	25,000.0000	0.0000	1,481.2549

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	20.5900	625.0607	0.0016	21.3026	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 5.15 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	20.59	MH	10.00	109.00	10.90	224.43
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.15	HR	15.72	100.00	15.72	80.97
9STGEN	Sm Tools - General	1.00	20.59	MH	0.90	100.00	0.90	18.53
LFORMN	Laborer-Foreman	1.00	5.15	MH	14.00	110.00	23.34	120.18
LGEN	Laborer-General	3.00	15.44	MH	12.00	110.00	20.62	318.44

**Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 632.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	753.04	404.48	1,157.52	649.93	0.00	621.38	0.00	0.00	0.00	0.00	2,428.83

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	2.8599	0.0417	24.0000	68.6374	2.6333	240.0003	0.0042	922.3417

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	52.6600	12.0015	0.0833	21.9810	1.1915

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 26.33 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	52.66	MH	10.00	109.00	10.90	573.99
8TRKGS10	Flatbed Truck 15K 200HP	1.00	26.33	HR	24.68	100.00	24.68	649.93
9STGEN	Sm Tools - General	1.00	52.66	MH	0.90	100.00	0.90	47.39
LFORMN	Laborer-Foreman	1.00	26.33	MH	14.00	110.00	23.34	614.47
LGEN	Laborer-General	1.00	26.33	MH	12.00	110.00	20.62	543.05

**Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 13250.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	4,978.76	2,696.63	7,675.39	12,046.26	0.00	895.72	0.00	0.00	0.00	0.00	20,617.37

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	1.4884	0.0067	149.9999	223.2638	8.8333	1,499.9989	0.0007	2,334.0401

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
353.3300	37.5004	0.0267	21.7230	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1499.9989 Eff: 100.00 Crew Hrs: 88.33 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	353.34	MH	1.50	109.00	1.63	577.71
8DEMO10	Breaker Attach Excavator H140S	1.00	88.33	HR	31.39	100.00	31.39	2,772.77
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	88.33	HR	83.58	100.00	83.58	7,382.97
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	88.33	HR	15.72	100.00	15.72	1,388.81
8TRKWTR02	Water Tank and Trailer 500 G	1.00	88.33	HR	5.68	100.00	5.68	501.71
9STGEN	Sm Tools - General	1.00	353.34	MH	0.90	100.00	0.90	318.01
LFORMN	Laborer-Foreman	1.00	88.33	MH	14.00	110.00	23.34	2,061.35
LGEN	Laborer-General	2.00	176.67	MH	12.00	110.00	20.62	3,643.72
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	88.33	MH	13.24	110.00	22.31	1,970.32

Activity: 22 Load Rollofs (CS-04) Quantity: 344.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	41.89	0.00	0.00	56.80
Total	1,237.51	662.37	1,899.88	3,009.98	0.00	218.04	0.00	14,410.00	0.00	0.00	19,537.90

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2728	0.0833	12.0000	171.2740	2.8667	119.9999	0.0083	6,815.5386

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
86.0100	3.9995	0.2500	22.0891	3.5974

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 28.67 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	86.01	MH	1.50	109.00	1.64	140.63
5DH80	Rolloff Bin Delivery	1.00	18.00	EA	250.00	100.00	250.00	4,500.00
5DH81	Bin Rental	18.00	324.00	DY	25.00	100.00	25.00	8,100.00
5TRKBT	Bin Truck	1.00	14.48	HR	125.00	100.00	125.00	1,810.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	28.67	HR	83.58	100.00	83.58	2,396.35
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	28.67	HR	15.72	100.00	15.72	450.78
8TRKWTR02	Water Tank and Trailer 500 G	1.00	28.67	HR	5.68	100.00	5.68	162.85
9STGEN	Sm Tools - General	1.00	86.01	MH	0.90	100.00	0.90	77.41
LFORMN	Laborer-Foreman	1.00	28.67	MH	14.00	110.00	23.34	669.07
LGEN	Laborer-General	1.00	28.67	MH	12.00	110.00	20.62	591.30
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	28.67	MH	13.24	110.00	22.31	639.51

Activity: 30 Removal of Soil(CS-06) Quantity: 48.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	23.44	0.00	0.00	38.34
Total	172.66	92.41	265.07	419.95	0.00	30.42	0.00	1,125.00	0.00	0.00	1,840.44

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2713	0.0833	12.0000	171.2550	0.4000	120.0000	0.0083	4,601.1000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.0000	4.0000	0.2500	22.0892	3.5971

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
5DH80	Rolloff Bin Delivery	1.00	3.00	EA	250.00	100.00	250.00	750.00
5DH81	Bin Rental	3.00	15.00	DY	25.00	100.00	25.00	375.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	4.00	HR	83.58	100.00	83.59	334.34
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.00	HR	15.72	100.00	15.72	62.89
8TRKWTR02	Water Tank and Trailer 500 G	1.00	4.00	HR	5.68	100.00	5.68	22.72
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	1.00	4.00	MH	12.00	110.00	20.63	82.50
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	4.00	MH	13.24	110.00	22.31	89.22

Activity: 40 Backfill and Grading (BF-01) Quantity: 489.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.29
Total	1,543.47	802.77	2,346.24	3,485.24	0.00	258.24	0.00	1,874.96	0.00	0.00	7,964.68

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9253	0.0417	24.0000	286.2076	2.0375	240.0000	0.0042	3,909.0454

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
101.9000	4.7988	0.2084	23.0249	3.1564

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 20.38 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	101.87	MH	1.50	109.00	1.64	166.56
5TRKED	Trucking - End Dump	1.00	20.38	HR	92.00	100.00	92.00	1,874.96
8BDZR05	Bulldozer Cat D5K2 XL	1.00	20.38	HR	53.11	100.00	53.11	1,082.40
8BHLD426	BHL Cat 420E 1.25CY	1.00	20.38	HR	35.85	100.00	35.85	730.68
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	20.38	HR	60.65	100.00	60.65	1,235.97
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	20.38	HR	15.72	100.00	15.72	320.43
8TRKWTR02	Water Tank and Trailer 500 G	1.00	20.38	HR	5.68	100.00	5.68	115.76
9STGEN	Sm Tools - General	1.00	101.87	MH	0.90	100.00	0.90	91.68
LFORMN	Laborer-Foreman	1.00	20.38	MH	14.00	110.00	23.34	475.60
LGEN	Laborer-General	1.00	20.38	MH	12.00	110.00	20.62	420.33
OPDZ9	Op Eng 3- Dozer to D9	1.00	20.38	MH	16.59	110.00	26.85	547.19
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	20.38	MH	13.24	110.00	22.31	454.60
OPROLL	Op Eng - Rollers	1.00	20.38	MH	13.02	110.00	22.01	448.52

Activity: 50 Decontamination (DC-01) Quantity: 13251.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.81	0.00	0.00	0.00	0.00	2.62
Total	8,629.08	4,776.68	13,405.76	10,556.17	0.00	10,731.68	0.00	0.00	0.00	0.00	34,693.61

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0389	10.6008	1,250.0000	0.0008	3,272.7351

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
636.0500	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 106.01 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	16.00	ROLL	185.00	109.00	201.65	3,226.40
31PPE003	Level C Supplies	1.00	636.04	MH	10.00	109.00	10.90	6,932.84

8CONCEQ42	Pressure Washer 3,000psi	1.00	106.01	HR	6.07	100.00	6.07	643.27
8GEN100	Generator 125 KW	1.00	106.01	HR	47.42	100.00	47.42	5,027.21
8TRKGS10	Flatbed Truck 15K 200HP	1.00	106.01	HR	24.68	100.00	24.68	2,616.75
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	106.01	HR	15.72	100.00	15.72	1,666.80
8TRKWTR02	Water Tank and Trailer 500 G	1.00	106.01	HR	5.68	100.00	5.68	602.14
9STGEN	Sm Tools - General	1.00	636.04	MH	0.90	100.00	0.90	572.44
LFORMN	Laborer-Foreman	1.00	106.01	MH	14.00	110.00	23.34	2,473.94
LGEN	Laborer-General	5.00	530.04	MH	12.00	110.00	20.62	10,931.82

Activity: 60      Sampling and Analysis (SA-02)      Quantity: 1.00      Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,960.00	757.85	2,717.85	0.00	0.00	590.00	7,300.56	0.00	0.00	0.00	10,608.41
Total	1,960.00	757.85	2,717.85	0.00	0.00	590.00	7,300.56	0.00	0.00	0.00	10,608.41

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	60.0000	0.0167	60.0000	45.2975	1,960.0000

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	50.00	MH	10.00	109.00	10.90	545.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	23.00	EA	158.36	100.00	158.36	3,642.28
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	81.00	EA	13.73	100.00	13.73	1,112.13
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	9.00	EA	188.83	100.00	188.83	1,699.47
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
X122	→ Field Technician	1.00	50.00	MH	28.00	110.00	42.46	2,122.96
X124	→ Chemist	1.00	10.00	MH	42.00	100.00	59.49	594.89

Activity: 70      Transportation (TR-01)      Quantity: 1.00      Unit: LS

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	4,000.00	MI	5.64	100.00	5.64	22,560.00

Activity: 80      Treatment and Disposal (TD-01)      Quantity: 1.00      Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	211,850.00	0.00	0.00	0.00	211,850.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	211,850.00	0.00	0.00	0.00	211,850.00

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD03	Treat & Dispose - Drummed Waste	1.00	632.00	EA	255.00	100.00	255.00	161,160.00
4TD04	Treat & Dispose - Solid Waste (TSCA)	1.00	274.00	CY	185.00	100.00	185.00	50,690.00

Activity: 90      Certification of Closure (CS-07)      Quantity: 1.00      Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**  
**70**

**Unit 603**  
Takeoff Qty: 1.000 LS  
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	28,892.68	15,207.95	44,100.63	43,213.75	0.00	19,460.91	167,012.16	63,328.09	0.00	0.00	337,115.54
Total	28,892.68	15,207.95	44,100.63	43,213.75	0.00	19,460.91	167,012.16	63,328.09	0.00	0.00	337,115.54

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
1,912.1400	0.0005	1,912.1400	176.3027	15.1101	23.0635	0.0024

Activity: 10 Removal of Waste (CS-03) Quantity: 12000.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	264.00	145.01	409.01	75.47	0.00	226.56	0.00	0.00	0.00	0.00	711.04

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9333	0.4800	25,000.0000	0.0000	1,481.3333

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
19.2000	625.0000	0.0016	21.3026	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 4.80 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	19.20	MH	10.00	109.00	10.90	209.28
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.80	HR	15.72	100.00	15.72	75.47
9STGEN	Sm Tools - General	1.00	19.20	MH	0.90	100.00	0.90	17.28
LFORMN	Laborer-Foreman	1.00	4.80	MH	14.00	110.00	23.34	112.02
LGEN	Laborer-General	3.00	14.40	MH	12.00	110.00	20.62	296.99

Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 1240.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	1,477.76	793.72	2,271.48	1,275.42	0.00	1,219.18	0.00	0.00	0.00	0.00	4,766.08

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.8604	0.0417	24.0000	68.6498	5.1667	240.0003	0.0042	922.4683

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
103.3400	11.9992	0.0833	21.9806	1.1917

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 51.67 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	103.32	MH	10.00	109.00	10.90	1,126.19
8TRKGS10	Flatbed Truck 15K 200HP	1.00	51.67	HR	24.68	100.00	24.68	1,275.42



9STGEN	Sm Tools - General	1.00	103.32	MH	0.90	100.00	0.90	92.99
LFORMN	Laborer-Foreman	1.00	51.67	MH	14.00	110.00	23.34	1,205.82
LGEN	Laborer-General	1.00	51.67	MH	12.00	110.00	20.62	1,065.66

Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 18852.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	7,083.82	3,836.79	10,920.61	17,139.99	0.00	1,274.42	0.00	0.00	0.00	0.00	29,335.02

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	149.9999	223.2700	12.5680	1,499.9988	0.0007	2,334.1022

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
502.7200	37.5000	0.0267	21.7230	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1499.998 Eff: 100.00 Crew Hrs: 125.68 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	502.73	MH	1.50	109.00	1.63	821.96
8DEMO10	Breaker Attach Excavator H140S	1.00	125.68	HR	31.39	100.00	31.39	3,945.22
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	125.68	HR	83.58	100.00	83.58	10,504.84
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	125.68	HR	15.72	100.00	15.72	1,976.07
8TRKWTR02	Water Tank and Trailer 500 G	1.00	125.68	HR	5.68	100.00	5.68	713.86
9STGEN	Sm Tools - General	1.00	502.73	MH	0.90	100.00	0.90	452.46
LFORMN	Laborer-Foreman	1.00	125.68	MH	14.00	110.00	23.34	2,932.99
LGEN	Laborer-General	2.00	251.36	MH	12.00	110.00	20.62	5,184.18
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	125.68	MH	13.24	110.00	22.31	2,803.44

Activity: 22 Load Rollofs (CS-04) Quantity: 484.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	50.46	0.00	0.00	65.36
Total	1,740.81	931.77	2,672.58	4,234.12	0.00	306.71	0.00	24,421.25	0.00	0.00	31,634.66

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2700	0.0833	12.0000	171.2406	4.0333	120.0001	0.0083	7,843.3106

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
120.9900	4.0003	0.2500	22.0893	3.5967

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 40.33 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	120.99	MH	1.50	109.00	1.64	197.82
5DH80	Rolloff Bin Delivery	1.00	25.00	EA	250.00	100.00	250.00	6,250.00
5DH81	Bin Rental	25.00	625.00	DY	25.00	100.00	25.00	15,625.00
5TRKBT	Bin Truck	1.00	20.37	HR	125.00	100.00	125.00	2,546.25
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	40.33	HR	83.58	100.00	83.58	3,370.94
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	40.33	HR	15.72	100.00	15.72	634.11
8TRKWTR02	Water Tank and Trailer 500 G	1.00	40.33	HR	5.68	100.00	5.68	229.07
9STGEN	Sm Tools - General	1.00	120.99	MH	0.90	100.00	0.90	108.89
LFORMN	Laborer-Foreman	1.00	40.33	MH	14.00	110.00	23.34	941.18
LGEN	Laborer-General	1.00	40.33	MH	12.00	110.00	20.62	831.79
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	40.33	MH	13.24	110.00	22.31	899.61

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63
Total	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
632.2100	4.0000	0.2500	158.0525	0.4000	2.5000	0.4000	1,656.5750

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.0000	0.0833	12.0000	22.0892	172.6600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 4 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: remove 1 front end loader and 1 backhoe

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	4.00	HR	67.10	100.00	67.10	268.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	4.00	HR	24.68	100.00	24.69	98.74
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	1.00	4.00	MH	12.00	110.00	20.63	82.50
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	4.00	MH	13.24	110.00	22.31	89.22

Activity: 40 Removal of Soil(CS-06) Quantity: 45.00 Unit: CY

Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.68	0.00	25.00	0.00	39.95
Total	161.87	86.63	248.50	393.70	0.00	30.42	0.00	1,125.00	0.00	1,797.62

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2711	0.0833	12.0000	171.2533	0.3750	120.0000	0.0083	4,793.6533

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
11.2500	4.0000	0.2500	22.0889	3.5971

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 3.75 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
5DH80	Rolloff Bin Delivery	1.00	3.00	EA	250.00	100.00	250.00	750.00
5DH81	Bin Rental	3.00	15.00	DY	25.00	100.00	25.00	375.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	3.75	HR	83.58	100.00	83.58	313.44
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.75	HR	15.72	100.00	15.72	58.96
8TRKWTR02	Water Tank and Trailer 500 G	1.00	3.75	HR	5.68	100.00	5.68	21.30
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	3.75	MH	14.00	110.00	23.34	87.51
LGEN	Laborer-General	1.00	3.75	MH	12.00	110.00	20.62	77.34
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3.75	MH	13.24	110.00	22.31	83.65

Activity: 50 Backfill and Grading (BF-01) Quantity: 661.00 Unit: CY

Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	16.28
Total	2,085.75	1,084.81	3,170.56	4,709.70	0.00	349.07	0.00	2,534.60	0.00	10,763.93

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9217	0.0417	24.0000	286.1210	2.7542	239.9997	0.0042	3,908.2301

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
137.7000	4.8003	0.2083	23.0251	3.1554

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 27.54 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	137.70	MH	1.50	109.00	1.64	225.14
5TRKED	Trucking - End Dump	1.00	27.55	HR	92.00	100.00	92.00	2,534.60
8BDZR05	Bulldozer Cat D5K2 XL	1.00	27.54	HR	53.11	100.00	53.11	1,462.68
8BHL426	BHL Cat 420E 1.25CY	1.00	27.54	HR	35.85	100.00	35.85	987.39
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	27.54	HR	60.65	100.00	60.65	1,670.19
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	27.54	HR	15.72	100.00	15.72	433.01
8TRKWTR02	Water Tank and Trailer 500 G	1.00	27.54	HR	5.68	100.00	5.68	156.43
9STGEN	Sm Tools - General	1.00	137.70	MH	0.90	100.00	0.90	123.93
LFORMN	Laborer-Foreman	1.00	27.54	MH	14.00	110.00	23.34	642.71
LGEN	Laborer-General	1.00	27.54	MH	12.00	110.00	20.62	568.00
OPDZ9	Op Eng 3- Dozer to D9	1.00	27.54	MH	16.59	110.00	26.85	739.44
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	27.54	MH	13.24	110.00	22.31	614.31
OPROLL	Op Eng - Rollers	1.00	27.54	MH	13.02	110.00	22.01	606.10

Activity: 60 Decontamination (DC-01) Quantity: 18853.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.81	0.00	0.00	0.00	0.00	2.62
Total	12,277.01	6,796.03	19,073.04	15,018.21	0.00	15,316.13	0.00	0.00	0.00	0.00	49,407.38

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0333	15.0824	1,250.0000	0.0008	3,275.8301

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
904.9400	20.8334	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 150.82 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	23.00	ROLL	185.00	109.00	201.65	4,637.95
31PPE003	Level C Supplies	1.00	904.93	MH	10.00	109.00	10.90	9,863.74
8CONCEQ42	Pressure Washer 3,000psi	1.00	150.82	HR	6.07	100.00	6.07	915.18
8GEN100	Generator 125 KW	1.00	150.82	HR	47.42	100.00	47.42	7,152.19
8TRKGS10	Flatbed Truck 15K 200HP	1.00	150.82	HR	24.68	100.00	24.68	3,722.84
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	150.82	HR	15.72	100.00	15.72	2,371.34
8TRKWTR02	Water Tank and Trailer 500 G	1.00	150.82	HR	5.68	100.00	5.68	856.66
9STGEN	Sm Tools - General	1.00	904.93	MH	0.90	100.00	0.90	814.44
LFORMN	Laborer-Foreman	1.00	150.82	MH	14.00	110.00	23.34	3,519.69
LGEN	Laborer-General	5.00	754.12	MH	12.00	110.00	20.62	15,553.35

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,352.00	909.42	3,261.42	0.00	0.00	708.00	9,519.64	0.00	0.00	0.00	13,489.06
Total	2,352.00	909.42	3,261.42	0.00	0.00	708.00	9,519.64	0.00	0.00	0.00	13,489.06

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
72.0000	0.0139	72.0000	45.2975	2,352.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	60.00	MH	10.00	109.00	10.90	654.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	29.00	EA	158.36	100.00	158.36	4,592.44
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	2.00	EA	359.21	100.00	359.21	718.42

4LAB03	Chlorinated herbicides (EPA 515)	1.00	2.00	EA	219.07	100.00	219.07	438.14
4LAB04	Cyanide (SW 9010)	1.00	2.00	EA	54.93	100.00	54.93	109.86
4LAB05	Metals (SW 6010)	1.00	98.00	EA	13.73	100.00	13.73	1,345.54
4LAB06	Total dissolved sulfide (SW 9030)	1.00	2.00	EA	17.77	100.00	17.77	35.54
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	10.00	EA	188.83	100.00	188.83	1,888.30
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	2.00	EA	195.70	100.00	195.70	391.40
9STGEN	Sm Tools - General	1.00	60.00	MH	0.90	100.00	0.90	54.00
X122	→ Field Technician	1.00	60.00	MH	28.00	110.00	42.46	2,547.55
X124	→ Chemist	1.00	12.00	MH	42.00	100.00	59.49	713.87

Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35,247.24	0.00	0.00	35,247.24
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35,247.24	0.00	0.00	35,247.24

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	4,500.00	MI	7.75	100.00	7.75	34,875.00
5TRKST01	Transportation - Bulk Solid	1.00	66.00	MI	5.64	100.00	5.64	372.24

Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	157,492.52	0.00	0.00	0.00	157,492.52
Total	0.00	0.00	0.00	0.00	0.00	0.00	157,492.52	0.00	0.00	0.00	157,492.52

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	644.00	CY	96.38	100.00	96.38	62,068.72
4TD02	Treat & Dispose - Liquid Waste	1.00	57,140.00	GAL	1.67	100.00	1.67	95,423.80

Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**  
**80**  
**Unit 604**  
 Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	15,003.18	7,708.70	22,711.88	20,519.76	0.00	9,478.06	106,627.84	27,321.60	0.00	0.00	186,659.14
Total	15,003.18	7,708.70	22,711.88	20,519.76	0.00	9,478.06	106,627.84	27,321.60	0.00	0.00	186,659.14

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
933.7200	0.0011	933.7200	199.9091	16.0682	24.3241	0.0056

**Activity: 10 Removal of Waste (CS-03) Quantity: 6000.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	132.00	72.51	204.51	37.74	0.00	113.28	0.00	0.00	0.00	0.00	355.53

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9375	0.2400	25,000.0000	0.0000	1,481.3750

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
9.6000	625.0000	0.0016	21.3031	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 2.40 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	9.60	MH	10.00	109.00	10.90	104.64
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.40	HR	15.72	100.00	15.73	37.74
9STGEN	Sm Tools - General	1.00	9.60	MH	0.90	100.00	0.90	8.64
LFORMN	Laborer-Foreman	1.00	2.40	MH	14.00	110.00	23.34	56.01
LGEN	Laborer-General	3.00	7.20	MH	12.00	110.00	20.63	148.50

**Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 122.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	145.29	78.04	223.33	125.39	0.00	120.00	0.00	0.00	0.00	0.00	468.72

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.8584	0.0417	24.0002	68.6011	0.5083	240.0016	0.0042	922.0782

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10.1600	12.0079	0.0833	21.9813	1.1909

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0002 Eff: 100.00 Crew Hrs: 5.08 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	10.17	MH	10.00	109.00	10.90	110.85
8TRKGS10	Flatbed Truck 15K 200HP	1.00	5.08	HR	24.68	100.00	24.68	125.39
9STGEN	Sm Tools - General	1.00	10.17	MH	0.90	100.00	0.90	9.15
LFORMN	Laborer-Foreman	1.00	5.08	MH	14.00	110.00	23.34	118.55
LGEN	Laborer-General	1.00	5.08	MH	12.00	110.00	20.63	104.78

**Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 9312.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	3,499.07	1,895.21	5,394.28	8,466.33	0.00	629.49	0.00	0.00	0.00	0.00	14,490.10

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	150.0000	223.2701	6.2080	1,500.0000	0.0007	2,334.1012

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
248.3200	37.5000	0.0267	21.7231	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500 Eff: 100.00 Crew Hrs: 62.08 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	248.32	MH	1.50	109.00	1.63	406.00
8DEMO10	Breaker Attach Excavator H140S	1.00	62.08	HR	31.39	100.00	31.39	1,948.75

8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	62.08	HR	83.58	100.00	83.58	5,188.89
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	62.08	HR	15.72	100.00	15.72	976.08
8TRKWTR02	Water Tank and Trailer 500 G	1.00	62.08	HR	5.68	100.00	5.68	352.61
9STGEN	Sm Tools - General	1.00	248.32	MH	0.90	100.00	0.90	223.49
LFORMN	Laborer-Foreman	1.00	62.08	MH	14.00	110.00	23.34	1,448.76
LGEN	Laborer-General	2.00	124.16	MH	12.00	110.00	20.62	2,560.75
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	62.08	MH	13.24	110.00	22.31	1,384.77

Activity: 22 Load Rollofs (CS-04) Quantity: 210.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	38.00	0.00	0.00	52.91
Total	755.37	404.32	1,159.69	1,837.27	0.00	133.09	0.00	7,980.00	0.00	0.00	11,110.05

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2712	0.0833	12.0000	171.2549	1.7500	120.0000	0.0083	6,348.6000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
52.5000	4.0000	0.2500	22.0893	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 17.50 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	52.50	MH	1.50	109.00	1.64	85.84
5DH80	Rolloff Bin Delivery	1.00	11.00	EA	250.00	100.00	250.00	2,750.00
5DH81	Bin Rental	11.00	165.00	DY	25.00	100.00	25.00	4,125.00
5TRKBT	Bin Truck	1.00	8.84	HR	125.00	100.00	125.00	1,105.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	17.50	HR	83.58	100.00	83.58	1,462.72
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	17.50	HR	15.72	100.00	15.72	275.15
8TRKWTR02	Water Tank and Trailer 500 G	1.00	17.50	HR	5.68	100.00	5.68	99.40
9STGEN	Sm Tools - General	1.00	52.50	MH	0.90	100.00	0.90	47.25
LFORMN	Laborer-Foreman	1.00	17.50	MH	14.00	110.00	23.34	408.40
LGEN	Laborer-General	1.00	17.50	MH	12.00	110.00	20.62	360.93
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	17.50	MH	13.24	110.00	22.31	390.36

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63
Total	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
632.2100	4.0000	0.2500	158.0525	0.4000	2.5000	0.4000	1,656.5750

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.0000	0.0833	12.0000	22.0892	172.6600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 4 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: remove 1 front end loader and 1 backhoe

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	4.00	HR	67.10	100.00	67.10	268.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	4.00	HR	24.68	100.00	24.69	98.74
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	1.00	4.00	MH	12.00	110.00	20.63	82.50
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	4.00	MH	13.24	110.00	22.31	89.22

**Activity: 40 Removal of Soil(CS-06) Quantity: 23.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.53	8.76	0.00	0.63	0.00	32.61	0.00	0.00	47.54
Total	82.87	44.35	127.22	201.58	0.00	14.60	0.00	750.00	0.00	0.00	1,093.40

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2957	0.0833	11.9998	171.5448	0.1917	119.9979	0.0083	5,704.5964

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
5.7600	3.9931	0.2504	22.0868	3.6030

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 1.92 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	5.76	MH	1.50	109.00	1.64	9.42
5DH80	Rolloff Bin Delivery	1.00	2.00	EA	250.00	100.00	250.00	500.00
5DH81	Bin Rental	2.00	10.00	DY	25.00	100.00	25.00	250.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.92	HR	83.58	100.00	83.58	160.48
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.92	HR	15.72	100.00	15.72	30.19
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.92	HR	5.68	100.00	5.68	10.91
9STGEN	Sm Tools - General	1.00	5.76	MH	0.90	100.00	0.90	5.18
LFORMN	Laborer-Foreman	1.00	1.92	MH	14.00	110.00	23.34	44.81
LGEN	Laborer-General	1.00	1.92	MH	12.00	110.00	20.62	39.59
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.92	MH	13.24	110.00	22.30	42.82

**Activity: 50 Backfill and Grading (BF-01) Quantity: 290.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.15	1.64	4.80	7.12	0.00	0.53	0.00	3.84	0.00	0.00	16.28
Total	914.88	475.85	1,390.73	2,065.82	0.00	153.14	0.00	1,112.28	0.00	0.00	4,721.97

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9191	0.0417	24.0001	286.0601	1.2083	240.0007	0.0042	3,907.8480

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
60.4000	4.8013	0.2083	23.0253	3.1548

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 12.08 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	60.41	MH	1.50	109.00	1.63	98.77
5TRKED	Trucking - End Dump	1.00	12.09	HR	92.00	100.00	92.00	1,112.28
8BDZR05	Bulldozer Cat D5K2 XL	1.00	12.08	HR	53.11	100.00	53.11	641.58
8BHLD426	BHL Cat 420E 1.25CY	1.00	12.08	HR	35.85	100.00	35.85	433.10
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	12.08	HR	60.65	100.00	60.65	732.60
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	12.08	HR	15.72	100.00	15.72	189.93
8TRKWTR02	Water Tank and Trailer 500 G	1.00	12.08	HR	5.68	100.00	5.68	68.61
9STGEN	Sm Tools - General	1.00	60.41	MH	0.90	100.00	0.90	54.37
LFORMN	Laborer-Foreman	1.00	12.08	MH	14.00	110.00	23.34	281.91
LGEN	Laborer-General	1.00	12.08	MH	12.00	110.00	20.63	249.15
OPDZ9	Op Eng 3- Dozer to D9	1.00	12.08	MH	16.59	110.00	26.85	324.35
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	12.08	MH	13.24	110.00	22.31	269.46
OPROLL	Op Eng - Rollers	1.00	12.08	MH	13.02	110.00	22.01	265.86

**Activity: 60 Decontamination (DC-01) Quantity: 9312.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	0.65	0.36	1.01	0.80	0.00	0.83	0.00	0.00	0.00	0.00	2.63
Total	6,064.04	3,356.80	9,420.84	7,418.49	0.00	7,694.04	0.00	0.00	0.00	0.00	24,533.37

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0434	7.4496	1,250.0000	0.0008	3,293.2466

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
446.9800	20.8331	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 74.50 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	12.00	ROLL	185.00	109.00	201.65	2,419.80
31PPE003	Level C Supplies	1.00	446.97	MH	10.00	109.00	10.90	4,871.97
8CONCEQ42	Pressure Washer 3,000psi	1.00	74.50	HR	6.07	100.00	6.07	452.07
8GEN100	Generator 125 KW	1.00	74.50	HR	47.42	100.00	47.42	3,532.94
8TRKGS10	Flatbed Truck 15K 200HP	1.00	74.50	HR	24.68	100.00	24.68	1,838.96
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	74.50	HR	15.72	100.00	15.72	1,171.36
8TRKWTR02	Water Tank and Trailer 500 G	1.00	74.50	HR	5.68	100.00	5.68	423.16
9STGEN	Sm Tools - General	1.00	446.97	MH	0.90	100.00	0.90	402.27
LFORMN	Laborer-Foreman	1.00	74.50	MH	14.00	110.00	23.34	1,738.61
LGEN	Laborer-General	5.00	372.48	MH	12.00	110.00	20.62	7,682.23

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,960.00	757.85	2,717.85	0.00	0.00	590.00	6,508.76	0.00	0.00	0.00	9,816.61
Total	1,960.00	757.85	2,717.85	0.00	0.00	590.00	6,508.76	0.00	0.00	0.00	9,816.61

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
60.0000	0.0167	60.0000	45.2975	1,960.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	50.00	MH	10.00	109.00	10.90	545.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	18.00	EA	158.36	100.00	158.36	2,850.48
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	81.00	EA	13.73	100.00	13.73	1,112.13
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	9.00	EA	188.83	100.00	188.83	1,699.47
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
9STGEN	Sm Tools - General	1.00	50.00	MH	0.90	100.00	0.90	45.00
X122	→ Field Technician	1.00	50.00	MH	28.00	110.00	42.46	2,122.96
X124	→ Chemist	1.00	10.00	MH	42.00	100.00	59.49	594.89

Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17,479.32	0.00	0.00	17,479.32
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17,479.32	0.00	0.00	17,479.32

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	1,500.00	MI	7.75	100.00	7.75	11,625.00



5TRKST01	Transportation - Bulk Solid	1.00	1,038.00	MI	5.64	100.00	5.64	5,854.32
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**Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	100,119.08	0.00	0.00	0.00	100,119.08
Total	0.00	0.00	0.00	0.00	0.00	0.00	100,119.08	0.00	0.00	0.00	100,119.08

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	366.00	CY	96.38	100.00	96.38	35,275.08
4TD02	Treat & Dispose - Liquid Waste	1.00	20,200.00	GAL	1.67	100.00	1.67	33,734.00
4TD03	Treat & Dispose - Drummed Waste	1.00	122.00	EA	255.00	100.00	255.00	31,110.00

**Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem 90**

**Unit 700**  
 Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	66,738.62	35,734.70	102,473.32	109,753.73	0.00	47,117.90	328,945.07	66,002.73	0.00	0.00	654,292.75
Total	66,738.62	35,734.70	102,473.32	109,753.73	0.00	47,117.90	328,945.07	66,002.73	0.00	0.00	654,292.75

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
4,597.8600	0.0002	4,597.8600	142.3038	14.5151	22.2872	0.0010

**Activity: 10 Removal of Waste (CS-03) Quantity: 18070.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	397.52	218.34	615.86	113.68	0.00	341.14	0.00	0.00	0.00	0.00	1,070.68

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9325	0.7228	25,000.0000	0.0000	1,481.2950

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.9100	625.0432	0.0016	21.3027	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 7.23 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	28.91	MH	10.00	109.00	10.90	315.12
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	7.23	HR	15.72	100.00	15.72	113.68
9STGEN	Sm Tools - General	1.00	28.91	MH	0.90	100.00	0.90	26.02
LFORMN	Laborer-Foreman	1.00	7.23	MH	14.00	110.00	23.34	168.72

LGEM	Laborer-General	3.00	21.68	MH	12.00	110.00	20.62	447.14
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**Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 428.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	509.94	273.89	783.83	440.12	0.00	421.02	0.00	0.00	0.00	0.00	1,644.97

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.8597	0.0417	24.0002	68.6332	1.7833	240.0018	0.0042	922.4200

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
35.6600	12.0022	0.0833	21.9807	1.1914

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0002 Eff: 100.00 Crew Hrs: 17.83 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	35.68	MH	10.00	109.00	10.90	388.91
8TRKGS10	Flatbed Truck 15K 200HP	1.00	17.83	HR	24.68	100.00	24.68	440.12
9STGEN	Sm Tools - General	1.00	35.68	MH	0.90	100.00	0.90	32.11
LFORMN	Laborer-Foreman	1.00	17.83	MH	14.00	110.00	23.34	416.10
LGEM	Laborer-General	1.00	17.83	MH	12.00	110.00	20.62	367.73

**Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 48473.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	18,214.16	9,865.27	28,079.43	44,070.55	0.00	3,276.77	0.00	0.00	0.00	0.00	75,426.75

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	150.0000	223.2686	32.3153	1,500.0002	0.0007	2,334.0857

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,292.6100	37.5001	0.0267	21.7230	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500.0002 Eff: 100.00 Crew Hrs: 323.15 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,292.61	MH	1.50	109.00	1.64	2,113.42
8DEMO10	Breaker Attach Excavator H140S	1.00	323.15	HR	31.39	100.00	31.39	10,144.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	323.15	HR	83.58	100.00	83.58	27,010.17
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	323.15	HR	15.72	100.00	15.72	5,080.89
8TRKWTR02	Water Tank and Trailer 500 G	1.00	323.15	HR	5.68	100.00	5.68	1,835.49
9STGEN	Sm Tools - General	1.00	1,292.61	MH	0.90	100.00	0.90	1,163.35
LFORMN	Laborer-Foreman	1.00	323.15	MH	14.00	110.00	23.34	7,541.33
LGEM	Laborer-General	2.00	646.31	MH	12.00	110.00	20.62	13,329.84
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	323.15	MH	13.24	110.00	22.31	7,208.26

**Activity: 22 Load Rollofs (CS-04) Quantity: 1171.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.16	0.00	0.00	39.06
Total	4,211.95	2,254.45	6,466.40	10,244.63	0.00	742.13	0.00	28,286.25	0.00	0.00	45,739.41

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2707	0.0833	12.0000	171.2489	9.7583	120.0000	0.0083	4,687.2170

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
292.7400	4.0001	0.2500	22.0892	3.5969

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 97.58 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	292.75	MH	1.50	109.00	1.64	478.65
5DH80	Rolloff Bin Delivery	1.00	59.00	EA	250.00	100.00	250.00	14,750.00
5DH81	Bin Rental	59.00	295.00	DY	25.00	100.00	25.00	7,375.00
5TRKBT	Bin Truck	1.00	49.29	HR	125.00	100.00	125.00	6,161.25
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	97.58	HR	83.58	100.00	83.58	8,156.13
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	97.58	HR	15.72	100.00	15.72	1,534.25
8TRKWTR02	Water Tank and Trailer 500 G	1.00	97.58	HR	5.68	100.00	5.68	554.25
9STGEN	Sm Tools - General	1.00	292.75	MH	0.90	100.00	0.90	263.48
LFORMN	Laborer-Foreman	1.00	97.58	MH	14.00	110.00	23.34	2,277.22
LGEN	Laborer-General	1.00	97.58	MH	12.00	110.00	20.62	2,012.54
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	97.58	MH	13.24	110.00	22.31	2,176.64

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,158.20	1,155.19	3,313.39	4,589.15	0.00	30.42	0.00	0.00	0.00	0.00	7,932.96
Total	2,158.20	1,155.19	3,313.39	4,589.15	0.00	30.42	0.00	0.00	0.00	0.00	7,932.96

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
7,902.5400	50.0000	0.0200	158.0508	5.0000	0.2000	5.0000	1,586.5920

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
150.0000	0.0067	150.0000	22.0893	2,158.2000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 5 Eff: 100.00 Crew Hrs: 50.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: Removal:  
 CONVEYOR SYSTEM (40 FOOT SECTIONS) - 5 ea  
 HOPPERS - 1 ea  
 SHREDDERS - 1 ea  
 FRONT-END LOADERS - 1 ea  
 BACKHOES - 1 ea

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	50.00	HR	67.10	100.00	67.10	3,354.95
8TRKGS10	Flatbed Truck 15K 200HP	1.00	50.00	HR	24.68	100.00	24.68	1,234.20
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	50.00	MH	14.00	110.00	23.34	1,166.85
LGEN	Laborer-General	1.00	50.00	MH	12.00	110.00	20.62	1,031.23
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	50.00	MH	13.24	110.00	22.31	1,115.31

Activity: 40 Removal of Soil(CS-06) Quantity: 67.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.59	1.92	5.52	8.74	0.00	0.63	0.00	22.39	0.00	0.00	37.29
Total	240.86	128.90	369.76	585.82	0.00	42.54	0.00	1,500.00	0.00	0.00	2,498.12

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2624	0.0833	11.9999	171.1466	0.5583	119.9986	0.0083	4,474.1914

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
16.7400	4.0024	0.2499	22.0884	3.5949

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 5.58 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	16.78	MH	1.50	109.00	1.64	27.44
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00

5DH81	Bin Rental	4.00	20.00	DY	25.00	100.00	25.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	5.58	HR	83.58	100.00	83.58	466.40
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.58	HR	15.72	100.00	15.72	87.73
8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.58	HR	5.68	100.00	5.68	31.69
9STGEN	Sm Tools - General	1.00	16.78	MH	0.90	100.00	0.90	15.10
LFORMN	Laborer-Foreman	1.00	5.58	MH	14.00	110.00	23.34	130.21
LGEN	Laborer-General	1.00	5.58	MH	12.00	110.00	20.62	115.08
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.58	MH	13.24	110.00	22.31	124.47

Activity: 50 Backfill and Grading (BF-01) Quantity: 1547.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	4,881.88	2,539.08	7,420.96	11,023.49	0.00	816.93	0.00	5,933.08	0.00	0.00	25,194.46

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9227	0.0417	24.0000	286.1459	6.4458	240.0005	0.0042	3,908.6509

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
322.3000	4.7999	0.2083	23.0250	3.1557

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 64.46 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	322.26	MH	1.50	109.00	1.64	526.90
5TRKED	Trucking - End Dump	1.00	64.49	HR	92.00	100.00	92.00	5,933.08
8BDZR05	Bulldozer Cat D5K2 XL	1.00	64.46	HR	53.11	100.00	53.11	3,423.54
8BHLD426	BHL Cat 420E 1.25CY	1.00	64.46	HR	35.85	100.00	35.85	2,311.08
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	64.46	HR	60.65	100.00	60.65	3,909.24
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	64.46	HR	15.72	100.00	15.72	1,013.50
8TRKWTR02	Water Tank and Trailer 500 G	1.00	64.46	HR	5.68	100.00	5.68	366.13
9STGEN	Sm Tools - General	1.00	322.26	MH	0.90	100.00	0.90	290.03
LFORMN	Laborer-Foreman	1.00	64.46	MH	14.00	110.00	23.34	1,504.29
LGEN	Laborer-General	1.00	64.46	MH	12.00	110.00	20.62	1,329.46
OPDZ9	Op Eng 3- Dozer to D9	1.00	64.46	MH	16.59	110.00	26.85	1,730.72
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	64.46	MH	13.24	110.00	22.31	1,437.86
OPROLL	Op Eng - Rollers	1.00	64.46	MH	13.02	110.00	22.01	1,418.63

Activity: 60 Decontamination (DC-01) Quantity: 48473.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.84	0.00	0.00	0.00	0.00	2.65
Total	31,565.55	17,473.33	49,038.88	38,613.96	0.00	40,561.95	0.00	0.00	0.00	0.00	128,214.79

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0352	38.7784	1,250.0000	0.0008	3,306.3455

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,326.7000	20.8334	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 387.78 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	65.00	ROLL	185.00	109.00	201.65	13,107.25
31PPE003	Level C Supplies	1.00	2,326.67	MH	10.00	109.00	10.90	25,360.70
8CONCEQ42	Pressure Washer 3,000psi	1.00	387.78	HR	6.07	100.00	6.07	2,353.05
8GEN100	Generator 125 KW	1.00	387.78	HR	47.42	100.00	47.42	18,389.30
8TRKGS10	Flatbed Truck 15K 200HP	1.00	387.78	HR	24.68	100.00	24.68	9,571.96

8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	387.78	HR	15.72	100.00	15.72	6,097.06
8TRKWTR02	Water Tank and Trailer 500 G	1.00	387.78	HR	5.68	100.00	5.68	2,202.59
9STGEN	Sm Tools - General	1.00	2,326.67	MH	0.90	100.00	0.90	2,094.00
LFORMN	Laborer-Foreman	1.00	387.78	MH	14.00	110.00	23.34	9,049.60
LGEN	Laborer-General	5.00	1,938.92	MH	12.00	110.00	20.62	39,989.28

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3,150.00	1,224.22	4,374.22	0.00	0.00	885.00	25,395.16	0.00	0.00	0.00	30,654.38
Total	3,150.00	1,224.22	4,374.22	0.00	0.00	885.00	25,395.16	0.00	0.00	0.00	30,654.38

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	95.0000	0.0105	95.0000	46.0444	3,150.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	75.00	MH	10.00	109.00	10.90	817.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	59.00	EA	158.36	100.00	158.36	9,343.24
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	3.00	EA	359.21	100.00	359.21	1,077.63
4LAB03	Chlorinated herbicides (EPA 515)	1.00	3.00	EA	219.07	100.00	219.07	657.21
4LAB04	Cyanide (SW 9010)	1.00	3.00	EA	54.93	100.00	54.93	164.79
4LAB05	Metals (SW 6010)	1.00	115.00	EA	13.73	100.00	13.73	1,578.95
4LAB06	Total dissolved sulfide (SW 9030)	1.00	3.00	EA	17.77	100.00	17.77	53.31
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	11.00	EA	188.83	100.00	188.83	2,077.13
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	3.00	EA	195.70	100.00	195.70	587.10
4LAB10	Metals screen, furnace (24 TAT)	1.00	8.00	EA	82.40	100.00	82.40	659.20
4LAB11	Organochlorine pesticides & PCBs (24 hr TAT)	1.00	8.00	EA	312.00	100.00	312.00	2,496.00
4LAB12	Targeted TCLP (24 hr TAT)	1.00	3.00	EA	1,220.20	100.00	1,220.20	3,660.60
4LAB13	Volatile organic analysis (24 hr TAT)	1.00	8.00	EA	380.00	100.00	380.00	3,040.00
9STGEN	Sm Tools - General	1.00	75.00	MH	0.90	100.00	0.90	67.50
X122	→ Field Technician	1.00	75.00	MH	28.00	110.00	42.46	3,184.44
X124	→ Chemist	1.00	20.00	MH	42.00	100.00	59.49	1,189.78

Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30,283.40	0.00	0.00	30,283.40
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30,283.40	0.00	0.00	30,283.40

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	3,500.00	MI	7.75	100.00	7.75	27,125.00
5TRKST01	Transportation - Bulk Solid	1.00	560.00	MI	5.64	100.00	5.64	3,158.40

Activity: 90 Treatment and Disposal (TD-02-1) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	299,406.80	0.00	0.00	0.00	299,406.80
Total	0.00	0.00	0.00	0.00	0.00	0.00	299,406.80	0.00	0.00	0.00	299,406.80

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	2,124.00	CY	96.38	100.00	96.38	204,711.12

4TD02	Treat & Dispose - Liquid Waste	1.00	56,704.00	GAL	1.67	100.00	1.67	94,695.68
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<b>Activity: 92</b>	<b>T&amp;D of Decon Fluid (TD-03-1)</b>	<b>Quantity: 48473.00</b>					<b>Unit: GAL</b>		
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Total	131.56	70.67	202.23	72.33	0.00	0.00	4,143.11	0.00	0.00	0.00	4,417.67

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0057	0.0001	10,538.9833	59.6947	0.4599	105,389.8335	0.0000	9,604.8832

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
9.2000	5,268.8043	0.0002	21.9815	0.0027

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 10538.9833 Eff: 100.00 Crew Hrs: 4.60 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	48,473.00	GAL	0.07	100.00	0.07	3,393.11
4TK01	10K gal Holding Tanks	1.00	5.00	DY	150.00	100.00	150.00	750.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.60	HR	15.72	100.00	15.72	72.33
LFORMN	Laborer-Foreman	1.00	4.60	MH	14.00	110.00	23.34	107.35
LGEN	Laborer-General	1.00	4.60	MH	12.00	110.00	20.63	94.88

<b>Activity: 100</b>	<b>Certification of Closure (CS-07)</b>	<b>Quantity: 1.00</b>					<b>Unit: EA</b>		
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**100**

**Unit 702**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	41,236.58	21,951.67	63,188.25	66,712.49	0.00	27,896.47	318,554.77	35,356.77	0.00	0.00	511,708.75
Total	41,236.58	21,951.67	63,188.25	66,712.49	0.00	27,896.47	318,554.77	35,356.77	0.00	0.00	511,708.75

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
2,800.0900	0.0004	2,800.0900	182.7473	14.7269	22.5665	0.0017

<b>Activity: 10</b>	<b>Removal of Waste (CS-03)</b>	<b>Quantity: 18000.00</b>					<b>Unit: SF</b>		
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	396.00	217.51	613.51	113.21	0.00	339.84	0.00	0.00	0.00	0.00	1,066.56

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9333	0.7200	25,000.0000	0.0000	1,481.3333

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.8000	625.0000	0.0016	21.3024	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 7.20 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	28.80	MH	10.00	109.00	10.90	313.92
8TRKP55	Leased 4x4, 3/4 Ton Gas Super	1.00	7.20	HR	15.72	100.00	15.72	113.21
9STGEN	Sm Tools - General	1.00	28.80	MH	0.90	100.00	0.90	25.92
LFORMN	Laborer-Foreman	1.00	7.20	MH	14.00	110.00	23.34	168.02
LGEN	Laborer-General	3.00	21.60	MH	12.00	110.00	20.62	445.49

Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 79.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	94.10	50.54	144.64	81.21	0.00	77.76	0.00	0.00	0.00	0.00	303.61

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.8589	0.0417	24.0005	68.6140	0.3292	240.0049	0.0042	922.3782

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6.5800	12.0061	0.0833	21.9818	1.1911

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0005 Eff: 100.00 Crew Hrs: 3.29 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	6.59	MH	10.00	109.00	10.90	71.83
8TRKGS10	Flatbed Truck 15K 200HP	1.00	3.29	HR	24.68	100.00	24.68	81.21
9STGEN	Sm Tools - General	1.00	6.59	MH	0.90	100.00	0.90	5.93
LFORMN	Laborer-Foreman	1.00	3.29	MH	14.00	110.00	23.34	76.78
LGEN	Laborer-General	1.00	3.29	MH	12.00	110.00	20.63	67.86

Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 28559.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	10,731.28	5,812.36	16,543.64	25,965.01	0.00	1,930.58	0.00	0.00	0.00	0.00	44,439.23

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	150.0000	223.2676	19.0393	1,500.0003	0.0007	2,334.0753

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
761.5700	37.5002	0.0267	21.7231	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500.0003 Eff: 100.00 Crew Hrs: 190.39 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	761.57	MH	1.50	109.00	1.64	1,245.17
8DEMO10	Breaker Attach Excavator H140S	1.00	190.39	HR	31.39	100.00	31.39	5,976.53
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	190.39	HR	83.58	100.00	83.58	15,913.56
8TRKP55	Leased 4x4, 3/4 Ton Gas Super	1.00	190.39	HR	15.72	100.00	15.72	2,993.50
8TRKWTR02	Water Tank and Trailer 500 G	1.00	190.39	HR	5.68	100.00	5.68	1,081.42
9STGEN	Sm Tools - General	1.00	761.57	MH	0.90	100.00	0.90	685.41
LFORMN	Laborer-Foreman	1.00	190.39	MH	14.00	110.00	23.34	4,443.13
LGEN	Laborer-General	2.00	380.79	MH	12.00	110.00	20.62	7,853.62
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	190.39	MH	13.24	110.00	22.31	4,246.89

Activity: 22 Load Rollofs (CS-04) Quantity: 730.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.27	0.00	0.00	39.17
Total	2,625.67	1,405.40	4,031.07	6,386.35	0.00	462.64	0.00	17,716.25	0.00	0.00	28,596.31

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2704	0.0833	12.0000	171.2454	6.0833	120.0001	0.0083	4,700.7659

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
182.4900	4.0002	0.2500	22.0893	3.5968

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 60.83 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	182.50	MH	1.50	109.00	1.64	298.39
5DH80	Rolloff Bin Delivery	1.00	37.00	EA	250.00	100.00	250.00	9,250.00
5DH81	Bin Rental	37.00	185.00	DY	25.00	100.00	25.00	4,625.00
5TRKBT	Bin Truck	1.00	30.73	HR	125.00	100.00	125.00	3,841.25
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	60.83	HR	83.58	100.00	83.58	5,084.41
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	60.83	HR	15.72	100.00	15.72	956.43
8TRKWTR02	Water Tank and Trailer 500 G	1.00	60.83	HR	5.68	100.00	5.68	345.51
9STGEN	Sm Tools - General	1.00	182.50	MH	0.90	100.00	0.90	164.25
LFORMN	Laborer-Foreman	1.00	60.83	MH	14.00	110.00	23.34	1,419.58
LGEN	Laborer-General	1.00	60.83	MH	12.00	110.00	20.62	1,254.60
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	60.83	MH	13.24	110.00	22.31	1,356.89

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

U. Cost	1,726.56	924.14	2,650.70	3,671.32	0.00	30.42	0.00	0.00	0.00	0.00	6,352.44
Total	1,726.56	924.14	2,650.70	3,671.32	0.00	30.42	0.00	0.00	0.00	0.00	6,352.44

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
6,322.0200	40.0000	0.0250	158.0505	4.0000	0.2500	4.0000	1,588.1100

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
120.0000	0.0083	120.0000	22.0892	1,726.5600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 4 Eff: 100.00 Crew Hrs: 40.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: Removal:  
CONVEYOR SYSTEM (40 FOOT SECTIONS) - 4 ea  
FRONT-END LOADERS - 1 ea  
BACKHOES - 1 ea

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	40.00	HR	67.10	100.00	67.10	2,683.96
8TRKGS10	Flatbed Truck 15K 200HP	1.00	40.00	HR	24.68	100.00	24.68	987.36
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	40.00	MH	14.00	110.00	23.34	933.47
LGEN	Laborer-General	1.00	40.00	MH	12.00	110.00	20.62	824.98
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	40.00	MH	13.24	110.00	22.31	892.25

Activity: 40 Removal of Soil(CS-06) Quantity: 67.00 Unit: CY

U. Cost	3.59	1.92	5.52	8.74	0.00	0.63	0.00	22.39	0.00	0.00	37.29
Total	240.86	128.90	369.76	585.82	0.00	42.54	0.00	1,500.00	0.00	0.00	2,498.12

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2624	0.0833	11.9999	171.1466	0.5583	119.9986	0.0083	4,474.1914

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
16.7400	4.0024	0.2499	22.0884	3.5949



Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 5.58 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	16.78	MH	1.50	109.00	1.64	27.44
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00
5DH81	Bin Rental	4.00	20.00	DY	25.00	100.00	25.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	5.58	HR	83.58	100.00	83.58	466.40
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.58	HR	15.72	100.00	15.72	87.73
8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.58	HR	5.68	100.00	5.68	31.69
9STGEN	Sm Tools - General	1.00	16.78	MH	0.90	100.00	0.90	15.10
LFORMN	Laborer-Foreman	1.00	5.58	MH	14.00	110.00	23.34	130.21
LGEN	Laborer-General	1.00	5.58	MH	12.00	110.00	20.62	115.08
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.58	MH	13.24	110.00	22.31	124.47

Activity: 50 Backfill and Grading (BF-01) Quantity: 995.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	3,139.96	1,633.10	4,773.06	7,090.20	0.00	525.43	0.00	3,816.16	0.00	0.00	16,204.85

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9229	0.0417	24.0001	286.1499	4.1458	240.0008	0.0042	3,908.7201

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
207.3000	4.7998	0.2083	23.0249	3.1557

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 41.46 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	207.27	MH	1.50	109.00	1.64	338.89
5TRKED	Trucking - End Dump	1.00	41.48	HR	92.00	100.00	92.00	3,816.16
8BDZR05	Bulldozer Cat D5K2 XL	1.00	41.46	HR	53.11	100.00	53.11	2,201.98
8BHLD426	BHL Cat 420E 1.25CY	1.00	41.46	HR	35.85	100.00	35.85	1,486.47
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	41.46	HR	60.65	100.00	60.65	2,514.38
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	41.46	HR	15.72	100.00	15.72	651.88
8TRKWTR02	Water Tank and Trailer 500 G	1.00	41.46	HR	5.68	100.00	5.68	235.49
9STGEN	Sm Tools - General	1.00	207.27	MH	0.90	100.00	0.90	186.54
LFORMN	Laborer-Foreman	1.00	41.46	MH	14.00	110.00	23.34	967.54
LGEN	Laborer-General	1.00	41.46	MH	12.00	110.00	20.62	855.09
OPDZ9	Op Eng 3- Dozer to D9	1.00	41.46	MH	16.59	110.00	26.85	1,113.17
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	41.46	MH	13.24	110.00	22.31	924.82
OPROLL	Op Eng - Rollers	1.00	41.46	MH	13.02	110.00	22.01	912.44

Activity: 60 Decontamination (DC-01) Quantity: 28559.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.83	0.00	0.00	0.00	0.00	2.64
Total	18,597.59	10,294.82	28,892.41	22,750.35	0.00	23,838.26	0.00	0.00	0.00	0.00	75,481.02

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0354	22.8472	1,250.0000	0.0008	3,303.7317

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,370.8300	20.8334	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 228.47 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	38.00	ROLL	185.00	109.00	201.65	7,662.70
31PPE003	Level C Supplies	1.00	1,370.81	MH	10.00	109.00	10.90	14,941.83
8CONCEQ42	Pressure Washer 3,000psi	1.00	228.47	HR	6.07	100.00	6.07	1,386.36
8GEN100	Generator 125 KW	1.00	228.47	HR	47.42	100.00	47.42	10,834.50
8TRKGS10	Flatbed Truck 15K 200HP	1.00	228.47	HR	24.68	100.00	24.68	5,639.55
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	228.47	HR	15.72	100.00	15.72	3,592.23
8TRKWTR02	Water Tank and Trailer 500 G	1.00	228.47	HR	5.68	100.00	5.68	1,297.71
9STGEN	Sm Tools - General	1.00	1,370.81	MH	0.90	100.00	0.90	1,233.73
LFORMN	Laborer-Foreman	1.00	228.47	MH	14.00	110.00	23.34	5,331.78
LGEN	Laborer-General	5.00	1,142.36	MH	12.00	110.00	20.62	23,560.63

**Activity: 70      Sampling and Analysis (SA-02)      Quantity: 1.00      Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,282.00	886.10	3,168.10	0.00	0.00	649.00	16,698.84	0.00	0.00	0.00	20,515.94
Total	2,282.00	886.10	3,168.10	0.00	0.00	649.00	16,698.84	0.00	0.00	0.00	20,515.94

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	69.0000	0.0145	69.0000	45.9145	2,282.0000

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	55.00	MH	10.00	109.00	10.90	599.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	39.00	EA	158.36	100.00	158.36	6,176.04
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	2.00	EA	359.21	100.00	359.21	718.42
4LAB03	Chlorinated herbicides (EPA 515)	1.00	2.00	EA	219.07	100.00	219.07	438.14
4LAB04	Cyanide (SW 9010)	1.00	2.00	EA	54.93	100.00	54.93	109.86
4LAB05	Metals (SW 6010)	1.00	98.00	EA	13.73	100.00	13.73	1,345.54
4LAB06	Total dissolved sulfide (SW 9030)	1.00	2.00	EA	17.77	100.00	17.77	35.54
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	10.00	EA	188.83	100.00	188.83	1,888.30
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	2.00	EA	195.70	100.00	195.70	391.40
4LAB10	Metals screen, furnace (24 TAT)	1.00	8.00	EA	82.40	100.00	82.40	659.20
4LAB11	Organochlorine pesticides & PCBs (24 hr TAT)	1.00	8.00	EA	312.00	100.00	312.00	2,496.00
4LAB12	Targeted TCLP (24 hr TAT)	1.00	2.00	EA	1,220.20	100.00	1,220.20	2,440.40
9STGEN	Sm Tools - General	1.00	55.00	MH	0.90	100.00	0.90	49.50
X122	→ Field Technician	1.00	55.00	MH	28.00	110.00	42.46	2,335.26
X124	→ Chemist	1.00	14.00	MH	42.00	100.00	59.49	832.84

**Activity: 80      Transportation (TR-01)      Quantity: 1.00      Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,324.36	0.00	0.00	12,324.36
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12,324.36	0.00	0.00	12,324.36

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	1,500.00	MI	7.75	100.00	7.75	11,625.00
5TRKST01	Transportation - Bulk Solid	1.00	124.00	MI	5.64	100.00	5.64	699.36

**Activity: 90      Treatment and Disposal (TD-02-1)      Quantity: 1.00      Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	299,406.80	0.00	0.00	0.00	299,406.80
Total	0.00	0.00	0.00	0.00	0.00	0.00	299,406.80	0.00	0.00	0.00	299,406.80

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	2,124.00	CY	96.38	100.00	96.38	204,711.12
4TD02	Treat & Dispose - Liquid Waste	1.00	56,704.00	GAL	1.67	100.00	1.67	94,695.68

Activity: 92 T&D of Decon Fluid (TD-03-1) Quantity: 28559.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Total	125.56	67.44	193.00	69.02	0.00	0.00	2,449.13	0.00	0.00	0.00	2,711.15

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0092	0.0002	6,499.9886	59.6354	0.4394	64,999.8862	0.0000	6,170.5396

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
8.7800	3,252.7335	0.0003	21.9818	0.0044

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 6500 Eff: 100.00 Crew Hrs: 4.39 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	28,559.00	GAL	0.07	100.00	0.07	1,999.13
4TK01	10K gal Holding Tanks	1.00	3.00	DY	150.00	100.00	150.00	450.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.39	HR	15.72	100.00	15.72	69.02
LFORMN	Laborer-Foreman	1.00	4.39	MH	14.00	110.00	23.34	102.45
LGEN	Laborer-General	1.00	4.39	MH	12.00	110.00	20.63	90.55

Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

Biditem

Unit 703 and 703A

110

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	7,742.51	3,898.29	11,640.80	9,488.60	0.00	4,373.87	36,880.23	11,627.03	0.00	0.00	74,010.53
Total	7,742.51	3,898.29	11,640.80	9,488.60	0.00	4,373.87	36,880.23	11,627.03	0.00	0.00	74,010.53

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
450.4400	0.0022	450.4400	164.3072	17.1888	25.8432	0.0115

Activity: 10 Removal of Waste (CS-03) Quantity: 3570.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	78.52	43.13	121.65	22.48	0.00	67.38	0.00	0.00	0.00	0.00	211.51

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9314	0.1428	25,000.0000	0.0000	1,481.1625

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
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5.7100	625.2189	0.0016	21.3047	0.0220
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 1.43 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	5.71	MH	10.00	109.00	10.90	62.24
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.43	HR	15.72	100.00	15.72	22.48
9STGEN	Sm Tools - General	1.00	5.71	MH	0.90	100.00	0.90	5.14
LFORMN	Laborer-Foreman	1.00	1.43	MH	14.00	110.00	23.34	33.37
LGEN	Laborer-General	3.00	4.28	MH	12.00	110.00	20.63	88.28

Activity: 12 Removal of Waste - Drummed (CS-03) Quantity: 182.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.19	0.64	1.83	1.03	0.00	0.98	0.00	0.00	0.00	0.00	3.84
Total	216.79	116.44	333.23	187.10	0.00	179.12	0.00	0.00	0.00	0.00	699.45

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.8590	0.0417	24.0004	68.6162	0.7583	240.0042	0.0042	922.3679

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
15.1600	12.0053	0.0833	21.9809	1.1912

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0004 Eff: 100.00 Crew Hrs: 7.58 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	15.18	MH	10.00	109.00	10.90	165.46
8TRKGS10	Flatbed Truck 15K 200HP	1.00	7.58	HR	24.68	100.00	24.68	187.10
9STGEN	Sm Tools - General	1.00	15.18	MH	0.90	100.00	0.90	13.66
LFORMN	Laborer-Foreman	1.00	7.58	MH	14.00	110.00	23.34	176.89
LGEN	Laborer-General	1.00	7.58	MH	12.00	110.00	20.63	156.34

Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 4048.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	1,521.13	823.90	2,345.03	3,680.83	0.00	273.66	0.00	0.00	0.00	0.00	6,299.52

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4886	0.0067	149.9998	223.2900	2.6987	1,499.9981	0.0007	2,334.3054

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
107.9500	37.4988	0.0267	21.7233	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1499.9981 Eff: 100.00 Crew Hrs: 26.99 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	107.95	MH	1.50	109.00	1.64	176.50
8DEMO10	Breaker Attach Excavator H140S	1.00	26.99	HR	31.39	100.00	31.39	847.24
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	26.99	HR	83.58	100.00	83.58	2,255.93
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	26.99	HR	15.72	100.00	15.72	424.36
8TRKWTR02	Water Tank and Trailer 500 G	1.00	26.99	HR	5.68	100.00	5.68	153.30
9STGEN	Sm Tools - General	1.00	107.95	MH	0.90	100.00	0.90	97.16
LFORMN	Laborer-Foreman	1.00	26.99	MH	14.00	110.00	23.34	629.87
LGEN	Laborer-General	2.00	53.97	MH	12.00	110.00	20.62	1,113.11
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	26.99	MH	13.24	110.00	22.31	602.05

**Activity: 22 Load Rollofs (CS-04) Quantity: 110.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	25.72	0.00	0.00	40.63
Total	395.81	211.85	607.66	962.74	0.00	69.71	0.00	2,828.75	0.00	0.00	4,468.86

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2764	0.0833	12.0000	171.3157	0.9167	119.9996	0.0083	4,875.1023

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
27.5100	3.9985	0.2501	22.0887	3.5983

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 9.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	27.50	MH	1.50	109.00	1.63	44.96
5DH80	Rolloff Bin Delivery	1.00	6.00	EA	250.00	100.00	250.00	1,500.00
5DH81	Bin Rental	6.00	30.00	DY	25.00	100.00	25.00	750.00
5TRKBT	Bin Truck	1.00	4.63	HR	125.00	100.00	125.00	578.75
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	9.17	HR	83.58	100.00	83.58	766.47
8TRKPUS5	Leased 4x4, 3/4 Ton Gas Super	1.00	9.17	HR	15.72	100.00	15.72	144.18
8TRKWTR02	Water Tank and Trailer 500 G	1.00	9.17	HR	5.68	100.00	5.68	52.09
9STGEN	Sm Tools - General	1.00	27.50	MH	0.90	100.00	0.90	24.75
LFORMN	Laborer-Foreman	1.00	9.17	MH	14.00	110.00	23.34	214.00
LGEN	Laborer-General	1.00	9.17	MH	12.00	110.00	20.62	189.12
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	9.17	MH	13.24	110.00	22.31	204.54

**Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	86.33	46.20	132.53	183.57	0.00	30.42	0.00	0.00	0.00	0.00	346.52
Total	86.33	46.20	132.53	183.57	0.00	30.42	0.00	0.00	0.00	0.00	346.52

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
316.1000	2.0000	0.5000	158.0500	0.2000	5.0000	0.2000	1,732.6000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6.0000	0.1667	6.0000	22.0883	86.3300

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 2 Eff: 100.00 Crew Hrs: 2.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: Removal:  
FRONT-END LOADERS - 1 ea  
BACKHOES - 1 ea

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	2.00	HR	67.10	100.00	67.10	134.20
8TRKGS10	Flatbed Truck 15K 200HP	1.00	2.00	HR	24.68	100.00	24.69	49.37
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	2.00	MH	14.00	110.00	23.34	46.67
LGEN	Laborer-General	1.00	2.00	MH	12.00	110.00	20.63	41.25
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	2.00	MH	13.24	110.00	22.31	44.61

**Activity: 40 Removal of Soil(CS-06) Quantity: 14.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.61	1.93	5.54	8.77	0.00	0.64	0.00	26.79	0.00	0.00	41.73
Total	50.50	27.03	77.53	122.84	0.00	8.90	0.00	375.00	0.00	0.00	584.27

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.3121	0.0833	12.0007	171.7555	0.1167	120.0069	0.0083	5,008.3148

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3.5100	3.9886	0.2507	22.0883	3.6071

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0007 Eff: 100.00 Crew Hrs: 1.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	3.51	MH	1.50	109.00	1.64	5.74
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.17	HR	83.58	100.00	83.58	97.79
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.17	HR	15.72	100.00	15.73	18.40
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.17	HR	5.68	100.00	5.68	6.65
9STGEN	Sm Tools - General	1.00	3.51	MH	0.90	100.00	0.90	3.16
LFORMN	Laborer-Foreman	1.00	1.17	MH	14.00	110.00	23.34	27.31
LGEN	Laborer-General	1.00	1.17	MH	12.00	110.00	20.62	24.12
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.17	MH	13.24	110.00	22.31	26.10

Activity: 50 Backfill and Grading (BF-01) Quantity: 155.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.29
Total	489.24	254.45	743.69	1,104.74	0.00	81.85	0.00	594.32	0.00	0.00	2,524.60

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9254	0.0417	24.0001	286.2100	0.6458	240.0012	0.0042	3,909.0782

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
32.3000	4.7988	0.2084	23.0245	3.1564

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 6.46 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	32.29	MH	1.50	109.00	1.63	52.79
5TRKED	Trucking - End Dump	1.00	6.46	HR	92.00	100.00	92.00	594.32
8BDZR05	Bulldozer Cat D5K2 XL	1.00	6.46	HR	53.11	100.00	53.11	343.10
8BHLD426	BHL Cat 420E 1.25CY	1.00	6.46	HR	35.85	100.00	35.85	231.61
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	6.46	HR	60.65	100.00	60.65	391.77
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.46	HR	15.72	100.00	15.72	101.57
8TRKWTR02	Water Tank and Trailer 500 G	1.00	6.46	HR	5.68	100.00	5.68	36.69
9STGEN	Sm Tools - General	1.00	32.29	MH	0.90	100.00	0.90	29.06
LFORMN	Laborer-Foreman	1.00	6.46	MH	14.00	110.00	23.34	150.75
LGEN	Laborer-General	1.00	6.46	MH	12.00	110.00	20.62	133.23
OPDZ9	Op Eng 3- Dozer to D9	1.00	6.46	MH	16.59	110.00	26.85	173.44
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	6.46	MH	13.24	110.00	22.31	144.10
OPROLL	Op Eng - Rollers	1.00	6.46	MH	13.02	110.00	22.01	142.17

Activity: 60 Decontamination (DC-01) Quantity: 4048.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.83	0.00	0.00	0.00	0.00	2.64
Total	2,635.99	1,459.18	4,095.17	3,224.30	0.00	3,379.63	0.00	0.00	0.00	0.00	10,699.10

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8082	0.0080	125.0000	226.0212	3.2384	1,250.0000	0.0008	3,303.8229

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
194.3000	20.8338	0.0480	21.0765	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 32.38 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	5.39	ROLL	185.00	109.00	201.65	1,086.89
31PPE003	Level C Supplies	1.00	194.30	MH	10.00	109.00	10.90	2,117.87
8CONCEQ42	Pressure Washer 3,000psi	1.00	32.38	HR	6.07	100.00	6.07	196.48
8GEN100	Generator 125 KW	1.00	32.38	HR	47.42	100.00	47.42	1,535.52
8TRKGS10	Flatbed Truck 15K 200HP	1.00	32.38	HR	24.68	100.00	24.68	799.27
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	32.38	HR	15.72	100.00	15.72	509.11
8TRKWTR02	Water Tank and Trailer 500 G	1.00	32.38	HR	5.68	100.00	5.68	183.92
9STGEN	Sm Tools - General	1.00	194.30	MH	0.90	100.00	0.90	174.87
LFORMN	Laborer-Foreman	1.00	32.38	MH	14.00	110.00	23.34	755.65
LGEN	Laborer-General	5.00	161.92	MH	12.00	110.00	20.62	3,339.52

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	991.20	384.75	1,375.95	0.00	0.00	283.20	8,229.11	0.00	0.00	0.00	9,888.26
Total	991.20	384.75	1,375.95	0.00	0.00	283.20	8,229.11	0.00	0.00	0.00	9,888.26

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
30.0000	0.0333	30.0000	45.8650	991.2000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	24.00	MH	10.00	109.00	10.90	261.60
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	4.00	EA	158.36	100.00	158.36	633.44
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	57.00	EA	13.73	100.00	13.73	782.61
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	6.00	EA	188.83	100.00	188.83	1,132.98
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
4LAB10	Metals screen, furnace (24 TAT)	1.00	3.00	EA	82.40	100.00	82.40	247.20
4LAB11	Organochlorine pesticides & PCBs (24 hr TAT)	1.00	3.00	EA	312.00	100.00	312.00	936.00
4LAB12	Targeted TCLP (24 hr TAT)	1.00	1.00	EA	1,220.20	100.00	1,220.20	1,220.20
4LAB13	Volatile organic analysis (24 hr TAT)	1.00	6.00	EA	380.00	100.00	380.00	2,280.00
4LAB17	Paint filter test (SW 9095)	1.00	6.00	EA	25.00	100.00	25.00	150.00
9STGEN	Sm Tools - General	1.00	24.00	MH	0.90	100.00	0.90	21.60
X122	→ Field Technician	1.00	24.00	MH	28.00	110.00	42.46	1,019.02
X124	→ Chemist	1.00	6.00	MH	42.00	100.00	59.49	356.93

Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,828.96	0.00	0.00	7,828.96
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,828.96	0.00	0.00	7,828.96

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	1,000.00	MI	7.75	100.00	7.75	7,750.00
5TRKST01	Transportation - Bulk Solid	1.00	14.00	MI	5.64	100.00	5.64	78.96

**Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	28,651.12	0.00	0.00	0.00	28,651.12
Total	0.00	0.00	0.00	0.00	0.00	0.00	28,651.12	0.00	0.00	0.00	28,651.12

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	124.00	CY	96.38	100.00	96.38	11,951.12
4TD02	Treat & Dispose - Liquid Waste	1.00	10,000.00	GAL	1.67	100.00	1.67	16,700.00

**Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**120**

**Unit 708**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	5,712.32	2,899.36	8,611.68	7,299.66	0.00	4,977.43	18,219.66	5,528.43	0.00	0.00	44,636.86
Total	5,712.32	2,899.36	8,611.68	7,299.66	0.00	4,977.43	18,219.66	5,528.43	0.00	0.00	44,636.86

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
333.0900	0.0030	333.0900	134.0084	17.1495	25.8539	0.0165

**Activity: 10 Removal of Waste (TS-03) Quantity: 6126.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.02	0.00	0.01	0.00	0.05	0.00	0.00	0.10
Total	85.28	46.48	131.76	93.71	0.00	63.02	0.00	319.95	0.00	0.00	608.44

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0368	0.0003	3,000.0000	110.4163	0.2042	30,000.0000	0.0000	2,979.6278

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6.1200	1,000.9804	0.0010	21.5294	0.0139

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 3000 Eff: 100.00 Crew Hrs: 2.04 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	5.34	MH	10.00	109.00	10.90	58.21
5VTRK	Vac Truck	1.00	2.37	HR	135.00	100.00	135.00	319.95
8GEN050	Generator 45 KW	1.00	2.04	HR	18.78	100.00	18.78	38.32
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	2.04	HR	11.43	100.00	11.43	23.32
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.04	HR	15.72	100.00	15.72	32.07
9STGEN	Sm Tools - General	1.00	5.34	MH	0.90	100.00	0.90	4.81
LFORMN	Laborer-Foreman	1.00	2.04	MH	14.00	110.00	23.33	47.60
LGEN	Laborer-General	2.00	4.08	MH	12.00	110.00	20.63	84.16



**Activity: 20 Tank System Purging (TS-04) Quantity: 5734.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.08
Total	63.12	34.65	97.77	68.07	0.00	311.95	0.00	0.00	0.00	0.00	477.79

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0289	0.0002	5,000.0000	144.6111	0.1147	50,000.0000	0.0000	4,166.2888

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
4.5900	1,249.2375	0.0008	21.3007	0.0110

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 1.15 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	86.00	LB	2.75	109.00	3.00	257.79
31PPE003	Level C Supplies	1.00	4.59	MH	10.00	109.00	10.90	50.03
8GEN050	Generator 45 KW	1.00	1.15	HR	18.78	100.00	18.78	21.60
8TRKGS10	Flatbed Truck 15K 200HP	1.00	1.15	HR	24.68	100.00	24.69	28.39
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.15	HR	15.72	100.00	15.72	18.08
9STGEN	Sm Tools - General	1.00	4.59	MH	0.90	100.00	0.90	4.13
LFORMN	Laborer-Foreman	1.00	1.15	MH	14.00	110.00	23.33	26.83
LGEN	Laborer-General	3.00	3.44	MH	12.00	110.00	20.62	70.94

**Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 392.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.07	0.04	0.12	0.11	0.00	5.08	0.00	0.00	0.00	0.00	5.31
Total	29.26	15.96	45.22	43.23	0.00	1,991.14	0.00	0.00	0.00	0.00	2,079.59

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2256	0.0018	560.0000	126.3571	0.0700	5,600.0000	0.0002	29,708.4286

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.1000	186.6667	0.0054	21.5333	0.0746

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 560 Eff: 100.00 Crew Hrs: 0.70 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	2.10	MH	10.00	109.00	10.90	22.89
31PPF040	55 gal STL Drum - Closed	1.00	22.00	EA	82.00	109.00	89.38	1,966.36
8COMPR04	Compressor 185 CFM 80HP	1.00	0.70	HR	15.81	100.00	15.81	11.07
8GEN050	Generator 45 KW	1.00	0.70	HR	18.78	100.00	18.79	13.15
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	0.70	HR	11.43	100.00	11.43	8.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	0.70	HR	15.72	100.00	15.73	11.01
9STGEN	Sm Tools - General	1.00	2.10	MH	0.90	100.00	0.90	1.89
LFORMN	Laborer-Foreman	1.00	0.70	MH	14.00	110.00	23.34	16.34
LGEN	Laborer-General	2.00	1.40	MH	12.00	110.00	20.63	28.88

**Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 600.00 Unit: FT**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.32	1.27	3.58	4.74	0.00	0.42	0.00	0.00	0.00	0.00	8.74
Total	1,391.28	759.05	2,150.33	2,841.98	0.00	253.50	0.00	0.00	0.00	0.00	5,245.81

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.3205	0.0333	30.0000	249.6155	2.0000	300.0000	0.0033	2,622.9050

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
100.0000	6.0000	0.1667	21.5033	2.3188

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 2 Eff: 100.00 Crew Hrs: 20.00 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	100.00	MH	1.50	109.00	1.64	163.50
8COMPR04	Compressor 185 CFM 80HP	1.00	20.00	HR	15.81	100.00	15.81	316.20
8GEN050	Generator 45 KW	1.00	20.00	HR	18.78	100.00	18.78	375.66
8TRKGS05	Boom Truck 28,000# Cap	1.00	20.00	HR	67.10	100.00	67.10	1,341.98
8TRKGS10	Flatbed Truck 15K 200HP	1.00	20.00	HR	24.68	100.00	24.68	493.68
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	20.00	HR	15.72	100.00	15.72	314.46
9STGEN	Sm Tools - General	1.00	100.00	MH	0.90	100.00	0.90	90.00
LFORMN	Laborer-Foreman	1.00	20.00	MH	14.00	110.00	23.34	466.74
LGEN	Laborer-General	3.00	60.00	MH	12.00	110.00	20.62	1,237.47
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	20.00	MH	13.24	110.00	22.31	446.12

Activity: 41 Excavation and Loading (TS-06) Quantity: 5734.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Total	112.73	61.05	173.78	209.98	0.00	20.28	0.00	0.00	0.00	0.00	404.04

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0669	0.0003	2,867.0000	191.8800	0.2000	28,670.0000	0.0000	2,020.2000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
8.0000	716.7500	0.0014	21.7225	0.0197

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 2 Eff: 100.00 Crew Hrs: 2.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	8.00	MH	1.50	109.00	1.64	13.08
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	2.00	HR	83.58	100.00	83.59	167.17
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.00	HR	15.72	100.00	15.73	31.45
8TRKWTR02	Water Tank and Trailer 500 G	1.00	2.00	HR	5.68	100.00	5.68	11.36
9STGEN	Sm Tools - General	1.00	8.00	MH	0.90	100.00	0.90	7.20
LFORMN	Laborer-Foreman	1.00	2.00	MH	14.00	110.00	23.34	46.67
LGEN	Laborer-General	2.00	4.00	MH	12.00	110.00	20.63	82.50
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	2.00	MH	13.24	110.00	22.31	44.61

Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 1089.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.69	1.09	0.00	0.08	0.00	0.35	0.00	0.00	2.22
Total	490.92	265.90	756.82	1,187.86	0.00	88.35	0.00	386.50	0.00	0.00	2,419.53

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7857	0.0080	125.0000	223.2185	0.8712	1,250.0000	0.0008	2,777.2383

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
34.8400	31.2572	0.0320	21.7227	0.4508

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 8.71 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	34.85	MH	1.50	109.00	1.64	56.98
5DH80	Rolloff Bin Delivery	1.00	1.03	EA	250.00	100.00	250.00	257.50
5DH81	Bin Rental	20.00	5.16	DY	25.00	100.00	25.00	129.00
8DEMO10	Breaker Attach Excavator H140S	1.00	8.71	HR	31.39	100.00	31.39	273.42
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	8.71	HR	83.58	100.00	83.58	728.02

8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	8.71	HR	15.72	100.00	15.72	136.95
8TRKWTR02	Water Tank and Trailer 500 G	1.00	8.71	HR	5.68	100.00	5.68	49.47
9STGEN	Sm Tools - General	1.00	34.85	MH	0.90	100.00	0.90	31.37
LFORMN	Laborer-Foreman	1.00	8.71	MH	14.00	110.00	23.34	203.26
LGEN	Laborer-General	2.00	17.42	MH	12.00	110.00	20.62	359.28
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	8.71	MH	13.24	110.00	22.31	194.28

Activity: 52 Load Rollofs (TS-07) Quantity: 41.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.53	8.76	0.00	0.63	0.00	32.68	0.00	0.00	47.60
Total	147.62	79.02	226.64	359.06	0.00	25.99	0.00	1,340.00	0.00	0.00	1,951.69

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2854	0.0833	12.0002	171.4277	0.3417	120.0023	0.0083	5,712.3749

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10.2600	3.9961	0.2502	22.0897	3.6005

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0002 Eff: 100.00 Crew Hrs: 3.42 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	10.25	MH	1.50	109.00	1.64	16.76
5DH80	Rolloff Bin Delivery	1.00	3.00	EA	250.00	100.00	250.00	750.00
5DH81	Bin Rental	3.00	15.00	DY	25.00	100.00	25.00	375.00
5TRKBT	Bin Truck	1.00	1.72	HR	125.00	100.00	125.00	215.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	3.42	HR	83.58	100.00	83.58	285.86
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.42	HR	15.72	100.00	15.72	53.77
8TRKWTR02	Water Tank and Trailer 500 G	1.00	3.42	HR	5.68	100.00	5.68	19.43
9STGEN	Sm Tools - General	1.00	10.25	MH	0.90	100.00	0.90	9.23
LFORMN	Laborer-Foreman	1.00	3.42	MH	14.00	110.00	23.34	79.81
LGEN	Laborer-General	1.00	3.42	MH	12.00	110.00	20.63	70.54
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3.42	MH	13.24	110.00	22.31	76.29

Activity: 60 Removal of Soil (TS-08) Quantity: 4.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.68	2.54	7.22	8.66	0.00	0.84	0.00	93.75	0.00	0.00	110.48
Total	18.73	10.16	28.89	34.64	0.00	3.37	0.00	375.00	0.00	0.00	441.90

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.8825	0.0833	12.0012	190.6091	0.0333	120.0120	0.0083	13,258.3258

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1.3300	3.0075	0.3325	21.7218	4.6825

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0012 Eff: 100.00 Crew Hrs: 0.33 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1.33	MH	1.50	109.00	1.63	2.17
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	0.33	HR	83.58	100.00	83.58	27.58
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	0.33	HR	15.72	100.00	15.73	5.19
8TRKWTR02	Water Tank and Trailer 500 G	1.00	0.33	HR	5.68	100.00	5.67	1.87
9STGEN	Sm Tools - General	1.00	1.33	MH	0.90	100.00	0.90	1.20
LFORMN	Laborer-Foreman	1.00	0.33	MH	14.00	110.00	23.36	7.71
LGEN	Laborer-General	2.00	0.67	MH	12.00	110.00	20.61	13.81

OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	0.33	MH	13.24	110.00	22.33	7.37
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**Activity: 70 Backfill and Grading (BF-01) Quantity: 94.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.30
Total	296.88	154.41	451.29	670.37	0.00	49.63	0.00	360.64	0.00	0.00	1,531.93

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9326	0.0417	23.9998	286.3788	0.3917	239.9980	0.0042	3,911.2774

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
19.6000	4.7959	0.2085	23.0250	3.1583

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 23.9998 Eff: 100.00 Crew Hrs: 3.92 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	19.58	MH	1.50	109.00	1.63	32.01
5TRKED	Trucking - End Dump	1.00	3.92	HR	92.00	100.00	92.00	360.64
8BDZR05	Bulldozer Cat D5K2 XL	1.00	3.92	HR	53.11	100.00	53.11	208.20
8BHLD426	BHL Cat 420E 1.25CY	1.00	3.92	HR	35.85	100.00	35.85	140.54
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	3.92	HR	60.65	100.00	60.65	237.73
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.92	HR	15.72	100.00	15.72	61.63
8TRKWTR02	Water Tank and Trailer 500 G	1.00	3.92	HR	5.68	100.00	5.68	22.27
9STGEN	Sm Tools - General	1.00	19.58	MH	0.90	100.00	0.90	17.62
LFORMN	Laborer-Foreman	1.00	3.92	MH	14.00	110.00	23.34	91.48
LGEN	Laborer-General	1.00	3.92	MH	12.00	110.00	20.63	80.85
OPDZ9	Op Eng 3- Dozer to D9	1.00	3.92	MH	16.59	110.00	26.85	105.25
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3.92	MH	13.24	110.00	22.31	87.44
OPROLL	Op Eng - Rollers	1.00	3.92	MH	13.02	110.00	22.01	86.27

**Activity: 80 Decontamination (DC-02) Quantity: 2241.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.93	0.00	0.00	0.00	0.00	2.73
Total	1,459.37	807.85	2,267.22	1,785.41	0.00	2,075.80	0.00	0.00	0.00	0.00	6,128.43

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8084	0.0080	125.0000	226.0503	1.7928	1,250.0000	0.0008	3,418.3568

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
107.5700	20.8329	0.0480	21.0767	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 17.93 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	4.00	ROLL	185.00	109.00	201.65	806.60
31PPE003	Level C Supplies	1.00	107.56	MH	10.00	109.00	10.90	1,172.40
8CONCEQ42	Pressure Washer 3,000psi	1.00	17.93	HR	6.07	100.00	6.07	108.80
8GEN100	Generator 125 KW	1.00	17.93	HR	47.42	100.00	47.42	850.28
8TRKGS10	Flatbed Truck 15K 200HP	1.00	17.93	HR	24.68	100.00	24.68	442.58
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	17.93	HR	15.72	100.00	15.72	281.91
8TRKWTR02	Water Tank and Trailer 500 G	1.00	17.93	HR	5.68	100.00	5.68	101.84
9STGEN	Sm Tools - General	1.00	107.56	MH	0.90	100.00	0.90	96.80
LFORMN	Laborer-Foreman	1.00	17.93	MH	14.00	110.00	23.34	418.44
LGEN	Laborer-General	5.00	89.64	MH	12.00	110.00	20.62	1,848.78

**Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS**

Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	330.40	128.25	458.65	0.00	0.00	94.40	3,345.27	0.00	0.00	0.00	3,898.32
Total	330.40	128.25	458.65	0.00	0.00	94.40	3,345.27	0.00	0.00	0.00	3,898.32

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10.0000	0.1000	10.0000	45.8650	330.4000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	8.00	MH	10.00	109.00	10.90	87.20
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	3.00	EA	158.36	100.00	158.36	475.08
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	25.00	EA	13.73	100.00	13.73	343.25
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	2.00	EA	188.83	100.00	188.83	377.66
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
4LAB10	Metals screen, furnace (24 TAT)	1.00	1.00	EA	82.40	100.00	82.40	82.40
4LAB12	Targeted TCLP (24 hr TAT)	1.00	1.00	EA	1,220.20	100.00	1,220.20	1,220.20
9STGEN	Sm Tools - General	1.00	8.00	MH	0.90	100.00	0.90	7.20
X122	→ Field Technician	1.00	8.00	MH	28.00	110.00	42.46	339.67
X124	→ Chemist	1.00	2.00	MH	42.00	100.00	59.49	118.98

Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,746.34	0.00	0.00	2,746.34
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,746.34	0.00	0.00	2,746.34

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	350.00	MI	7.75	100.00	7.75	2,712.50
5TRKST01	Transportation - Bulk Solid	1.00	6.00	MI	5.64	100.00	5.64	33.84

Activity: 112 T&D of Decon Fluid (TD-03-1) Quantity: 2241.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.01	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.15
Total	9.73	5.22	14.95	5.35	0.00	0.00	306.87	0.00	0.00	0.00	327.17

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0091	0.0002	6,499.4200	58.8747	0.0345	64,994.1995	0.0000	9,488.6891

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
0.6800	3,295.5882	0.0003	21.9853	0.0043

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 6500 Eff: 100.00 Crew Hrs: 0.34 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	2,241.00	GAL	0.07	100.00	0.07	156.87
4TK01	10K gal Holding Tanks	1.00	1.00	DY	150.00	100.00	150.00	150.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	0.34	HR	15.72	100.00	15.74	5.35
LFORMN	Laborer-Foreman	1.00	0.34	MH	14.00	110.00	23.35	7.94
LGEN	Laborer-General	1.00	0.34	MH	12.00	110.00	20.62	7.01

Activity: 110 Treatment and Disposal (TD-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	14,567.52	0.00	0.00	0.00	14,567.52
Total	0.00	0.00	0.00	0.00	0.00	0.00	14,567.52	0.00	0.00	0.00	14,567.52

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	45.00	CY	96.38	100.00	96.38	4,337.10
4TD02	Treat & Dispose - Liquid Waste	1.00	6,126.00	GAL	1.67	100.00	1.67	10,230.42

Activity: 120 Tank Systems Certification of Closure (TS\_09 -1) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**130**

**Unit 900**

Takeoff Qty: 1.000 LS  
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	14,238.69	7,420.63	21,659.32	20,463.18	0.00	12,675.69	37,251.41	10,825.74	0.00	0.00	102,875.34
Total	14,238.69	7,420.63	21,659.32	20,463.18	0.00	12,675.69	37,251.41	10,825.74	0.00	0.00	102,875.34

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
912.1000	0.0011	912.1000	112.7895	15.6109	23.7467	0.0058

Activity: 10 Removal of Waste (TS-03) Quantity: 10556.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.02	0.00	0.01	0.00	0.05	0.00	0.00	0.10
Total	147.14	80.20	227.34	161.69	0.00	124.60	0.00	550.80	0.00	0.00	1,064.43

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0369	0.0003	2,999.9716	110.5607	0.3519	29,999.7158	0.0000	3,025.0661

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10.5600	999.6212	0.0010	21.5284	0.0139

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 3000 Eff: 100.00 Crew Hrs: 3.52 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	10.56	MH	10.00	109.00	10.90	115.10
5VTRK	Vac Truck	1.00	4.08	HR	135.00	100.00	135.00	550.80
8GEN050	Generator 45 KW	1.00	3.52	HR	18.78	100.00	18.78	66.12
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	3.52	HR	11.43	100.00	11.43	40.23
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.52	HR	15.72	100.00	15.72	55.34
9STGEN	Sm Tools - General	1.00	10.56	MH	0.90	100.00	0.90	9.50
LFORMN	Laborer-Foreman	1.00	3.52	MH	14.00	110.00	23.34	82.15
LGEN	Laborer-General	2.00	7.04	MH	12.00	110.00	20.62	145.19

Activity: 20 Tank System Purging (TS-03) Quantity: 10014.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.08
Total	110.13	60.48	170.61	118.39	0.00	544.83	0.00	0.00	0.00	0.00	833.83

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0289	0.0002	5,000.0000	144.2980	0.2003	50,000.0000	0.0000	4,163.3214

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
8.0100	1,250.1873	0.0008	21.2996	0.0110

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 2.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	150.19	LB	2.75	109.00	3.00	450.19
31PPE003	Level C Supplies	1.00	8.02	MH	10.00	109.00	10.90	87.42
8GEN050	Generator 45 KW	1.00	2.00	HR	18.78	100.00	18.79	37.57
8TRKGS10	Flatbed Truck 15K 200HP	1.00	2.00	HR	24.68	100.00	24.69	49.37
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.00	HR	15.72	100.00	15.73	31.45
9STGEN	Sm Tools - General	1.00	8.02	MH	0.90	100.00	0.90	7.22
LFORMN	Laborer-Foreman	1.00	2.00	MH	14.00	110.00	23.34	46.67
LGEN	Laborer-General	3.00	6.01	MH	12.00	110.00	20.62	123.94

Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 542.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.07	0.04	0.12	0.11	0.00	5.08	0.00	0.00	0.00	0.00	5.31
Total	40.55	22.10	62.65	59.90	0.00	2,753.16	0.00	0.00	0.00	0.00	2,875.71

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2261	0.0018	559.9752	126.6143	0.0968	5,599.7520	0.0002	29,710.8172

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.9100	186.2543	0.0054	21.5292	0.0748

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 559.9752 Eff: 100.00 Crew Hrs: 0.97 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	2.90	MH	10.00	109.00	10.90	31.61
31PPF040	55 gal STL Drum - Closed	1.00	30.42	EA	82.00	109.00	89.38	2,718.94
8COMPRO4	Compressor 185 CFM 80HP	1.00	0.97	HR	15.81	100.00	15.81	15.34
8GEN050	Generator 45 KW	1.00	0.97	HR	18.78	100.00	18.78	18.22
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	0.97	HR	11.43	100.00	11.43	11.09
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	0.97	HR	15.72	100.00	15.72	15.25
9STGEN	Sm Tools - General	1.00	2.90	MH	0.90	100.00	0.90	2.61
LFORMN	Laborer-Foreman	1.00	0.97	MH	14.00	110.00	23.34	22.64
LGEN	Laborer-General	2.00	1.94	MH	12.00	110.00	20.62	40.01

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 830.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.32	1.27	3.58	4.74	0.00	0.42	0.00	0.00	0.00	0.00	8.74
Total	1,924.71	1,050.06	2,974.77	3,931.89	0.00	350.67	0.00	0.00	0.00	0.00	7,257.33

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.3213	0.0333	30.0000	249.6380	2.7667	299.9996	0.0033	2,623.1282

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
138.3400	5.9997	0.1667	21.5033	2.3189

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 30 Eff: 100.00 Crew Hrs: 27.67 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	138.33	MH	1.50	109.00	1.64	226.17
8COMPRO4	Compressor 185 CFM 80HP	1.00	27.67	HR	15.81	100.00	15.81	437.46
8GEN050	Generator 45 KW	1.00	27.67	HR	18.78	100.00	18.78	519.73
8TRKGS05	Boom Truck 28,000# Cap	1.00	27.67	HR	67.10	100.00	67.10	1,856.63
8TRKGS10	Flatbed Truck 15K 200HP	1.00	27.67	HR	24.68	100.00	24.68	683.01
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	27.67	HR	15.72	100.00	15.72	435.06
9STGEN	Sm Tools - General	1.00	138.33	MH	0.90	100.00	0.90	124.50
LFORMN	Laborer-Foreman	1.00	27.67	MH	14.00	110.00	23.34	645.73
LGEN	Laborer-General	3.00	83.00	MH	12.00	110.00	20.62	1,711.83
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	27.67	MH	13.24	110.00	22.31	617.21

Activity: 41 Loading (TS-06) Quantity: 10014.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Total	225.46	122.10	347.56	452.75	0.00	35.41	0.00	0.00	0.00	0.00	835.72

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0799	0.0004	2,503.5000	200.0775	0.4000	25,035.0000	0.0000	2,089.3000

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
16.0000	625.8750	0.0016	21.7225	0.0225

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 4 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	13.97	MH	1.50	109.00	1.63	22.84
8TRKGS05	Boom Truck 28,000# Cap	1.00	4.00	HR	67.10	100.00	67.10	268.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	4.00	HR	24.68	100.00	24.69	98.74
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.00	HR	15.72	100.00	15.72	62.89
8TRKWTR02	Water Tank and Trailer 500 G	1.00	4.00	HR	5.68	100.00	5.68	22.72
9STGEN	Sm Tools - General	1.00	13.97	MH	0.90	100.00	0.90	12.57
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	2.00	8.00	MH	12.00	110.00	20.62	164.99
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	4.00	MH	13.24	110.00	22.31	89.22

Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 5924.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.70	1.09	0.00	0.08	0.00	0.00	0.00	0.00	1.87
Total	2,671.10	1,446.73	4,117.83	6,462.96	0.00	480.58	0.00	0.00	0.00	0.00	11,061.37

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7861	0.0080	125.0000	223.2611	4.7392	1,250.0000	0.0008	2,334.0163

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
189.5600	31.2513	0.0320	21.7231	0.4509

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 47.39 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	189.58	MH	1.50	109.00	1.63	309.96
8DEMO10	Breaker Attach Excavator H140S	1.00	47.39	HR	31.39	100.00	31.39	1,487.62
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	47.39	HR	83.58	100.00	83.58	3,961.05
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	47.39	HR	15.72	100.00	15.72	745.11
8TRKWTR02	Water Tank and Trailer 500 G	1.00	47.39	HR	5.68	100.00	5.68	269.18
9STGEN	Sm Tools - General	1.00	189.58	MH	0.90	100.00	0.90	170.62



LFORMN	Laborer-Foreman	1.00	47.39	MH	14.00	110.00	23.34	1,105.95
LGEN	Laborer-General	2.00	94.78	MH	12.00	110.00	20.62	1,954.79
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	47.39	MH	13.24	110.00	22.31	1,057.09

Activity: 52 Load Rollofs (TS-07) Quantity: 152.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.98	0.00	0.00	39.89
Total	546.89	292.72	839.61	1,330.19	0.00	96.33	0.00	3,797.50	0.00	0.00	6,063.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2750	0.0833	12.0002	171.3023	1.2667	120.0016	0.0083	4,787.1393

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
38.0100	3.9989	0.2501	22.0892	3.5980

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0002 Eff: 100.00 Crew Hrs: 12.67 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	38.00	MH	1.50	109.00	1.64	62.13
5DH80	Rolloff Bin Delivery	1.00	8.00	EA	250.00	100.00	250.00	2,000.00
5DH81	Bin Rental	8.00	40.00	DY	25.00	100.00	25.00	1,000.00
5TRKBT	Bin Truck	1.00	6.38	HR	125.00	100.00	125.00	797.50
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	12.67	HR	83.58	100.00	83.58	1,059.01
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	12.67	HR	15.72	100.00	15.72	199.21
8TRKWTR02	Water Tank and Trailer 500 G	1.00	12.67	HR	5.68	100.00	5.68	71.97
9STGEN	Sm Tools - General	1.00	38.00	MH	0.90	100.00	0.90	34.20
LFORMN	Laborer-Foreman	1.00	12.67	MH	14.00	110.00	23.34	295.68
LGEN	Laborer-General	1.00	12.67	MH	12.00	110.00	20.62	261.31
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	12.67	MH	13.24	110.00	22.31	282.62

Activity: 60 Removal of Soil (TS-08) Quantity: 15.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.70	2.54	7.24	8.75	0.00	0.85	0.00	25.00	0.00	0.00	41.84
Total	70.46	38.17	108.63	131.23	0.00	12.68	0.00	375.00	0.00	0.00	627.54

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.9907	0.0833	12.0010	191.9034	0.1250	120.0096	0.0083	5,020.7217

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
5.0000	3.0000	0.3333	21.7260	4.6973

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.001 Eff: 100.00 Crew Hrs: 1.25 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	5.00	MH	1.50	109.00	1.64	8.18
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.25	HR	83.58	100.00	83.58	104.48
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.25	HR	15.72	100.00	15.72	19.65
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.25	HR	5.68	100.00	5.68	7.10
9STGEN	Sm Tools - General	1.00	5.00	MH	0.90	100.00	0.90	4.50
LFORMN	Laborer-Foreman	1.00	1.25	MH	14.00	110.00	23.34	29.18
LGEN	Laborer-General	2.00	2.50	MH	12.00	110.00	20.62	51.56
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.25	MH	13.24	110.00	22.31	27.89

Activity: 70 Backfill and Grading (BF-01) Quantity: 150.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	473.35	246.21	719.56	1,068.83	0.00	79.20	0.00	575.92	0.00	0.00	2,443.51

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9226	0.0417	24.0000	286.1424	0.6250	240.0000	0.0042	3,909.6160

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
31.2500	4.8000	0.2083	23.0259	3.1557

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 6.25 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	31.24	MH	1.50	109.00	1.64	51.08
5TRKED	Trucking - End Dump	1.00	6.26	HR	92.00	100.00	92.00	575.92
8BDZR05	Bulldozer Cat D5K2 XL	1.00	6.25	HR	53.11	100.00	53.11	331.94
8BHLD426	BHL Cat 420E 1.25CY	1.00	6.25	HR	35.85	100.00	35.85	224.08
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	6.25	HR	60.65	100.00	60.65	379.04
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.25	HR	15.72	100.00	15.72	98.27
8TRKWTR02	Water Tank and Trailer 500 G	1.00	6.25	HR	5.68	100.00	5.68	35.50
9STGEN	Sm Tools - General	1.00	31.24	MH	0.90	100.00	0.90	28.12
LFORMN	Laborer-Foreman	1.00	6.25	MH	14.00	110.00	23.34	145.86
LGEN	Laborer-General	1.00	6.25	MH	12.00	110.00	20.63	128.91
OPDZ9	Op Eng 3- Dozer to D9	1.00	6.25	MH	16.59	110.00	26.85	167.82
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	6.25	MH	13.24	110.00	22.31	139.42
OPROLL	Op Eng - Rollers	1.00	6.25	MH	13.02	110.00	22.01	137.55

Activity: 80 Decontamination (DC-02) Quantity: 8468.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.92	0.00	0.00	0.00	0.00	2.73
Total	5,514.30	3,052.48	8,566.78	6,745.35	0.00	7,820.63	0.00	0.00	0.00	0.00	23,132.76

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8082	0.0080	125.0000	226.0293	6.7744	1,250.0000	0.0008	3,414.7319

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
406.4600	20.8335	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 67.74 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	15.00	ROLL	185.00	109.00	201.65	3,024.75
31PPE003	Level C Supplies	1.00	406.43	MH	10.00	109.00	10.90	4,430.09
8CONCEQ42	Pressure Washer 3,000psi	1.00	67.74	HR	6.07	100.00	6.07	411.05
8GEN100	Generator 125 KW	1.00	67.74	HR	47.42	100.00	47.42	3,212.37
8TRKGS10	Flatbed Truck 15K 200HP	1.00	67.74	HR	24.68	100.00	24.68	1,672.09
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	67.74	HR	15.72	100.00	15.72	1,065.08
8TRKWTR02	Water Tank and Trailer 500 G	1.00	67.74	HR	5.68	100.00	5.68	384.76
9STGEN	Sm Tools - General	1.00	406.43	MH	0.90	100.00	0.90	365.79
LFORMN	Laborer-Foreman	1.00	67.74	MH	14.00	110.00	23.34	1,580.85
LGEN	Laborer-General	5.00	338.72	MH	12.00	110.00	20.62	6,985.93

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,237.60	478.02	1,715.62	0.00	0.00	377.60	4,717.20	0.00	0.00	0.00	6,810.42
Total	1,237.60	478.02	1,715.62	0.00	0.00	377.60	4,717.20	0.00	0.00	0.00	6,810.42

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
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38.0000	0.0263	38.0000	45.1479	1,237.6000
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	32.00	MH	10.00	109.00	10.90	348.80
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	8.00	EA	158.36	100.00	158.36	1,266.88
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	1.00	EA	359.21	100.00	359.21	359.21
4LAB03	Chlorinated herbicides (EPA 515)	1.00	1.00	EA	219.07	100.00	219.07	219.07
4LAB04	Cyanide (SW 9010)	1.00	1.00	EA	54.93	100.00	54.93	54.93
4LAB05	Metals (SW 6010)	1.00	57.00	EA	13.73	100.00	13.73	782.61
4LAB06	Total dissolved sulfide (SW 9030)	1.00	1.00	EA	17.77	100.00	17.77	17.77
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	1.00	EA	188.83	100.00	188.83	188.83
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	1.00	EA	195.70	100.00	195.70	195.70
4LAB10	Metals screen, furnace (24 TAT)	1.00	5.00	EA	82.40	100.00	82.40	412.00
4LAB12	Targeted TCLP (24 hr TAT)	1.00	1.00	EA	1,220.20	100.00	1,220.20	1,220.20
9STGEN	Sm Tools - General	1.00	32.00	MH	0.90	100.00	0.90	28.80
X122	→ Field Technician	1.00	32.00	MH	28.00	110.00	42.46	1,358.69
X124	→ Chemist	1.00	6.00	MH	42.00	100.00	59.49	356.93

Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,526.52	0.00	0.00	5,526.52
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,526.52	0.00	0.00	5,526.52

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	700.00	MI	7.75	100.00	7.75	5,425.00
5TRKST01	Transportation - Bulk Solid	1.00	18.00	MI	5.64	100.00	5.64	101.52

Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	32,534.21	0.00	0.00	0.00	32,534.21
Total	0.00	0.00	0.00	0.00	0.00	0.00	32,534.21	0.00	0.00	0.00	32,534.21

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	172.00	CY	96.38	100.00	96.38	16,577.36
4TD02	Treat & Dispose - Liquid Waste	1.00	9,555.00	GAL	1.67	100.00	1.67	15,956.85

Activity: 120 Tank Systems Certification of Closure (TS\_09 -1) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**Unit 1200A Containers**

**140**

Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	11,565.60	67.68	0.00	0.00	11,633.28
Total	0.00	0.00	0.00	0.00	0.00	0.00	11,565.60	67.68	0.00	0.00	11,633.28

Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	12.00	MI	5.64	100.00	5.64	67.68

Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	120.00	CY	96.38	100.00	96.38	11,565.60

**Biditem**

**Unit 1200A Containment**

**150**

Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	76,559.76	41,067.81	117,627.57	117,539.64	0.00	69,400.92	250,772.25	77,618.05	0.00	0.00	632,958.43
Total	76,559.76	41,067.81	117,627.57	117,539.64	0.00	69,400.92	250,772.25	77,618.05	0.00	0.00	632,958.43

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
5,294.4000	0.0002	5,294.4000	119.5524	14.4605	22.2174	0.0010

Activity: 10 Containment Buildings Removal of Waste (CB-03) Quantity: 744.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.40	0.00	0.00	39.31
Total	2,676.17	1,432.44	4,108.61	6,509.20	0.00	471.51	0.00	18,153.75	0.00	0.00	29,243.07

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2713	0.0833	12.0000	171.2550	6.2000	120.0000	0.0083	4,716.6242

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
186.0000	4.0000	0.2500	22.0893	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 62.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	186.00	MH	1.50	109.00	1.64	304.11
5DH80	Rolloff Bin Delivery	1.00	38.00	EA	250.00	100.00	250.00	9,500.00
5DH81	Bin Rental	38.00	190.00	DY	25.00	100.00	25.00	4,750.00
5TRKBT	Bin Truck	1.00	31.23	HR	125.00	100.00	125.00	3,903.75
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	62.00	HR	83.58	100.00	83.58	5,182.21
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	62.00	HR	15.72	100.00	15.72	974.83
8TRKWTR02	Water Tank and Trailer 500 G	1.00	62.00	HR	5.68	100.00	5.68	352.16
9STGEN	Sm Tools - General	1.00	186.00	MH	0.90	100.00	0.90	167.40
LFORMN	Laborer-Foreman	1.00	62.00	MH	14.00	110.00	23.34	1,446.90
LGEN	Laborer-General	1.00	62.00	MH	12.00	110.00	20.62	1,278.72

OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	62.00	MH	13.24	110.00	22.31	1,382.99
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**Activity: 20 Demolition and Removal of Building (CB-04) Quantity: 8980.00 Unit: CF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.08	0.04	0.13	0.20	0.00	0.01	0.00	1.42	0.00	0.00	1.76
Total	734.21	392.98	1,127.19	1,785.83	0.00	129.36	0.00	12,753.75	0.00	0.00	15,796.13

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.3244	0.0019	527.9992	171.2775	1.7008	5,279.9925	0.0002	9,287.6890

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
51.0300	175.9749	0.0057	22.0888	0.0818

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 528 Eff: 100.00 Crew Hrs: 17.01 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	51.03	MH	1.50	109.00	1.63	83.43
5DH80	Rolloff Bin Delivery	1.00	17.00	EA	250.00	100.00	250.00	4,250.00
5DH81	Bin Rental	17.00	85.00	DY	25.00	100.00	25.00	2,125.00
5TRKBT	Bin Truck	1.00	51.03	HR	125.00	100.00	125.00	6,378.75
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	17.01	HR	83.58	100.00	83.58	1,421.76
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	17.01	HR	15.72	100.00	15.72	267.45
8TRKWTR02	Water Tank and Trailer 500 G	1.00	17.01	HR	5.68	100.00	5.68	96.62
9STGEN	Sm Tools - General	1.00	51.03	MH	0.90	100.00	0.90	45.93
LFORMN	Laborer-Foreman	1.00	17.01	MH	14.00	110.00	23.34	396.95
LGEN	Laborer-General	1.00	17.01	MH	12.00	110.00	20.62	350.82
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	17.01	MH	13.24	110.00	22.31	379.42

**Activity: 30 Demo of Concrete Structures (CB-05) Quantity: 24091.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.70	1.09	0.00	0.08	0.00	0.00	0.00	0.00	1.87
Total	10,863.03	5,883.70	16,746.73	26,284.13	0.00	1,954.38	0.00	0.00	0.00	0.00	44,985.24

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7862	0.0080	125.0000	223.2725	19.2728	1,250.0000	0.0008	2,334.1310

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
770.9200	31.2497	0.0320	21.7230	0.4509

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 192.73 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	770.96	MH	1.50	109.00	1.64	1,260.52
8DEMO10	Breaker Attach Excavator H140S	1.00	192.73	HR	31.39	100.00	31.39	6,049.99
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	192.73	HR	83.58	100.00	83.58	16,109.14
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	192.73	HR	15.72	100.00	15.72	3,030.29
8TRKWTR02	Water Tank and Trailer 500 G	1.00	192.73	HR	5.68	100.00	5.68	1,094.71
9STGEN	Sm Tools - General	1.00	770.96	MH	0.90	100.00	0.90	693.86
LFORMN	Laborer-Foreman	1.00	192.73	MH	14.00	110.00	23.34	4,497.73
LGEN	Laborer-General	2.00	385.46	MH	12.00	110.00	20.62	7,949.92
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	192.73	MH	13.24	110.00	22.31	4,299.08

**Activity: 32 Load Rollofs (CB-05) Quantity: 1505.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.15	0.00	0.00	39.05
Total	5,413.63	2,897.67	8,311.30	13,167.48	0.00	953.80	0.00	36,338.75	0.00	0.00	58,771.33

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2716	0.0833	12.0000	171.2593	12.5417	120.0000	0.0083	4,686.0849

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
376.2600	3.9999	0.2500	22.0892	3.5971

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 125.42 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	376.25	MH	1.50	109.00	1.64	615.17
5DH80	Rolloff Bin Delivery	1.00	76.00	EA	250.00	100.00	250.00	19,000.00
5DH81	Bin Rental	76.00	380.00	DY	25.00	100.00	25.00	9,500.00
5TRKBT	Bin Truck	0.50	62.71	HR	125.00	100.00	125.00	7,838.75
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	125.42	HR	83.58	100.00	83.58	10,483.11
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	125.42	HR	15.72	100.00	15.72	1,971.98
8TRKWTR02	Water Tank and Trailer 500 G	1.00	125.42	HR	5.68	100.00	5.68	712.39
9STGEN	Sm Tools - General	1.00	376.25	MH	0.90	100.00	0.90	338.63
LFORMN	Laborer-Foreman	1.00	125.42	MH	14.00	110.00	23.34	2,926.92
LGEN	Laborer-General	1.00	125.42	MH	12.00	110.00	20.62	2,586.73
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	125.42	MH	13.24	110.00	22.31	2,797.65

Activity: 60 Removal of Soil (CB-07) Quantity: 72.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.70	2.54	7.24	8.75	0.00	0.85	0.00	20.83	0.00	0.00	37.67
Total	338.18	183.17	521.35	629.92	0.00	60.84	0.00	1,500.00	0.00	0.00	2,712.11

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.9899	0.0833	12.0000	191.8783	0.6000	120.0000	0.0083	4,520.1833

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
24.0000	3.0000	0.3333	21.7229	4.6969

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 6.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	24.00	MH	1.50	109.00	1.64	39.24
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00
5DH81	Bin Rental	4.00	20.00	DY	25.00	100.00	25.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	6.00	HR	83.58	100.00	83.58	501.50
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.00	HR	15.72	100.00	15.72	94.34
8TRKWTR02	Water Tank and Trailer 500 G	1.00	6.00	HR	5.68	100.00	5.68	34.08
9STGEN	Sm Tools - General	1.00	24.00	MH	0.90	100.00	0.90	21.60
LFORMN	Laborer-Foreman	1.00	6.00	MH	14.00	110.00	23.34	140.02
LGEN	Laborer-General	2.00	12.00	MH	12.00	110.00	20.62	247.49
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	6.00	MH	13.24	110.00	22.31	133.84

Activity: 70 Backfill and Grading (BF-01) Quantity: 1970.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	6,216.33	3,233.15	9,449.48	14,036.73	0.00	1,040.36	0.00	7,563.32	0.00	0.00	32,089.89

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9219	0.0417	24.0000	286.1265	8.2083	240.0001	0.0042	3,909.4298

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
410.4000	4.8002	0.2083	23.0250	3.1555

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 82.08 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	410.40	MH	1.50	109.00	1.63	671.00
5TRKED	Trucking - End Dump	1.00	82.21	HR	92.00	100.00	92.00	7,563.32
8BDZR05	Bulldozer Cat D5K2 XL	1.00	82.08	HR	53.11	100.00	53.11	4,359.35
8BHL426	BHL Cat 420E 1.25CY	1.00	82.08	HR	35.85	100.00	35.85	2,942.81
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	82.08	HR	60.65	100.00	60.65	4,977.82
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	82.08	HR	15.72	100.00	15.72	1,290.54
8TRKWTR02	Water Tank and Trailer 500 G	1.00	82.08	HR	5.68	100.00	5.68	466.21
9STGEN	Sm Tools - General	1.00	410.40	MH	0.90	100.00	0.90	369.36
LFORMN	Laborer-Foreman	1.00	82.08	MH	14.00	110.00	23.34	1,915.50
LGEN	Laborer-General	1.00	82.08	MH	12.00	110.00	20.62	1,692.87
OPDZ9	Op Eng 3- Dozer to D9	1.00	82.08	MH	16.59	110.00	26.85	2,203.81
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	82.08	MH	13.24	110.00	22.31	1,830.90
OPROLL	Op Eng - Rollers	1.00	82.08	MH	13.02	110.00	22.01	1,806.40

Activity: 80 Decontamination (DC-02) Quantity: 68991.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.92	0.00	0.00	0.00	0.00	2.73
Total	44,926.97	24,869.64	69,796.61	54,959.53	0.00	63,716.87	0.00	0.00	0.00	0.00	188,473.01

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0370	55.1928	1,250.0000	0.0008	3,414.8115

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3,311.5700	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 551.93 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	122.21	ROLL	185.00	109.00	201.65	24,643.65
31PPE003	Level C Supplies	1.00	3,311.29	MH	10.00	109.00	10.90	36,093.06
8CONCEQ42	Pressure Washer 3,000psi	1.00	551.93	HR	6.07	100.00	6.07	3,349.11
8GEN100	Generator 125 KW	1.00	551.93	HR	47.42	100.00	47.42	26,173.62
8TRKGS10	Flatbed Truck 15K 200HP	1.00	551.93	HR	24.68	100.00	24.68	13,623.84
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	551.93	HR	15.72	100.00	15.72	8,678.00
8TRKWTR02	Water Tank and Trailer 500 G	1.00	551.93	HR	5.68	100.00	5.68	3,134.96
9STGEN	Sm Tools - General	1.00	3,311.29	MH	0.90	100.00	0.90	2,980.16
LFORMN	Laborer-Foreman	1.00	551.93	MH	14.00	110.00	23.34	12,880.36
LGEN	Laborer-General	5.00	2,759.64	MH	12.00	110.00	20.62	56,916.25

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3,810.80	1,480.72	5,291.52	0.00	0.00	1,073.80	21,291.28	0.00	0.00	0.00	27,656.60
Total	3,810.80	1,480.72	5,291.52	0.00	0.00	1,073.80	21,291.28	0.00	0.00	0.00	27,656.60

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
115.0000	0.0087	115.0000	46.0132	3,810.8000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	91.00	MH	10.00	109.00	10.90	991.90
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	73.00	EA	158.36	100.00	158.36	11,560.28
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	4.00	EA	359.21	100.00	359.21	1,436.84

4LAB03	Chlorinated herbicides (EPA 515)	1.00	4.00	EA	219.07	100.00	219.07	876.28
4LAB04	Cyanide (SW 9010)	1.00	4.00	EA	54.93	100.00	54.93	219.72
4LAB05	Metals (SW 6010)	1.00	132.00	EA	13.73	100.00	13.73	1,812.36
4LAB06	Total dissolved sulfide (SW 9030)	1.00	4.00	EA	17.77	100.00	17.77	71.08
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	24.00	EA	188.83	100.00	188.83	4,531.92
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	4.00	EA	195.70	100.00	195.70	782.80
9STGEN	Sm Tools - General	1.00	91.00	MH	0.90	100.00	0.90	81.90
X122	→ Field Technician	1.00	91.00	MH	28.00	110.00	42.46	3,863.79
X124	→ Chemist	1.00	24.00	MH	42.00	100.00	59.49	1,427.73

**Activity: 100 Certification of Closure (CB-08) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Activity: 105 Transportation (TR-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	232.00	MI	5.64	100.00	5.64	1,308.48

**Activity: 110 Treatment and Disposal (TD-02) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	2,320.00	CY	96.38	100.00	96.38	223,601.60

**Activity: 112 T&D of Decon Fluid (TD-03-1) Quantity: 68991.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Total	303.44	162.98	466.42	166.82	0.00	0.00	5,879.37	0.00	0.00	0.00	6,512.61

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0092	0.0002	6,500.0000	59.6608	1.0614	65,000.0000	0.0000	6,135.8677

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	21.2200	3,251.2253	0.0003	21.9802	0.0044

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 6500 Eff: 100.00 Crew Hrs: 10.61 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	68,991.00	GAL	0.07	100.00	0.07	4,829.37
4TK01	10K gal Holding Tanks	1.00	7.00	DY	150.00	100.00	150.00	1,050.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	10.61	HR	15.72	100.00	15.72	166.82
LFORMN	Laborer-Foreman	1.00	10.61	MH	14.00	110.00	23.34	247.60
LGEN	Laborer-General	1.00	10.61	MH	12.00	110.00	20.62	218.82



**Biditem**

**Unit 1200A Tanks**

**155**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	29,438.13	15,991.36	45,429.49	67,031.15	0.00	11,711.43	23,404.00	3,679.43	0.00	0.00	151,255.50
Total	29,438.13	15,991.36	45,429.49	67,031.15	0.00	11,711.43	23,404.00	3,679.43	0.00	0.00	151,255.50

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	2,099.4800	0.0005	2,099.4800	72.0443	14.0216	21.6384	0.0027

**Activity: 10 Removal of Waste (TS-03) Quantity: 46814.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.05	0.00	0.00	0.08
Total	391.38	213.35	604.73	429.96	0.00	331.46	0.00	2,442.15	0.00	0.00	3,808.30

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0221	0.0002	5,000.0000	110.5107	0.9363	50,000.0000	0.0000	4,067.4798

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0900	1,666.5717	0.0006	21.5283	0.0084

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 9.36 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	28.09	MH	10.00	109.00	10.90	306.18
5VTRK	Vac Truck	1.00	18.09	HR	135.00	100.00	135.00	2,442.15
8GEN050	Generator 45 KW	1.00	9.36	HR	18.78	100.00	18.78	175.81
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	9.36	HR	11.43	100.00	11.43	106.98
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	9.36	HR	15.72	100.00	15.72	147.17
9STGEN	Sm Tools - General	1.00	28.09	MH	0.90	100.00	0.90	25.28
LFORMN	Laborer-Foreman	1.00	9.36	MH	14.00	110.00	23.34	218.43
LGEN	Laborer-General	2.00	18.73	MH	12.00	110.00	20.62	386.30

**Activity: 20 Tank System Purging (TS-03) Quantity: 41200.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.08
Total	453.20	248.93	702.13	487.73	0.00	2,241.86	0.00	0.00	0.00	0.00	3,431.72

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0289	0.0002	5,000.0000	144.4005	0.8240	50,000.0000	0.0000	4,164.7087

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	32.9600	1,250.0000	0.0008	21.3025	0.0110

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 8.24 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	618.00	LB	2.75	109.00	3.00	1,852.46
31PPE003	Level C Supplies	1.00	33.00	MH	10.00	109.00	10.90	359.70
8GEN050	Generator 45 KW	1.00	8.24	HR	18.78	100.00	18.78	154.77
8TRKGS10	Flatbed Truck 15K 200HP	1.00	8.24	HR	24.68	100.00	24.68	203.40
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	8.24	HR	15.72	100.00	15.72	129.56
9STGEN	Sm Tools - General	1.00	33.00	MH	0.90	100.00	0.90	29.70
LFORMN	Laborer-Foreman	1.00	8.24	MH	14.00	110.00	23.34	192.30
LGEN	Laborer-General	3.00	24.72	MH	12.00	110.00	20.62	509.83

**Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 5614.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.07	0.04	0.12	0.11	0.00	0.06	0.00	0.00	0.00	0.00	0.29
Total	419.12	228.47	647.59	619.29	0.00	354.48	0.00	0.00	0.00	0.00	1,621.36

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2257	0.0018	559.9777	126.3670	1.0025	5,599.7766	0.0002	1,617.2522

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
30.0800	186.6356	0.0054	21.5289	0.0747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 559.9777 Eff: 100.00 Crew Hrs: 10.03 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	30.04	MH	10.00	109.00	10.90	327.44
8COMPR04	Compressor 185 CFM 80HP	1.00	10.03	HR	15.81	100.00	15.81	158.57
8GEN050	Generator 45 KW	1.00	10.03	HR	18.78	100.00	18.78	188.39
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	10.03	HR	11.43	100.00	11.43	114.63
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	10.03	HR	15.72	100.00	15.72	157.70
9STGEN	Sm Tools - General	1.00	30.04	MH	0.90	100.00	0.90	27.04
LFORMN	Laborer-Foreman	1.00	10.03	MH	14.00	110.00	23.34	234.06
LGEN	Laborer-General	2.00	20.05	MH	12.00	110.00	20.62	413.53

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 8600.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.80	1.52	4.33	6.94	0.00	0.51	0.00	0.00	0.00	0.00	11.78
Total	24,116.84	13,099.29	37,216.13	59,706.47	0.00	4,360.20	0.00	0.00	0.00	0.00	101,282.80

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.2701	0.0333	30.0000	338.1017	28.6667	299.9997	0.0033	3,533.1168

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,720.0100	5.0000	0.2000	21.6372	2.8043

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 30 Eff: 100.00 Crew Hrs: 286.67 Labor Pcs: 6.00 Equipment Pcs: 6.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,720.00	MH	1.50	109.00	1.64	2,812.20
8COMPR04	Compressor 185 CFM 80HP	1.00	286.67	HR	15.81	100.00	15.81	4,532.25
8EXC009	Excavator Cat 320D (21.1-24TN)	1.00	286.67	HR	66.18	100.00	66.18	18,970.96
8GEN050	Generator 45 KW	1.00	286.67	HR	18.78	100.00	18.78	5,384.52
8TRKGS05	Boom Truck 28,000# Cap	1.00	286.67	HR	67.10	100.00	67.10	19,235.27
8TRKGS10	Flatbed Truck 15K 200HP	1.00	286.67	HR	24.68	100.00	24.68	7,076.16
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	286.67	HR	15.72	100.00	15.72	4,507.31
9STGEN	Sm Tools - General	1.00	1,720.00	MH	0.90	100.00	0.90	1,548.00
LFORMN	Laborer-Foreman	1.00	286.67	MH	14.00	110.00	23.34	6,690.00
LGEN	Laborer-General	3.00	860.00	MH	12.00	110.00	20.62	17,737.09
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	286.67	MH	13.24	110.00	22.31	6,394.52
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	286.67	MH	13.24	110.00	22.31	6,394.52

Activity: 70 Backfill and Grading (BF-01) Quantity: 290.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.15	1.64	4.80	7.12	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	914.88	475.85	1,390.73	2,065.82	0.00	153.11	0.00	1,113.20	0.00	0.00	4,722.86

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9191	0.0417	24.0001	286.0601	1.2083	240.0007	0.0042	3,908.5846

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
60.4000	4.8013	0.2083	23.0253	3.1548

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 12.08 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	60.40	MH	1.50	109.00	1.63	98.75
5TRKED	Trucking - End Dump	1.00	12.10	HR	92.00	100.00	92.00	1,113.20
8BDZR05	Bulldozer Cat D5K2 XL	1.00	12.08	HR	53.11	100.00	53.11	641.58
8BHLD426	BHL Cat 420E 1.25CY	1.00	12.08	HR	35.85	100.00	35.85	433.10
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	12.08	HR	60.65	100.00	60.65	732.60
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	12.08	HR	15.72	100.00	15.72	189.93
8TRKWTR02	Water Tank and Trailer 500 G	1.00	12.08	HR	5.68	100.00	5.68	68.61
9STGEN	Sm Tools - General	1.00	60.40	MH	0.90	100.00	0.90	54.36
LFORMN	Laborer-Foreman	1.00	12.08	MH	14.00	110.00	23.34	281.91
LGEN	Laborer-General	1.00	12.08	MH	12.00	110.00	20.63	249.15
OPDZ9	Op Eng 3- Dozer to D9	1.00	12.08	MH	16.59	110.00	26.85	324.35
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	12.08	MH	13.24	110.00	22.31	269.46
OPROLL	Op Eng - Rollers	1.00	12.08	MH	13.02	110.00	22.01	265.86

Activity: 80 Decontamination (DC-02) Quantity: 4650.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.91	0.00	0.00	0.00	0.00	2.72
Total	3,028.08	1,676.21	4,704.29	3,704.27	0.00	4,246.72	0.00	0.00	0.00	0.00	12,655.28

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0366	3.7200	1,250.0000	0.0008	3,401.9570

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
223.2000	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 37.20 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	8.00	ROLL	185.00	109.00	201.65	1,613.20
31PPE003	Level C Supplies	1.00	223.18	MH	10.00	109.00	10.90	2,432.66
8CONCEQ42	Pressure Washer 3,000psi	1.00	37.20	HR	6.07	100.00	6.07	225.73
8GEN100	Generator 125 KW	1.00	37.20	HR	47.42	100.00	47.42	1,764.10
8TRKGS10	Flatbed Truck 15K 200HP	1.00	37.20	HR	24.68	100.00	24.68	918.24
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	37.20	HR	15.72	100.00	15.72	584.90
8TRKWTR02	Water Tank and Trailer 500 G	1.00	37.20	HR	5.68	100.00	5.68	211.30
9STGEN	Sm Tools - General	1.00	223.18	MH	0.90	100.00	0.90	200.86
LFORMN	Laborer-Foreman	1.00	37.20	MH	14.00	110.00	23.34	868.13
LGEN	Laborer-General	5.00	186.00	MH	12.00	110.00	20.62	3,836.16

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	82.60	32.06	114.66	0.00	0.00	23.60	475.08	0.00	0.00	0.00	613.34
Total	82.60	32.06	114.66	0.00	0.00	23.60	475.08	0.00	0.00	0.00	613.34

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.5000	0.4000	2.5000	45.8640	82.6000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	2.00	MH	10.00	109.00	10.90	21.80
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	3.00	EA	158.36	100.00	158.36	475.08
9STGEN	Sm Tools - General	1.00	2.00	MH	0.90	100.00	0.90	1.80

X122	→ Field Technician	1.00	2.00	MH	28.00	110.00	42.46	84.92
X124	→ Chemist	1.00	0.50	MH	42.00	100.00	59.48	29.74

**Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	22.00	MI	5.64	100.00	5.64	124.08

**Activity: 110 Treatment and Disposal (TD-02) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	221.00	CY	96.38	100.00	96.38	21,299.98

**Activity: 112 T&D of Decon Fluid (TD-03) Quantity: 16842.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.10
Total	32.03	17.20	49.23	17.61	0.00	0.00	1,628.94	0.00	0.00	0.00	1,695.78

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0040	0.0001	15,000.0000	59.5297	0.1123	150,000.0000	0.0000	15,103.1350

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.2400	7,518.7500	0.0001	21.9777	0.0019

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 15000 Eff: 100.00 Crew Hrs: 1.12 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	16,842.00	GAL	0.07	100.00	0.07	1,178.94
4TK01	10K gal Holding Tanks	1.00	3.00	DY	150.00	100.00	150.00	450.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.12	HR	15.72	100.00	15.72	17.61
LFORMN	Laborer-Foreman	1.00	1.12	MH	14.00	110.00	23.34	26.14
LGEN	Laborer-General	1.00	1.12	MH	12.00	110.00	20.62	23.09

**Biditem**

**160**

**Unit 1400**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	401,336.40	218,875.66	620,212.06	526,395.11	0.00	347,589.55	920,141.64	563,827.38	0.00	0.00	2,978,165.74
Total	401,336.40	218,875.66	620,212.06	526,395.11	0.00	347,589.55	920,141.64	563,827.38	0.00	0.00	2,978,165.74

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
28,765.7600	0.0000	28,765.7600	103.5316	13.9519	21.5608	0.0001

**Activity: 10 Removal of Waste (TS-03) Quantity: 5066172.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.05	0.00	0.00	0.09
Total	42,353.14	23,087.51	65,440.65	46,542.73	0.00	59,803.46	0.00	264,347.55	0.00	0.00	436,134.39

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0221	0.0002	5,000.0000	110.5207	101.3234	50,000.0000	0.0000	4,304.3780

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3,039.7000	1,666.6684	0.0006	21.5287	0.0084

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 1013.23 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	5,068.09	MH	10.00	109.00	10.90	55,242.18
5VTRK	Vac Truck	1.00	1,958.13	HR	135.00	100.00	135.00	264,347.55
8GEN050	Generator 45 KW	1.00	1,013.23	HR	18.78	100.00	18.78	19,031.50
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	1,013.23	HR	11.43	100.00	11.43	11,580.21
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1,013.23	HR	15.72	100.00	15.72	15,931.02
9STGEN	Sm Tools - General	1.00	5,068.09	MH	0.90	100.00	0.90	4,561.28
LFORMN	Laborer-Foreman	1.00	1,013.23	MH	14.00	110.00	23.34	23,645.69
LGEN	Laborer-General	2.00	2,026.47	MH	12.00	110.00	20.62	41,794.96

Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 91499.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.04	0.02	0.06	0.06	0.00	0.04	0.00	0.00	0.00	0.00	0.16
Total	3,824.70	2,084.92	5,909.62	5,649.66	0.00	3,239.10	0.00	0.00	0.00	0.00	14,798.38

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.1263	0.0010	1,000.0000	126.3323	9.1499	10,000.0000	0.0001	1,617.3270

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
274.5000	333.3297	0.0030	21.5287	0.0418

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 1000 Eff: 100.00 Crew Hrs: 91.50 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	274.50	MH	10.00	109.00	10.90	2,992.05
8COMPR04	Compressor 185 CFM 80HP	1.00	91.50	HR	15.81	100.00	15.81	1,446.62
8GEN050	Generator 45 KW	1.00	91.50	HR	18.78	100.00	18.78	1,718.64
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	91.50	HR	11.43	100.00	11.43	1,045.75
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	91.50	HR	15.72	100.00	15.72	1,438.65
9STGEN	Sm Tools - General	1.00	274.50	MH	0.90	100.00	0.90	247.05
LFORMN	Laborer-Foreman	1.00	91.50	MH	14.00	110.00	23.34	2,135.34
LGEN	Laborer-General	2.00	183.00	MH	12.00	110.00	20.62	3,774.28

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 20765.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.32	1.27	3.58	4.74	0.00	0.20	0.00	0.00	0.00	0.00	8.53
Total	48,149.98	26,269.68	74,419.66	98,356.66	0.00	4,246.38	0.00	0.00	0.00	0.00	177,022.70

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.3206	0.0333	30.0000	249.6163	69.2168	299.9996	0.0033	2,557.5125

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3,460.8400	6.0000	0.1667	21.5034	2.3188

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 30 Eff: 100.00 Crew Hrs: 692.17 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	692.17	MH	1.50	109.00	1.64	1,131.70
8COMPR04	Compressor 185 CFM 80HP	1.00	692.17	HR	15.81	100.00	15.81	10,943.21
8GEN050	Generator 45 KW	1.00	692.17	HR	18.78	100.00	18.78	13,001.03
8TRKGS05	Boom Truck 28,000# Cap	1.00	692.17	HR	67.10	100.00	67.10	46,443.91
8TRKGS10	Flatbed Truck 15K 200HP	1.00	692.17	HR	24.68	100.00	24.68	17,085.52
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	692.17	HR	15.72	100.00	15.72	10,882.99
9STGEN	Sm Tools - General	1.00	3,460.75	MH	0.90	100.00	0.90	3,114.68
LFORMN	Laborer-Foreman	1.00	692.17	MH	14.00	110.00	23.34	16,153.13
LGEN	Laborer-General	3.00	2,076.50	MH	12.00	110.00	20.62	42,826.83
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	692.17	MH	13.24	110.00	22.31	15,439.70

**Activity: 42 Load Tank (TS-06) Quantity: 5035672.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.05	0.00	0.00	0.07
Total	70,163.67	38,247.56	108,411.23	26,392.00	0.00	12,765.42	0.00	226,605.60	0.00	0.00	374,174.25

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0268	0.0003	3,000.0001	80.3090	167.8557	30,000.0006	0.0000	2,229.1420

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
5,035.6700	1,000.0004	0.0010	21.5287	0.0139

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 3000 Eff: 100.00 Crew Hrs: 1678.56 Labor Pcs: 3.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	5,035.67	MH	1.50	109.00	1.63	8,233.32
5VTRK	Vac Truck	1.00	1,678.56	HR	135.00	100.00	135.00	226,605.60
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1,678.56	HR	15.72	100.00	15.72	26,392.00
9STGEN	Sm Tools - General	1.00	5,035.67	MH	0.90	100.00	0.90	4,532.10
LFORMN	Laborer-Foreman	1.00	1,678.56	MH	14.00	110.00	23.34	39,172.45
LGEN	Laborer-General	2.00	3,357.11	MH	12.00	110.00	20.62	69,238.78

**Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 64664.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.69	1.09	0.00	0.08	0.00	0.00	0.00	0.00	1.87
Total	29,148.64	15,787.67	44,936.31	70,527.89	0.00	5,244.26	0.00	0.00	0.00	0.00	120,708.46

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7856	0.0080	125.0387	223.2694	51.7152	1,250.3867	0.0008	2,334.1002

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,068.6000	31.2598	0.0320	21.7231	0.4508

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250.3867 Eff: 100.00 Crew Hrs: 517.15 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	2,068.74	MH	1.50	109.00	1.64	3,382.39
8DEMO10	Breaker Attach Excavator H140S	1.00	517.15	HR	31.39	100.00	31.39	16,233.86
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	517.15	HR	83.58	100.00	83.58	43,225.47
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	517.15	HR	15.72	100.00	15.72	8,131.15
8TRKWTR02	Water Tank and Trailer 500 G	1.00	517.15	HR	5.68	100.00	5.68	2,937.41
9STGEN	Sm Tools - General	1.00	2,068.74	MH	0.90	100.00	0.90	1,861.87
LFORMN	Laborer-Foreman	1.00	517.15	MH	14.00	110.00	23.34	12,068.70
LGEN	Laborer-General	2.00	1,034.30	MH	12.00	110.00	20.62	21,331.95
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	517.15	MH	13.24	110.00	22.31	11,535.66

**Activity: 52 Load Rollofs (TS-07) Quantity: 1251.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.13	0.00	0.00	39.04
Total	4,499.85	2,408.57	6,908.42	10,944.89	0.00	792.83	0.00	30,188.75	0.00	0.00	48,834.89

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2712	0.0833	12.0002	171.2571	10.4249	120.0016	0.0083	4,684.4648

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
312.7500	4.0000	0.2500	22.0893	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0002 Eff: 100.00 Crew Hrs: 104.25 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	312.75	MH	1.50	109.00	1.64	511.35
5DH80	Rolloff Bin Delivery	1.00	63.00	EA	250.00	100.00	250.00	15,750.00
5DH81	Bin Rental	63.00	315.00	DY	25.00	100.00	25.00	7,875.00
5TRKBT	Bin Truck	1.00	52.51	HR	125.00	100.00	125.00	6,563.75
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	104.25	HR	83.58	100.00	83.58	8,713.63
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	104.25	HR	15.72	100.00	15.72	1,639.12
8TRKWTR02	Water Tank and Trailer 500 G	1.00	104.25	HR	5.68	100.00	5.68	592.14
9STGEN	Sm Tools - General	1.00	312.75	MH	0.90	100.00	0.90	281.48
LFORMN	Laborer-Foreman	1.00	104.25	MH	14.00	110.00	23.34	2,432.88
LGEN	Laborer-General	1.00	104.25	MH	12.00	110.00	20.62	2,150.11
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	104.25	MH	13.24	110.00	22.31	2,325.43

Activity: 60 Removal of Soil (TS-08) Quantity: 221.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.70	2.54	7.24	8.75	0.00	0.85	0.00	20.36	0.00	0.00	37.20
Total	1,038.10	562.26	1,600.36	1,933.87	0.00	186.75	0.00	4,500.00	0.00	0.00	8,220.98

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.9920	0.0833	12.0010	191.9192	1.8415	120.0096	0.0083	4,464.2361

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
73.6700	2.9999	0.3333	21.7234	4.6973

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.001 Eff: 100.00 Crew Hrs: 18.42 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	73.67	MH	1.50	109.00	1.63	120.45
5DH80	Rolloff Bin Delivery	1.00	12.00	EA	250.00	100.00	250.00	3,000.00
5DH81	Bin Rental	12.00	60.00	DY	25.00	100.00	25.00	1,500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	18.42	HR	83.58	100.00	83.58	1,539.62
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	18.42	HR	15.72	100.00	15.72	289.62
8TRKWTR02	Water Tank and Trailer 500 G	1.00	18.42	HR	5.68	100.00	5.68	104.63
9STGEN	Sm Tools - General	1.00	73.67	MH	0.90	100.00	0.90	66.30
LFORMN	Laborer-Foreman	1.00	18.42	MH	14.00	110.00	23.34	429.87
LGEN	Laborer-General	2.00	36.83	MH	12.00	110.00	20.62	759.60
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	18.42	MH	13.24	110.00	22.31	410.89

Activity: 70 Backfill and Grading (BF-02) Quantity: 1654.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	5,219.65	2,714.77	7,934.42	11,786.22	0.00	873.23	0.00	6,350.76	0.00	0.00	26,944.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9230	0.0417	24.0000	286.1518	6.8917	239.9999	0.0042	3,909.7389

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
344.6000	4.7998	0.2083	23.0250	3.1558

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 68.92 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	344.47	MH	1.50	109.00	1.64	563.21
5TRKED	Trucking - End Dump	1.00	69.03	HR	92.00	100.00	92.00	6,350.76
8BDZR05	Bulldozer Cat D5K2 XL	1.00	68.92	HR	53.11	100.00	53.11	3,660.41

8BHL426	BHL Cat 420E 1.25CY	1.00	68.92	HR	35.85	100.00	35.85	2,470.99
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	68.92	HR	60.65	100.00	60.65	4,179.72
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	68.92	HR	15.72	100.00	15.72	1,083.63
8TRKWTR02	Water Tank and Trailer 500 G	1.00	68.92	HR	5.68	100.00	5.68	391.47
9STGEN	Sm Tools - General	1.00	344.47	MH	0.90	100.00	0.90	310.02
LFORMN	Laborer-Foreman	1.00	68.92	MH	14.00	110.00	23.34	1,608.38
LGEN	Laborer-General	1.00	68.92	MH	12.00	110.00	20.62	1,421.44
OPDZ9	Op Eng 3- Dozer to D9	1.00	68.92	MH	16.59	110.00	26.85	1,850.47
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	68.92	MH	13.24	110.00	22.31	1,537.35
OPROLL	Op Eng - Rollers	1.00	68.92	MH	13.02	110.00	22.01	1,516.78

Activity: 80 Decontamination (DC-02) Quantity: 280144.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.89	0.00	0.92	0.00	0.00	0.00	0.00	2.83
Total	182,429.74	100,985.27	283,415.01	250,365.66	0.00	258,727.12	0.00	0.00	0.00	0.00	792,507.79

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.9054	0.0080	125.0000	238.1725	224.1152	1,250.0000	0.0008	3,536.1626

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
13,446.9100	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 2241.15 Labor Pcs: 6.00 Equipment Pcs: 7.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	496.24	ROLL	185.00	109.00	201.65	100,066.80
31PPE003	Level C Supplies	1.00	13,445.79	MH	10.00	109.00	10.90	146,559.11
8CONCEQ42	Pressure Washer 3,000psi	3.00	6,723.46	HR	6.07	100.00	6.07	40,797.96
8GEN100	Generator 125 KW	1.00	2,241.15	HR	47.42	100.00	47.42	106,279.82
8TRKGS10	Flatbed Truck 15K 200HP	1.00	2,241.15	HR	24.68	100.00	24.68	55,320.55
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2,241.15	HR	15.72	100.00	15.72	35,237.60
8TRKWTR02	Water Tank and Trailer 500 G	1.00	2,241.15	HR	5.68	100.00	5.68	12,729.73
9STGEN	Sm Tools - General	1.00	13,445.79	MH	0.90	100.00	0.90	12,101.21
LFORMN	Laborer-Foreman	1.00	2,241.15	MH	14.00	110.00	23.34	52,301.58
LGEN	Laborer-General	5.00	11,205.76	MH	12.00	110.00	20.62	231,113.43

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	6,146.00	2,390.13	8,536.13	0.00	0.00	1,711.00	35,971.88	0.00	0.00	0.00	46,219.01
Total	6,146.00	2,390.13	8,536.13	0.00	0.00	1,711.00	35,971.88	0.00	0.00	0.00	46,219.01

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
185.0000	0.0054	185.0000	46.1412	6,146.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	145.00	MH	10.00	109.00	10.90	1,580.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	172.00	EA	158.36	100.00	158.36	27,237.92
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	5.00	EA	359.21	100.00	359.21	1,796.05
4LAB03	Chlorinated herbicides (EPA 515)	1.00	5.00	EA	219.07	100.00	219.07	1,095.35
4LAB04	Cyanide (SW 9010)	1.00	5.00	EA	54.93	100.00	54.93	274.65
4LAB05	Metals (SW 6010)	1.00	149.00	EA	13.73	100.00	13.73	2,045.77
4LAB06	Total dissolved sulfide (SW 9030)	1.00	5.00	EA	17.77	100.00	17.77	88.85
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	13.00	EA	188.83	100.00	188.83	2,454.79



4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	5.00	EA	195.70	100.00	195.70	978.50
9STGEN	Sm Tools - General	1.00	145.00	MH	0.90	100.00	0.90	130.50
X122	→ Field Technician	1.00	145.00	MH	28.00	110.00	42.46	6,156.58
X124	→ Chemist	1.00	40.00	MH	42.00	100.00	59.49	2,379.55

**Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31,834.72	0.00	0.00	31,834.72
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31,834.72	0.00	0.00	31,834.72

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	4,000.00	MI	7.75	100.00	7.75	31,000.00
5TRKST01	Transportation - Bulk Solid	1.00	148.00	MI	5.64	100.00	5.64	834.72

**Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	852,454.82	0.00	0.00	0.00	852,454.82
Total	0.00	0.00	0.00	0.00	0.00	0.00	852,454.82	0.00	0.00	0.00	852,454.82

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	1,471.00	CY	96.38	100.00	96.38	141,774.98
4TD02	Treat & Dispose - Liquid Waste	1.00	50,357.00	GAL	1.67	100.00	1.67	84,096.19
4TD05	Treat & Dispose - Onsite Leachate	1.00	5,696,215.00	GAL	0.11	100.00	0.11	626,583.65

**Activity: 112 T&D of Decon Fluid (TD-03) Quantity: 371642.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.00	0.09	0.00	0.00	0.00	0.13
Total	7,085.93	3,805.96	10,891.89	3,895.53	0.00	0.00	31,714.94	0.00	0.00	0.00	46,502.36

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0398	0.0007	1,500.0008	59.6842	24.7761	15,000.0081	0.0001	1,876.9024

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
495.5200	750.0040	0.0013	21.9807	0.0191

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 1500.0008 Eff: 100.00 Crew Hrs: 247.76 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	371,642.00	GAL	0.07	100.00	0.07	26,014.94
4TK01	10K gal Holding Tanks	1.00	38.00	DY	150.00	100.00	150.00	5,700.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	247.76	HR	15.72	100.00	15.72	3,895.53
LFORMN	Laborer-Foreman	1.00	247.76	MH	14.00	110.00	23.34	5,781.96
LGEN	Laborer-General	1.00	247.76	MH	12.00	110.00	20.62	5,109.93

**Activity: 120 Tank Systems Certification of Closure (TS\_09 -1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
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X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**170**

**Unit 1700**

Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	24,109.91	12,636.46	36,746.37	32,382.66	0.00	18,747.20	53,941.84	19,545.43	0.00	0.00	161,363.50
Total	24,109.91	12,636.46	36,746.37	32,382.66	0.00	18,747.20	53,941.84	19,545.43	0.00	0.00	161,363.50

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	1,573.8300	0.0006	1,573.8300	102.5292	15.3193	23.3484	0.0034

**Activity: 10 Removal of Waste (TS-03) Quantity: 107086.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.05	0.00	0.00	0.08
Total	895.23	488.01	1,383.24	983.93	0.00	758.16	0.00	5,587.65	0.00	0.00	8,712.98

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0221	0.0002	5,000.0000	110.5266	2.1417	50,000.0000	0.0000	4,068.2162

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	64.2500	1,666.7082	0.0006	21.5290	0.0084

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 5000 Eff: 100.00 Crew Hrs: 21.42 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	64.25	MH	10.00	109.00	10.90	700.33
5VTRK	Vac Truck	1.00	41.39	HR	135.00	100.00	135.00	5,587.65
8GEN050	Generator 45 KW	1.00	21.42	HR	18.78	100.00	18.78	402.33
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	21.42	HR	11.43	100.00	11.43	244.81
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	21.42	HR	15.72	100.00	15.72	336.79
9STGEN	Sm Tools - General	1.00	64.25	MH	0.90	100.00	0.90	57.83
LFORMN	Laborer-Foreman	1.00	21.42	MH	14.00	110.00	23.34	499.89
LGEN	Laborer-General	2.00	42.83	MH	12.00	110.00	20.62	883.35

**Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 3070.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.04	0.02	0.06	0.06	0.00	0.04	0.00	0.00	0.00	0.00	0.16
Total	128.33	69.95	198.28	189.56	0.00	108.68	0.00	0.00	0.00	0.00	496.52

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.1263	0.0010	1,000.0000	126.3322	0.3070	10,000.0000	0.0001	1,617.3290

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	9.2100	333.3333	0.0030	21.5288	0.0418

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 1000 Eff: 100.00 Crew Hrs: 3.07 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	9.21	MH	10.00	109.00	10.90	100.39
8COMPR04	Compressor 185 CFM 80HP	1.00	3.07	HR	15.81	100.00	15.81	48.54
8GEN050	Generator 45 KW	1.00	3.07	HR	18.78	100.00	18.78	57.66
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	3.07	HR	11.43	100.00	11.43	35.09
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.07	HR	15.72	100.00	15.72	48.27
9STGEN	Sm Tools - General	1.00	9.21	MH	0.90	100.00	0.90	8.29

LFORMN	Laborer-Foreman	1.00	3.07	MH	14.00	110.00	23.34	71.64
LGEN	Laborer-General	2.00	6.14	MH	12.00	110.00	20.63	126.64

Activity: 40 Excavation, Dissassembly & Loading (TS-06) Quantity: 2090.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.32	1.27	3.58	4.74	0.00	0.42	0.00	0.00	0.00	0.00	8.74
Total	4,846.39	2,644.08	7,490.47	9,900.03	0.00	883.03	0.00	0.00	0.00	0.00	18,273.53

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.3208	0.0333	29.9999	249.6239	6.9667	299.9994	0.0033	2,622.9897

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
348.3400	5.9999	0.1667	21.5033	2.3188

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 29.9999 Eff: 100.00 Crew Hrs: 69.67 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	348.34	MH	1.50	109.00	1.64	569.54
8COMPRO4	Compressor 185 CFM 80HP	1.00	69.67	HR	15.81	100.00	15.81	1,101.48
8GEN050	Generator 45 KW	1.00	69.67	HR	18.78	100.00	18.78	1,308.61
8TRKGS05	Boom Truck 28,000# Cap	1.00	69.67	HR	67.10	100.00	67.10	4,674.79
8TRKGS10	Flatbed Truck 15K 200HP	1.00	69.67	HR	24.68	100.00	24.68	1,719.73
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	69.67	HR	15.72	100.00	15.72	1,095.42
9STGEN	Sm Tools - General	1.00	348.32	MH	0.90	100.00	0.90	313.49
LFORMN	Laborer-Foreman	1.00	69.67	MH	14.00	110.00	23.34	1,625.88
LGEN	Laborer-General	3.00	209.00	MH	12.00	110.00	20.62	4,310.52
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	69.67	MH	13.24	110.00	22.31	1,554.07

Activity: 50 Demo and Removal of Containment (TS-07) Quantity: 5471.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.45	0.24	0.70	1.09	0.00	0.08	0.00	0.00	0.00	0.00	1.87
Total	2,467.06	1,336.23	3,803.29	5,969.26	0.00	443.83	0.00	0.00	0.00	0.00	10,216.38

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.7862	0.0080	125.0000	223.2807	4.3768	1,250.0000	0.0008	2,334.2122

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
175.0800	31.2486	0.0320	21.7232	0.4509

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 43.77 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	175.08	MH	1.50	109.00	1.64	286.26
8DEMO10	Breaker Attach Excavator H140S	1.00	43.77	HR	31.39	100.00	31.39	1,373.98
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	43.77	HR	83.58	100.00	83.58	3,658.47
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	43.77	HR	15.72	100.00	15.72	688.20
8TRKWTR02	Water Tank and Trailer 500 G	1.00	43.77	HR	5.68	100.00	5.68	248.61
9STGEN	Sm Tools - General	1.00	175.08	MH	0.90	100.00	0.90	157.57
LFORMN	Laborer-Foreman	1.00	43.77	MH	14.00	110.00	23.34	1,021.46
LGEN	Laborer-General	2.00	87.54	MH	12.00	110.00	20.62	1,805.48
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	43.77	MH	13.24	110.00	22.31	976.35

Activity: 52 Load Rollofs (TS-07) Quantity: 168.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	30.51	0.00	0.00	45.41
Total	604.30	323.46	927.76	1,469.82	0.00	106.47	0.00	5,125.00	0.00	0.00	7,629.05

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2713	0.0833	12.0002	171.2582	1.4000	120.0017	0.0083	5,449.3993

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
42.0000	4.0000	0.2500	22.0895	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0002 Eff: 100.00 Crew Hrs: 14.00 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	42.00	MH	1.50	109.00	1.64	68.67
5DH80	Rolloff Bin Delivery	1.00	9.00	EA	250.00	100.00	250.00	2,250.00
5DH81	Bin Rental	9.00	45.00	DY	25.00	100.00	25.00	1,125.00
5TRKBT	Bin Truck	1.00	14.00	HR	125.00	100.00	125.00	1,750.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	14.00	HR	83.58	100.00	83.58	1,170.18
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	14.00	HR	15.72	100.00	15.72	220.12
8TRKWTR02	Water Tank and Trailer 500 G	1.00	14.00	HR	5.68	100.00	5.68	79.52
9STGEN	Sm Tools - General	1.00	42.00	MH	0.90	100.00	0.90	37.80
LFORMN	Laborer-Foreman	1.00	14.00	MH	14.00	110.00	23.34	326.71
LGEN	Laborer-General	1.00	14.00	MH	12.00	110.00	20.63	288.75
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	14.00	MH	13.24	110.00	22.31	312.30

Activity: 60 Removal of Soil (TS-08) Quantity: 21.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.70	2.54	7.24	8.75	0.00	0.85	0.00	35.71	0.00	0.00	52.55
Total	98.64	53.43	152.07	183.73	0.00	17.75	0.00	750.00	0.00	0.00	1,103.55

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
15.9905	0.0833	12.0007	191.8967	0.1750	120.0069	0.0083	6,306.3604

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
7.0000	3.0000	0.3333	21.7243	4.6971

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12.0007 Eff: 100.00 Crew Hrs: 1.75 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	7.00	MH	1.50	109.00	1.64	11.45
5DH80	Rolloff Bin Delivery	1.00	2.00	EA	250.00	100.00	250.00	500.00
5DH81	Bin Rental	2.00	10.00	DY	25.00	100.00	25.00	250.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	1.75	HR	83.58	100.00	83.58	146.27
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.75	HR	15.72	100.00	15.73	27.52
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.75	HR	5.68	100.00	5.68	9.94
9STGEN	Sm Tools - General	1.00	7.00	MH	0.90	100.00	0.90	6.30
LFORMN	Laborer-Foreman	1.00	1.75	MH	14.00	110.00	23.34	40.84
LGEN	Laborer-General	2.00	3.50	MH	12.00	110.00	20.63	72.19
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.75	MH	13.24	110.00	22.31	39.04

Activity: 70 Backfill and Grading (BF-02) Quantity: 26.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.15	1.64	4.78	7.10	0.00	0.53	0.00	3.86	0.00	0.00	16.27
Total	81.80	42.56	124.36	184.69	0.00	13.72	0.00	100.28	0.00	0.00	423.05

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.8865	0.0417	24.0007	285.2857	0.1083	240.0074	0.0042	3,905.1971

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
5.4000	4.8148	0.2077	23.0296	3.1462

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0007 Eff: 100.00 Crew Hrs: 1.08 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	5.41	MH	1.50	109.00	1.64	8.85
5TRKED	Trucking - End Dump	1.00	1.09	HR	92.00	100.00	92.00	100.28
8BDZR05	Bulldozer Cat D5K2 XL	1.00	1.08	HR	53.11	100.00	53.11	57.36
8BHLD426	BHL Cat 420E 1.25CY	1.00	1.08	HR	35.85	100.00	35.85	38.72
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	1.08	HR	60.65	100.00	60.65	65.50
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.08	HR	15.72	100.00	15.72	16.98
8TRKWTR02	Water Tank and Trailer 500 G	1.00	1.08	HR	5.68	100.00	5.68	6.13
9STGEN	Sm Tools - General	1.00	5.41	MH	0.90	100.00	0.90	4.87
LFORMN	Laborer-Foreman	1.00	1.08	MH	14.00	110.00	23.33	25.20
LGEN	Laborer-General	1.00	1.08	MH	12.00	110.00	20.63	22.28
OPDZ9	Op Eng 3- Dozer to D9	1.00	1.08	MH	16.59	110.00	26.86	29.01
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.08	MH	13.24	110.00	22.31	24.09
OPROLL	Op Eng - Rollers	1.00	1.08	MH	13.02	110.00	22.02	23.78

Activity: 80 Decontamination (DC-02) Quantity: 16949.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.92	0.00	0.00	0.00	0.00	2.73
Total	11,037.16	6,109.71	17,146.87	13,501.64	0.00	15,648.56	0.00	0.00	0.00	0.00	46,297.07

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0348	13.5592	1,250.0000	0.0008	3,414.4396

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
813.5500	20.8334	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 135.59 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	30.00	ROLL	185.00	109.00	201.65	6,049.50
31PPE003	Level C Supplies	1.00	813.48	MH	10.00	109.00	10.90	8,866.93
8CONCEQ42	Pressure Washer 3,000psi	1.00	135.59	HR	6.07	100.00	6.07	822.76
8GEN100	Generator 125 KW	1.00	135.59	HR	47.42	100.00	47.42	6,429.95
8TRKGS10	Flatbed Truck 15K 200HP	1.00	135.59	HR	24.68	100.00	24.68	3,346.90
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	135.59	HR	15.72	100.00	15.72	2,131.88
8TRKWTR02	Water Tank and Trailer 500 G	1.00	135.59	HR	5.68	100.00	5.68	770.15
9STGEN	Sm Tools - General	1.00	813.48	MH	0.90	100.00	0.90	732.13
LFORMN	Laborer-Foreman	1.00	135.59	MH	14.00	110.00	23.34	3,164.27
LGEN	Laborer-General	5.00	677.96	MH	12.00	110.00	20.62	13,982.60

Activity: 90 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,674.00	1,037.67	3,711.67	0.00	0.00	767.00	7,815.82	0.00	0.00	0.00	12,294.49
Total	2,674.00	1,037.67	3,711.67	0.00	0.00	767.00	7,815.82	0.00	0.00	0.00	12,294.49

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
81.0000	0.0123	81.0000	45.8231	2,674.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	65.00	MH	10.00	109.00	10.90	708.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	14.00	EA	158.36	100.00	158.36	2,217.04
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	3.00	EA	359.21	100.00	359.21	1,077.63

4LAB03	Chlorinated herbicides (EPA 515)	1.00	3.00	EA	219.07	100.00	219.07	657.21
4LAB04	Cyanide (SW 9010)	1.00	3.00	EA	54.93	100.00	54.93	164.79
4LAB05	Metals (SW 6010)	1.00	99.00	EA	13.73	100.00	13.73	1,359.27
4LAB06	Total dissolved sulfide (SW 9030)	1.00	3.00	EA	17.77	100.00	17.77	53.31
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	9.00	EA	188.83	100.00	188.83	1,699.47
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	3.00	EA	195.70	100.00	195.70	587.10
9STGEN	Sm Tools - General	1.00	65.00	MH	0.90	100.00	0.90	58.50
X122	→ Field Technician	1.00	65.00	MH	28.00	110.00	42.46	2,759.85
X124	→ Chemist	1.00	16.00	MH	42.00	100.00	59.49	951.82

Activity: 100 Transportation (TR-01-1 and 01-02) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	1,030.00	MI	7.75	100.00	7.75	7,982.50

Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	46,126.02	0.00	0.00	0.00	46,126.02
Total	0.00	0.00	0.00	0.00	0.00	0.00	46,126.02	0.00	0.00	0.00	46,126.02

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	188.00	CY	96.38	100.00	96.38	18,119.44
4TD02	Treat & Dispose - Liquid Waste	1.00	10,402.00	GAL	1.67	100.00	1.67	17,371.34
4TD05	Treat & Dispose - Onsite Leachate	1.00	96,684.00	GAL	0.11	100.00	0.11	10,635.24

Activity: 120 Tank Systems Certification of Closure (TS\_09 -1) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**180**

**Unit 2000**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	28,455.40	14,981.57	43,436.97	43,752.60	0.00	19,140.68	90,114.64	18,322.01	0.00	0.00	214,766.90
Total	28,455.40	14,981.57	43,436.97	43,752.60	0.00	19,140.68	90,114.64	18,322.01	0.00	0.00	214,766.90

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
1,883.5100	0.0005	1,883.5100	114.0248	15.1076	23.0617	0.0027

Activity: 10 Removal of Waste (CS-03) Quantity: 16708.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	367.53	201.90	569.43	105.03	0.00	315.42	0.00	0.00	0.00	0.00	989.88

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0404	0.0004	2,500.0000	100.9187	0.6683	25,000.0000	0.0000	1,481.1468

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
26.7300	625.0655	0.0016	21.3030	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 6.68 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	26.73	MH	10.00	109.00	10.90	291.36
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6.68	HR	15.72	100.00	15.72	105.03
9STGEN	Sm Tools - General	1.00	26.73	MH	0.90	100.00	0.90	24.06
LFORMN	Laborer-Foreman	1.00	6.68	MH	14.00	110.00	23.34	155.90
LGEN	Laborer-General	3.00	20.05	MH	12.00	110.00	20.62	413.53

Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 19404.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	7,291.24	3,949.14	11,240.38	17,641.86	0.00	1,311.71	0.00	0.00	0.00	0.00	30,193.95

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	150.0000	223.2703	12.9360	1,500.0000	0.0007	2,334.1025

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
517.4400	37.5000	0.0267	21.7231	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500 Eff: 100.00 Crew Hrs: 129.36 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	517.44	MH	1.50	109.00	1.63	846.01
8DEMO10	Breaker Attach Excavator H140S	1.00	129.36	HR	31.39	100.00	31.39	4,060.74
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	129.36	HR	83.58	100.00	83.58	10,812.43
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	129.36	HR	15.72	100.00	15.72	2,033.93
8TRKWTR02	Water Tank and Trailer 500 G	1.00	129.36	HR	5.68	100.00	5.68	734.76
9STGEN	Sm Tools - General	1.00	517.44	MH	0.90	100.00	0.90	465.70
LFORMN	Laborer-Foreman	1.00	129.36	MH	14.00	110.00	23.34	3,018.87
LGEN	Laborer-General	2.00	258.72	MH	12.00	110.00	20.62	5,335.97
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	129.36	MH	13.24	110.00	22.31	2,885.54

Activity: 22 Load Rollofs (CS-04) Quantity: 578.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.08	0.00	0.00	38.98
Total	2,079.21	1,112.92	3,192.13	5,057.23	0.00	366.31	0.00	13,916.25	0.00	0.00	22,531.92

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2722	0.0833	12.0000	171.2669	4.8167	119.9999	0.0083	4,677.9040

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
144.5100	3.9997	0.2500	22.0893	3.5972

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform  
 Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 48.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	144.50	MH	1.50	109.00	1.64	236.26
5DH80	Rolloff Bin Delivery	1.00	29.00	EA	250.00	100.00	250.00	7,250.00
5DH81	Bin Rental	29.00	145.00	DY	25.00	100.00	25.00	3,625.00
5TRKBT	Bin Truck	1.00	24.33	HR	125.00	100.00	125.00	3,041.25
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	48.17	HR	83.58	100.00	83.58	4,026.24
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	48.17	HR	15.72	100.00	15.72	757.38
8TRKWTR02	Water Tank and Trailer 500 G	1.00	48.17	HR	5.68	100.00	5.68	273.61
9STGEN	Sm Tools - General	1.00	144.50	MH	0.90	100.00	0.90	130.05
LFORMN	Laborer-Foreman	1.00	48.17	MH	14.00	110.00	23.34	1,124.15
LGEN	Laborer-General	1.00	48.17	MH	12.00	110.00	20.62	993.48
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	48.17	MH	13.24	110.00	22.31	1,074.50

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63
Total	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
632.2100	4.0000	0.2500	158.0525	0.4000	2.5000	0.4000	1,656.5750

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.0000	0.0833	12.0000	22.0892	172.6600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 4 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: Removal:  
FRONT-END LOADERS - 1 ea  
BACKHOES - 1 ea

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	4.00	HR	67.10	100.00	67.10	268.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	4.00	HR	24.68	100.00	24.69	98.74
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	1.00	4.00	MH	12.00	110.00	20.63	82.50
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	4.00	MH	13.24	110.00	22.31	89.22

Activity: 40 Removal of Soil(CS-06) Quantity: 62.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.53	8.75	0.00	0.63	0.00	24.19	0.00	0.00	39.11
Total	223.16	119.45	342.61	542.79	0.00	39.32	0.00	1,500.00	0.00	0.00	2,424.72

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2806	0.0833	11.9999	171.3666	0.5167	119.9992	0.0083	4,692.9762

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
15.5100	3.9974	0.2502	22.0896	3.5994

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 5.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	15.51	MH	1.50	109.00	1.64	25.36
5DH80	Rolloff Bin Delivery	1.00	4.00	EA	250.00	100.00	250.00	1,000.00
5DH81	Bin Rental	4.00	20.00	DY	25.00	100.00	25.00	500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	5.17	HR	83.58	100.00	83.58	432.13
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.17	HR	15.72	100.00	15.72	81.29



8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.17	HR	5.68	100.00	5.68	29.37
9STGEN	Sm Tools - General	1.00	15.51	MH	0.90	100.00	0.90	13.96
LFORMN	Laborer-Foreman	1.00	5.17	MH	14.00	110.00	23.34	120.66
LGEN	Laborer-General	1.00	5.17	MH	12.00	110.00	20.62	106.62
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.17	MH	13.24	110.00	22.31	115.33

Activity: 50 Backfill and Grading (BF-01) Quantity: 640.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	2,019.85	1,050.50	3,070.35	4,560.92	0.00	337.97	0.00	2,454.56	0.00	0.00	10,423.80

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9239	0.0417	24.0001	286.1733	2.6667	240.0006	0.0042	3,908.9348

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
133.3500	4.7994	0.2084	23.0247	3.1560

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 26.67 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	133.32	MH	1.50	109.00	1.64	217.98
5TRKED	Trucking - End Dump	1.00	26.68	HR	92.00	100.00	92.00	2,454.56
8BDZR05	Bulldozer Cat D5K2 XL	1.00	26.67	HR	53.11	100.00	53.11	1,416.47
8BHLD426	BHL Cat 420E 1.25CY	1.00	26.67	HR	35.85	100.00	35.85	956.20
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	26.67	HR	60.65	100.00	60.65	1,617.43
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	26.67	HR	15.72	100.00	15.72	419.33
8TRKWTR02	Water Tank and Trailer 500 G	1.00	26.67	HR	5.68	100.00	5.68	151.49
9STGEN	Sm Tools - General	1.00	133.32	MH	0.90	100.00	0.90	119.99
LFORMN	Laborer-Foreman	1.00	26.67	MH	14.00	110.00	23.34	622.39
LGEN	Laborer-General	1.00	26.67	MH	12.00	110.00	20.62	550.04
OPDZ9	Op Eng 3- Dozer to D9	1.00	26.67	MH	16.59	110.00	26.85	716.07
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	26.67	MH	13.24	110.00	22.31	594.90
OPROLL	Op Eng - Rollers	1.00	26.67	MH	13.02	110.00	22.01	586.95

Activity: 60 Decontamination (DC-02) Quantity: 19404.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.83	0.00	0.00	0.00	0.00	2.63
Total	12,635.85	6,994.67	19,630.52	15,457.35	0.00	16,031.53	0.00	0.00	0.00	0.00	51,119.40

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0350	15.5232	1,250.0000	0.0008	3,293.0968

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
931.3900	20.8334	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 155.23 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	25.00	ROLL	185.00	109.00	201.65	5,041.25
31PPE003	Level C Supplies	1.00	931.38	MH	10.00	109.00	10.90	10,152.04
8CONCEQ42	Pressure Washer 3,000psi	1.00	155.23	HR	6.07	100.00	6.07	941.94
8GEN100	Generator 125 KW	1.00	155.23	HR	47.42	100.00	47.42	7,361.32
8TRKGS10	Flatbed Truck 15K 200HP	1.00	155.23	HR	24.68	100.00	24.68	3,831.70
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	155.23	HR	15.72	100.00	15.72	2,440.68
8TRKWTR02	Water Tank and Trailer 500 G	1.00	155.23	HR	5.68	100.00	5.68	881.71
9STGEN	Sm Tools - General	1.00	931.38	MH	0.90	100.00	0.90	838.24
LFORMN	Laborer-Foreman	1.00	155.23	MH	14.00	110.00	23.34	3,622.59

LGEM	Laborer-General	5.00	776.16	MH	12.00	110.00	20.62	16,007.93
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**Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,352.00	909.42	3,261.42	0.00	0.00	708.00	11,352.36	0.00	0.00	0.00	15,321.78
Total	2,352.00	909.42	3,261.42	0.00	0.00	708.00	11,352.36	0.00	0.00	0.00	15,321.78

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
72.0000	0.0139	72.0000	45.2975	2,352.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	60.00	MH	10.00	109.00	10.90	654.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	21.00	EA	158.36	100.00	158.36	3,325.56
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	2.00	EA	359.21	100.00	359.21	718.42
4LAB03	Chlorinated herbicides (EPA 515)	1.00	2.00	EA	219.07	100.00	219.07	438.14
4LAB04	Cyanide (SW 9010)	1.00	2.00	EA	54.93	100.00	54.93	109.86
4LAB05	Metals (SW 6010)	1.00	98.00	EA	13.73	100.00	13.73	1,345.54
4LAB06	Total dissolved sulfide (SW 9030)	1.00	2.00	EA	17.77	100.00	17.77	35.54
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	10.00	EA	188.83	100.00	188.83	1,888.30
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	2.00	EA	195.70	100.00	195.70	391.40
4LAB10	Metals screen, furnace (24 TAT)	1.00	8.00	EA	82.40	100.00	82.40	659.20
4LAB12	Targeted TCLP (24 hr TAT)	1.00	2.00	EA	1,220.20	100.00	1,220.20	2,440.40
9STGEN	Sm Tools - General	1.00	60.00	MH	0.90	100.00	0.90	54.00
X122	→ Field Technician	1.00	60.00	MH	28.00	110.00	42.46	2,547.55
X124	→ Chemist	1.00	12.00	MH	42.00	100.00	59.49	713.87

**Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	80.00	MI	5.64	100.00	5.64	451.20

**Activity: 82 T&D of Decon Fluid (TR-03) Quantity: 19404.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Total	36.90	19.80	56.70	20.28	0.00	0.00	1,658.28	0.00	0.00	0.00	1,735.26

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0040	0.0001	15,000.0000	59.5083	0.1294	150,000.0000	0.0000	13,414.1929

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2.5800	7,520.9302	0.0001	21.9767	0.0019

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 15000 Eff: 100.00 Crew Hrs: 1.29 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	19,404.00	GAL	0.07	100.00	0.07	1,358.28
4TK01	10K gal Holding Tanks	1.00	2.00	DY	150.00	100.00	150.00	300.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.29	HR	15.72	100.00	15.72	20.28
LFORMN	Laborer-Foreman	1.00	1.29	MH	14.00	110.00	23.33	30.10
LGEM	Laborer-General	1.00	1.29	MH	12.00	110.00	20.62	26.60

**Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	800.00	CY	96.38	100.00	96.38	77,104.00

Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**190**

**Unit 2200**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	67,847.75	36,287.84	104,135.59	111,010.16	0.00	48,096.34	686,469.66	95,025.22	0.00	0.00	1,044,736.97
Total	67,847.75	36,287.84	104,135.59	111,010.16	0.00	48,096.34	686,469.66	95,025.22	0.00	0.00	1,044,736.97

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	4,665.3200	0.0002	4,665.3200	223.9368	14.5430	22.3212	0.0011

Activity: 10 Removal of Waste (CS-03) Quantity: 48300.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.06
Total	1,062.60	583.67	1,646.27	303.77	0.00	912.02	0.00	0.00	0.00	0.00	2,862.06

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0404	0.0004	2,500.0000	100.9337	1.9320	25,000.0000	0.0000	1,481.3975

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	77.2800	625.0000	0.0016	21.3027	0.0220

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 2500 Eff: 100.00 Crew Hrs: 19.32 Labor Pcs: 4.00 Equipment Pcs: 1.00

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	77.29	MH	10.00	109.00	10.90	842.46
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	19.32	HR	15.72	100.00	15.72	303.77
9STGEN	Sm Tools - General	1.00	77.29	MH	0.90	100.00	0.90	69.56
LFORMN	Laborer-Foreman	1.00	19.32	MH	14.00	110.00	23.34	450.87
LGEN	Laborer-General	3.00	57.96	MH	12.00	110.00	20.62	1,195.40

Activity: 20 Demo and Removal of Pads (CS-04) Quantity: 49430.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	18,573.75	10,060.03	28,633.78	44,940.65	0.00	3,341.46	0.00	0.00	0.00	0.00	76,915.89

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	1.4885	0.0067	150.0000	223.2686	32.9533	1,500.0002	0.0007	2,334.0855

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,318.1300	37.5001	0.0267	21.7230	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500.0002 Eff: 100.00 Crew Hrs: 329.53 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,318.13	MH	1.50	109.00	1.63	2,155.14
8DEMO10	Breaker Attach Excavator H140S	1.00	329.53	HR	31.39	100.00	31.39	10,344.28
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	329.53	HR	83.58	100.00	83.58	27,543.44
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	329.53	HR	15.72	100.00	15.72	5,181.20
8TRKWTR02	Water Tank and Trailer 500 G	1.00	329.53	HR	5.68	100.00	5.68	1,871.73
9STGEN	Sm Tools - General	1.00	1,318.13	MH	0.90	100.00	0.90	1,186.32
LFORMN	Laborer-Foreman	1.00	329.53	MH	14.00	110.00	23.34	7,690.22
LGEN	Laborer-General	2.00	659.07	MH	12.00	110.00	20.62	13,592.99
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	329.53	MH	13.24	110.00	22.31	7,350.57

Activity: 22 Load Rollofs (CS-04) Quantity: 1295.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.08	0.00	0.00	38.99
Total	4,658.26	2,493.35	7,151.61	11,330.21	0.00	820.71	0.00	31,187.50	0.00	0.00	50,490.03

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2717	0.0833	12.0000	171.2601	10.7917	120.0000	0.0083	4,678.6114

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
323.7600	3.9999	0.2500	22.0892	3.5971

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 107.92 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	323.75	MH	1.50	109.00	1.63	529.33
5DH80	Rolloff Bin Delivery	1.00	65.00	EA	250.00	100.00	250.00	16,250.00
5DH81	Bin Rental	65.00	325.00	DY	25.00	100.00	25.00	8,125.00
5TRKBT	Bin Truck	1.00	54.50	HR	125.00	100.00	125.00	6,812.50
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	107.92	HR	83.58	100.00	83.58	9,020.39
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	107.92	HR	15.72	100.00	15.72	1,696.83
8TRKWTR02	Water Tank and Trailer 500 G	1.00	107.92	HR	5.68	100.00	5.68	612.99
9STGEN	Sm Tools - General	1.00	323.75	MH	0.90	100.00	0.90	291.38
LFORMN	Laborer-Foreman	1.00	107.92	MH	14.00	110.00	23.34	2,518.53
LGEN	Laborer-General	1.00	107.92	MH	12.00	110.00	20.62	2,225.79
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	107.92	MH	13.24	110.00	22.31	2,407.29

Activity: 30 Removal of Process Equipment (CS-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63
Total	172.66	92.41	265.07	367.14	0.00	30.42	0.00	0.00	0.00	0.00	662.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
632.2100	4.0000	0.2500	158.0525	0.4000	2.5000	0.4000	1,656.5750

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.0000	0.0833	12.0000	22.0892	172.6600

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: CH 4 Eff: 100.00 Crew Hrs: 4.00 Labor Pcs: 3.00 Equipment Pcs: 2.00

Notes: Removal:  
FRONT-END LOADERS - 1 ea  
BACKHOES - 1 ea

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.00	MH	1.50	109.00	1.64	19.62
8TRKGS05	Boom Truck 28,000# Cap	1.00	4.00	HR	67.10	100.00	67.10	268.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	4.00	HR	24.68	100.00	24.69	98.74
9STGEN	Sm Tools - General	1.00	12.00	MH	0.90	100.00	0.90	10.80
LFORMN	Laborer-Foreman	1.00	4.00	MH	14.00	110.00	23.34	93.35
LGEN	Laborer-General	1.00	4.00	MH	12.00	110.00	20.63	82.50
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	4.00	MH	13.24	110.00	22.31	89.22

Activity: 40 Removal of Soil(CS-06) Quantity: 179.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	18.85	0.00	0.00	33.76
Total	644.00	344.69	988.69	1,566.41	0.00	113.52	0.00	3,375.00	0.00	0.00	6,043.62

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2743	0.0833	11.9999	171.2901	1.4917	119.9989	0.0083	4,051.5526

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
44.7600	3.9991	0.2501	22.0887	3.5978

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 14.92 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	44.78	MH	1.50	109.00	1.64	73.22
5DH80	Rolloff Bin Delivery	1.00	9.00	EA	250.00	100.00	250.00	2,250.00
5DH81	Bin Rental	9.00	45.00	DY	25.00	100.00	25.00	1,125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	14.92	HR	83.58	100.00	83.58	1,247.07
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	14.92	HR	15.72	100.00	15.72	234.59
8TRKWTR02	Water Tank and Trailer 500 G	1.00	14.92	HR	5.68	100.00	5.68	84.75
9STGEN	Sm Tools - General	1.00	44.78	MH	0.90	100.00	0.90	40.30
LFORMN	Laborer-Foreman	1.00	14.92	MH	14.00	110.00	23.34	348.18
LGEN	Laborer-General	1.00	14.92	MH	12.00	110.00	20.62	307.71
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	14.92	MH	13.24	110.00	22.31	332.80

Activity: 50 Backfill and Grading (BF-01) Quantity: 1842.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	5,812.66	3,023.18	8,835.84	13,125.25	0.00	972.81	0.00	7,064.68	0.00	0.00	29,998.58

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	24.0000	286.1380	7.6750	240.0000	0.0042	3,908.6098

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
383.7500	4.8000	0.2083	23.0250	3.1556

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 76.75 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	383.75	MH	1.50	109.00	1.63	627.43
5TRKED	Trucking - End Dump	1.00	76.79	HR	92.00	100.00	92.00	7,064.68
8BDZR05	Bulldozer Cat D5K2 XL	1.00	76.75	HR	53.11	100.00	53.11	4,076.27
8BHL426	BHL Cat 420E 1.25CY	1.00	76.75	HR	35.85	100.00	35.85	2,751.72
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	76.75	HR	60.65	100.00	60.65	4,654.58
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	76.75	HR	15.72	100.00	15.72	1,206.74

8TRKWTR02	Water Tank and Trailer 500 G	1.00	76.75	HR	5.68	100.00	5.68	435.94
9STGEN	Sm Tools - General	1.00	383.75	MH	0.90	100.00	0.90	345.38
LFORMN	Laborer-Foreman	1.00	76.75	MH	14.00	110.00	23.34	1,791.11
LGEN	Laborer-General	1.00	76.75	MH	12.00	110.00	20.62	1,582.93
OPDZ9	Op Eng 3- Dozer to D9	1.00	76.75	MH	16.59	110.00	26.85	2,060.70
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	76.75	MH	13.24	110.00	22.31	1,712.00
OPROLL	Op Eng - Rollers	1.00	76.75	MH	13.02	110.00	22.01	1,689.10

Activity: 60 Decontamination (DC-02) Quantity: 49430.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.83	0.00	0.00	0.00	0.00	2.64
Total	32,188.82	17,818.34	50,007.16	39,376.73	0.00	40,902.40	0.00	0.00	0.00	0.00	130,286.29

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0365	39.5440	1,250.0000	0.0008	3,294.7170

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,372.6400	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 395.44 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	64.00	ROLL	185.00	109.00	201.65	12,905.60
31PPE003	Level C Supplies	1.00	2,372.61	MH	10.00	109.00	10.90	25,861.45
8CONCEQ42	Pressure Washer 3,000psi	1.00	395.44	HR	6.07	100.00	6.07	2,399.53
8GEN100	Generator 125 KW	1.00	395.44	HR	47.42	100.00	47.42	18,752.56
8TRKGS10	Flatbed Truck 15K 200HP	1.00	395.44	HR	24.68	100.00	24.68	9,761.04
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	395.44	HR	15.72	100.00	15.72	6,217.50
8TRKWTR02	Water Tank and Trailer 500 G	1.00	395.44	HR	5.68	100.00	5.68	2,246.10
9STGEN	Sm Tools - General	1.00	2,372.61	MH	0.90	100.00	0.90	2,135.35
LFORMN	Laborer-Foreman	1.00	395.44	MH	14.00	110.00	23.34	9,228.36
LGEN	Laborer-General	5.00	1,977.20	MH	12.00	110.00	20.62	40,778.80

Activity: 70 Sampling and Analysis (SA-02) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3,458.00	1,340.81	4,798.81	0.00	0.00	1,003.00	24,045.60	0.00	0.00	0.00	29,847.41
Total	3,458.00	1,340.81	4,798.81	0.00	0.00	1,003.00	24,045.60	0.00	0.00	0.00	29,847.41

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
105.0000	0.0095	105.0000	45.7030	3,458.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	85.00	MH	10.00	109.00	10.90	926.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	54.00	EA	158.36	100.00	158.36	8,551.44
4LAB02	Base/neutral & acid extract org (SW 3550/SW 8270)	1.00	5.00	EA	359.21	100.00	359.21	1,796.05
4LAB03	Chlorinated herbicides (EPA 515)	1.00	5.00	EA	219.07	100.00	219.07	1,095.35
4LAB04	Cyanide (SW 9010)	1.00	5.00	EA	54.93	100.00	54.93	274.65
4LAB05	Metals (SW 6010)	1.00	149.00	EA	13.73	100.00	13.73	2,045.77
4LAB06	Total dissolved sulfide (SW 9030)	1.00	5.00	EA	17.77	100.00	17.77	88.85
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	13.00	EA	188.83	100.00	188.83	2,454.79
4LAB08	Dioxins & Dibenzofurans (SW3550/SW 8280)	1.00	5.00	EA	195.70	100.00	195.70	978.50
4LAB10	Metals screen, furnace (24 TAT)	1.00	8.00	EA	82.40	100.00	82.40	659.20

4LAB12	Targeted TCLP (24 hr TAT)	1.00	5.00	EA	1,220.20	100.00	1,220.20	6,101.00
9STGEN	Sm Tools - General	1.00	85.00	MH	0.90	100.00	0.90	76.50
X122	→ Field Technician	1.00	85.00	MH	28.00	110.00	42.46	3,609.03
X124	→ Chemist	1.00	20.00	MH	42.00	100.00	59.49	1,189.78

**Activity: 80 Transportation (TR-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53,398.04	0.00	0.00	53,398.04
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53,398.04	0.00	0.00	53,398.04

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKLQ02	Transportation - Bulk (500 mi)	1.00	6,500.00	MI	7.75	100.00	7.75	50,375.00
5TRKST01	Transportation - Bulk Solid	1.00	536.00	MI	5.64	100.00	5.64	3,023.04

**Activity: 90 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	662,424.06	0.00	0.00	0.00	662,424.06
Total	0.00	0.00	0.00	0.00	0.00	0.00	662,424.06	0.00	0.00	0.00	662,424.06

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	5,361.00	CY	96.38	100.00	96.38	516,693.18
4TD02	Treat & Dispose - Liquid Waste	1.00	87,264.00	GAL	1.67	100.00	1.67	145,730.88

**Activity: 100 Certification of Closure (CS-07) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**200**

**Landfill Trench 22**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	589,549.86	310,745.53	900,295.39	1,340,038.26	1,061,481.51	99,623.32	515,305.00	1,241,916.36	0.00	0.00	5,158,659.84
Total	589,549.86	310,745.53	900,295.39	1,340,038.26	1,061,481.51	99,623.32	515,305.00	1,241,916.36	0.00	0.00	5,158,659.84

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
39,778.8800	0.0000	39,778.8800	129.6834	14.8207	22.6325	0.0000

**Activity: 10 Load Clay (LF-04) Quantity: 201250.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	0.34	0.00	0.03	0.00	0.00	0.00	0.00	0.63
Total	35,161.87	17,916.96	53,078.83	68,415.21	0.00	5,668.57	0.00	0.00	0.00	0.00	127,162.61

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.6037	0.0056	180.0000	108.6655	111.8056	1,799.9999	0.0006	1,137.3550

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,236.1200	89.9996	0.0111	23.7370	0.1747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800 Eff: 100.00 Crew Hrs: 1118.06 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	2,236.12	MH	1.50	109.00	1.64	3,656.06
8LDRW950	Loader Cat 950H 4CY	1.00	1,118.06	HR	61.19	100.00	61.19	68,415.21
9STGEN	Sm Tools - General	1.00	2,236.12	MH	0.90	100.00	0.90	2,012.51
LGEN	Laborer-General	1.00	1,118.06	MH	12.00	110.00	20.62	23,059.45
OPLDR6	Op Eng 2- Loader <6Y	1.00	1,118.06	MH	16.59	110.00	26.85	30,019.38

Activity: 12 Haul Clay (LF-04) Quantity: 201250.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0167	60.0000	0.0000	335.4167	600.0000	0.0017	920.0009

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 60 Eff: 100.00 Crew Hrs: 3354.17 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	3,354.17	HR	92.00	100.00	92.00	308,583.64

Activity: 14 Place and Compact Clay (LF-04) Quantity: 201250.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.33	0.17	0.51	1.79	0.00	0.06	0.00	0.00	0.00	0.00	2.35
Total	67,101.49	35,083.39	102,184.88	359,750.35	0.00	11,337.13	0.00	0.00	0.00	0.00	473,272.36

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.2953	0.0056	180.0000	413.1594	111.8056	1,799.9999	0.0006	4,232.9949

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
4,472.2400	44.9998	0.0222	22.8487	0.3334

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800 Eff: 100.00 Crew Hrs: 1118.06 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	4,472.24	MH	1.50	109.00	1.63	7,312.11
8BDZR08	Bulldozer Cat D8T	1.00	1,118.06	HR	192.35	100.00	192.35	215,059.96
8COMPACRT4	Compactor Dynapac CP271 30TN	1.00	1,118.06	HR	62.25	100.00	62.25	69,599.24
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1,118.06	HR	15.72	100.00	15.72	17,579.26
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	1,118.06	HR	51.44	100.00	51.44	57,511.89
9STGEN	Sm Tools - General	1.00	4,472.24	MH	0.90	100.00	0.90	4,025.02
GC	Grade Checker	1.00	1,118.06	MH	12.00	110.00	20.62	23,059.45
OPDZ9	Op Eng 3- Dozer to D9	1.00	1,118.06	MH	16.59	110.00	26.85	30,019.38
OPROLL	Op Eng - Rollers	1.00	1,118.06	MH	13.02	110.00	22.01	24,606.10
TDWT	Water Truck Driver	1.00	1,118.06	MH	12.95	110.00	21.91	24,499.95

Activity: 16 Testing of Clay Liner (LF-04) Quantity: 112.00 Unit: DY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	1,383.93	0.00	0.00	0.00	1,383.93
Total	0.00	0.00	0.00	0.00	0.00	0.00	155,000.00	0.00	0.00	0.00	155,000.00

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	9.9826	0.1002	0.0000	111.8056	1.0017	0.9983	1,386.3353

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform



Crew: ZZZ \*\*\*CUSTOM CREW\*\*\* Prod: US 1800 Eff: 100.00 Crew Hrs: 1118.06 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4QC01	Quality Control Tech	1.00	1,120.00	HR	125.00	100.00	125.00	140,000.00
4QC02	Geotech Lab Testing (1 per 2000 cy)	1.00	100.00	EA	150.00	100.00	150.00	15,000.00

Activity: 20 Installation of Geomembrane (LF-05) Quantity: 2362500.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.06	0.03	0.10	0.05	0.33	0.01	0.00	0.11	0.00	0.00	0.60
Total	150,067.22	82,055.79	232,123.01	108,755.29	784,125.56	27,449.34	0.00	262,500.00	0.00	0.00	1,414,953.20

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.1443	0.0004	2,400.0000	346.2891	98.4375	24,000.0000	0.0000	14,374.1277

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
10,828.1400	218.1815	0.0046	21.4370	0.0635

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 24000 Eff: 100.00 Crew Hrs: 984.38 Labor Pcs: 11.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2EG78	40 mil HDPE Liner	1.00	2,480,625.00	SF	0.29	109.00	0.32	784,125.56
31PPE004	Level D Supplies	1.00	10,828.14	MH	1.50	109.00	1.64	17,704.01
5WEDGE01	Wedge Welder Rental	2.00	1,050.00	DY	250.00	100.00	250.00	262,500.00
8FORK04	Forklift Cat TL1055 10K#, 55	1.00	984.38	HR	51.29	100.00	51.29	50,489.83
8GEN050	Generator 45 KW	1.00	984.38	HR	18.78	100.00	18.78	18,489.61
8TRKGS10	Flatbed Truck 15K 200HP	1.00	984.38	HR	24.68	100.00	24.68	24,298.44
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	984.38	HR	15.72	100.00	15.72	15,477.41
9STGEN	Sm Tools - General	1.00	10,828.14	MH	0.90	100.00	0.90	9,745.33
LFORMN	Laborer-Foreman	1.00	984.38	MH	14.00	110.00	23.34	22,972.42
LGEN	Laborer-General	9.00	8,859.38	MH	12.00	110.00	20.62	182,720.46
OPLDR6	Op Eng 2- Loader <6Y	1.00	984.38	MH	16.59	110.00	26.85	26,430.13

Activity: 22 Geomembrane Quality Control (LF-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	142,500.00	0.00	0.00	0.00	142,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	142,500.00	0.00	0.00	0.00	142,500.00

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4QC01	Quality Control Tech	1.00	980.00	HR	125.00	100.00	125.00	122,500.00
4QCL	Liner QC	1.00	1.00	LS	20,000.00	100.00	20,000.00	20,000.00

Activity: 30 Drainage Layer (LF-06) Quantity: 2362500.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.04	0.02	0.07	0.04	0.11	0.01	0.00	0.00	0.00	0.00	0.23
Total	104,631.45	56,343.07	160,974.52	96,282.90	269,602.78	17,687.25	0.00	0.00	0.00	0.00	544,547.45

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.1089	0.0004	2,250.0000	245.0071	105.0000	22,500.0000	0.0000	5,186.1662

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
7,350.0000	321.4286	0.0031	21.9013	0.0443

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 22500 Eff: 100.00 Crew Hrs: 1050.00 Labor Pcs: 7.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2EG58	8 oz Non Woven Geo Fabric (15'x300')	1.00	566.00	ROLL	437.00	109.00	476.33	269,602.78

31PPE004	Level D Supplies	1.00	7,350.00	MH	1.50	109.00	1.64	12,017.25
8FORK04	Forklift Cat TL1055 10K#, 55	1.00	1,050.00	HR	51.29	100.00	51.29	53,855.55
8TRKGS10	Flatbed Truck 15K 200HP	1.00	1,050.00	HR	24.68	100.00	24.68	25,918.20
8TRKPUS5	Leased 4x4, 3/4 Ton Gas Super	1.00	1,050.00	HR	15.72	100.00	15.72	16,509.15
9STGEN	Sm Tools - General	1.00	6,300.00	MH	0.90	100.00	0.90	5,670.00
LFORMN	Laborer-Foreman	1.00	1,050.00	MH	14.00	110.00	23.34	24,503.79
LGEN	Laborer-General	5.00	5,250.00	MH	12.00	110.00	20.62	108,278.73
OPLDR6	Op Eng 2- Loader <6Y	1.00	1,050.00	MH	16.59	110.00	26.85	28,192.00

Activity: 32 Drainage Piping (LF-06) Quantity: 1250.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.54	0.79	2.33	4.51	4.91	0.25	0.00	0.00	0.00	0.00	12.00
Total	1,919.16	990.78	2,909.94	5,640.57	6,131.25	316.88	0.00	0.00	0.00	0.00	14,998.64

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
6.8404	0.0250	40.0000	273.6163	3.1250	400.0000	0.0025	4,799.5648

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
125.0000	10.0000	0.1000	23.2795	1.5353

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 400 Eff: 100.00 Crew Hrs: 31.25 Labor Pcs: 4.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2DA08	8" ADS Pipe	1.00	1,250.00	LF	4.50	109.00	4.91	6,131.25
31PPE004	Level D Supplies	1.00	125.00	MH	1.50	109.00	1.64	204.38
8COMPACW06	Compactor Plate 25IN (9200#)	1.00	31.25	HR	5.88	100.00	5.88	183.75
8COMPACW12	Compactor Bomag BW755-2 W=30	1.00	31.25	HR	13.68	100.00	13.68	427.38
8EXC011	Excavator Cat 329D L (28.1-33TN)	1.00	31.25	HR	97.30	100.00	97.30	3,040.69
8LDRW930	Loader Cat 930H 2.6 CY	1.00	31.25	HR	47.92	100.00	47.92	1,497.41
8TRKPUS5	Leased 4x4, 3/4 Ton Gas Super	1.00	31.25	HR	15.72	100.00	15.72	491.34
9STGEN	Sm Tools - General	1.00	125.00	MH	0.90	100.00	0.90	112.50
LFORMN	Laborer-Foreman	1.00	31.25	MH	14.00	110.00	23.34	729.29
LGEN	Laborer-General	1.00	31.25	MH	12.00	110.00	20.62	644.52
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	31.25	MH	13.24	110.00	22.31	697.08
OPLDR6	Op Eng 2- Loader <6Y	1.00	31.25	MH	16.59	110.00	26.85	839.05

Activity: 40 Load Common (LF-07) Quantity: 87500.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	0.34	0.00	0.03	0.00	0.00	0.00	0.00	0.63
Total	15,287.67	7,789.95	23,077.62	29,745.56	0.00	2,464.61	0.00	0.00	0.00	0.00	55,287.79

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.6037	0.0056	180.0000	108.6648	48.6111	1,800.0000	0.0006	1,137.3488

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
972.2200	90.0002	0.0111	23.7370	0.1747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800 Eff: 100.00 Crew Hrs: 486.11 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	972.23	MH	1.50	109.00	1.64	1,589.60
8LDRW950	Loader Cat 950H 4CY	1.00	486.11	HR	61.19	100.00	61.19	29,745.56
9STGEN	Sm Tools - General	1.00	972.23	MH	0.90	100.00	0.90	875.01
LGEN	Laborer-General	1.00	486.11	MH	12.00	110.00	20.62	10,025.79
OPLDR6	Op Eng 2- Loader <6Y	1.00	486.11	MH	16.59	110.00	26.85	13,051.83

Activity: 42 Haul Common (LF-07) Quantity: 87500.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0167	60.0000	0.0000	145.8333	600.0000	0.0017	919.9979

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 60 Eff: 100.00 Crew Hrs: 1458.33 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	1,458.33	HR	92.00	100.00	92.00	134,166.36

Activity: 44 Place and Compact Earthen Layer (LF-07) Quantity: 87500.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.33	0.17	0.51	1.79	0.00	0.06	0.00	0.00	0.00	0.00	2.35
Total	29,174.38	15,253.57	44,427.95	156,412.21	0.00	4,929.19	0.00	0.00	0.00	0.00	205,769.35

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.2953	0.0056	180.0000	413.1569	48.6111	1,800.0000	0.0006	4,232.9696

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,944.4400	45.0001	0.0222	22.8487	0.3334

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800 Eff: 100.00 Crew Hrs: 486.11 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,944.45	MH	1.50	109.00	1.64	3,179.18
8BDZR08	Bulldozer Cat D8T	1.00	486.11	HR	192.35	100.00	192.35	93,503.74
8COMPACRT4	Compactor Dynapac CP271 30TN	1.00	486.11	HR	62.25	100.00	62.25	30,260.35
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	486.11	HR	15.72	100.00	15.72	7,643.11
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	486.11	HR	51.44	100.00	51.44	25,005.01
9STGEN	Sm Tools - General	1.00	1,944.45	MH	0.90	100.00	0.90	1,750.01
GC	Grade Checker	1.00	486.11	MH	12.00	110.00	20.62	10,025.79
OPDZ9	Op Eng 3- Dozer to D9	1.00	486.11	MH	16.59	110.00	26.85	13,051.83
OPROLL	Op Eng - Rollers	1.00	486.11	MH	13.02	110.00	22.01	10,698.24
TDWT	Water Truck Driver	1.00	486.11	MH	12.95	110.00	21.91	10,652.09

Activity: 50 Load Topsoil (LF-08) Quantity: 262500.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.26	0.13	0.40	0.51	0.00	0.04	0.00	0.00	0.00	0.00	0.95
Total	68,794.69	35,054.79	103,849.48	133,855.31	0.00	11,090.63	0.00	0.00	0.00	0.00	248,795.42

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.9055	0.0083	120.0000	108.6650	218.7500	1,200.0000	0.0008	1,137.3505

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
4,375.0000	60.0000	0.0167	23.7370	0.2621

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1200 Eff: 100.00 Crew Hrs: 2187.50 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	4,375.00	MH	1.50	109.00	1.64	7,153.13
8LDRW950	Loader Cat 950H 4CY	1.00	2,187.50	HR	61.19	100.00	61.19	133,855.31
9STGEN	Sm Tools - General	1.00	4,375.00	MH	0.90	100.00	0.90	3,937.50
LGEN	Laborer-General	1.00	2,187.50	MH	12.00	110.00	20.62	45,116.14
OPLDR6	Op Eng 2- Loader <6Y	1.00	2,187.50	MH	16.59	110.00	26.85	58,733.34

Activity: 52 Haul Topsoil (LF-08) Quantity: 262500.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0222	45.0000	0.0000	583.3333	450.0000	0.0022	919.9995

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 45 Eff: 100.00 Crew Hrs: 5833.33 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	5,833.33	HR	92.00	100.00	92.00	536,666.36

Activity: 54 Place Topsoil (LF-08) Quantity: 262500.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	1.29	0.00	0.06	0.00	0.00	0.00	0.00	1.93
Total	99,955.63	51,828.37	151,784.00	338,329.68	0.00	16,635.94	0.00	0.00	0.00	0.00	506,749.62

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	1.8671	0.0083	120.0000	224.0520	218.7500	1,200.0000	0.0008	2,316.5697

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	6,562.5000	40.0000	0.0250	23.1290	0.3808

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1200 Eff: 100.00 Crew Hrs: 2187.50 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	6,562.50	MH	1.50	109.00	1.64	10,729.69
8LDRW966	Loader Cat 966H 5.5CY	1.00	2,187.50	HR	87.50	100.00	87.50	191,412.81
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2,187.50	HR	15.72	100.00	15.72	34,394.06
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	2,187.50	HR	51.44	100.00	51.44	112,522.81
9STGEN	Sm Tools - General	1.00	6,562.50	MH	0.90	100.00	0.90	5,906.25
GC	Grade Checker	1.00	2,187.50	MH	12.00	110.00	20.62	45,116.14
OPLDR6	Op Eng 2- Loader <6Y	1.00	2,187.50	MH	16.59	110.00	26.85	58,733.34
TDWT	Water Truck Driver	1.00	2,187.50	MH	12.95	110.00	21.91	47,934.52

Activity: 60 Vegetative Cover - Soil Prep (LF-09) Quantity: 2362500.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total	1,979.47	932.89	2,912.36	13,006.31	0.00	274.97	0.00	0.00	0.00	0.00	16,193.64

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0067	0.0000	21,779.9949	146.7549	10.8471	217,799.9486	0.0000	1,492.8990

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	108.4700	21,780.2157	0.0000	26.8495	0.0008

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 217800 Eff: 100.00 Crew Hrs: 108.47 Labor Pcs: 1.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	108.47	MH	1.50	109.00	1.64	177.35
8DISKTR10	Rome 12' Wide Disk Harrow	1.00	108.47	HR	22.08	100.00	22.08	2,395.45
8DISKTR12	Case Magnum 290 Tractor	1.00	108.47	HR	97.82	100.00	97.82	10,610.86
9STGEN	Sm Tools - General	1.00	108.47	MH	0.90	100.00	0.90	97.62
OPLDR6	Op Eng 2- Loader <6Y	1.00	108.47	MH	16.59	110.00	26.85	2,912.36

Activity: 62 Vegetative Cover - Seeding (LF-09) Quantity: 54.23 Unit: AC

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4LAND	Landscape & Irrigation Sub	1.00	54.23	AC	3,500.00	100.00	3,500.00	189,805.00

Activity: 70 SW Control - Grass Ditches (LF-14) Quantity: 6890.00 Unit: LF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	1.55	0.80	2.35	4.28	0.00	0.25	0.00	0.00	0.00	0.00	6.88
Total	10,674.26	5,483.38	16,157.64	29,470.60	0.00	1,746.62	0.00	0.00	0.00	0.00	47,374.86

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
6.6224	0.0200	50.0000	331.1193	13.7800	500.0000	0.0020	3,437.9434

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
689.0000	10.0000	0.1000	23.4509	1.5492

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 500 Eff: 100.00 Crew Hrs: 137.80 Labor Pcs: 5.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	689.00	MH	1.50	109.00	1.64	1,126.52
8BDZR04LGP	Bulldozer Cat D4K2 LGP	1.00	137.80	HR	52.92	100.00	52.92	7,292.79
8EXC011	Excavator Cat 329D L (28.1-33TN)	1.00	137.80	HR	97.30	100.00	97.30	13,408.22
8LDRW930	Loader Cat 930H 2.6 CY	1.00	137.80	HR	47.92	100.00	47.92	6,602.96
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	137.80	HR	15.72	100.00	15.72	2,166.63
9STGEN	Sm Tools - General	1.00	689.00	MH	0.90	100.00	0.90	620.10
GC	Grade Checker	1.00	137.80	MH	12.00	110.00	20.62	2,842.06
LGEN	Laborer-General	1.00	137.80	MH	12.00	110.00	20.62	2,842.06
OPDZ9	Op Eng 3- Dozer to D9	1.00	137.80	MH	16.59	110.00	26.85	3,699.86
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	137.80	MH	13.24	110.00	22.31	3,073.80
OPLDR6	Op Eng 2- Loader <6Y	1.00	137.80	MH	16.59	110.00	26.85	3,699.86

Activity: 72 SW Control - Rip Rap Ditches (LF-14) Quantity: 70.00 Unit: LF

U. Cost	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
31.77	1.94	0.99	2.93	5.35	23.17	0.32	0.00	0.00	0.00	0.00	31.77
Total	135.57	69.63	205.20	374.27	1,621.92	22.19	0.00	0.00	0.00	0.00	2,223.58

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.2781	0.0250	40.0000	331.1257	0.1750	400.0000	0.0025	12,706.1714

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
8.7500	8.0000	0.1250	23.4514	1.9367

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 400 Eff: 100.00 Crew Hrs: 1.75 Labor Pcs: 5.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2AR25	12" Rip Rap	1.00	62.00	TN	24.00	109.00	26.16	1,621.92
31PPE004	Level D Supplies	1.00	8.75	MH	1.50	109.00	1.64	14.31
8BDZR04LGP	Bulldozer Cat D4K2 LGP	1.00	1.75	HR	52.92	100.00	52.93	92.62
8EXC011	Excavator Cat 329D L (28.1-33TN)	1.00	1.75	HR	97.30	100.00	97.30	170.28
8LDRW930	Loader Cat 930H 2.6 CY	1.00	1.75	HR	47.92	100.00	47.91	83.85
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	1.75	HR	15.72	100.00	15.73	27.52
9STGEN	Sm Tools - General	1.00	8.75	MH	0.90	100.00	0.90	7.88
GC	Grade Checker	1.00	1.75	MH	12.00	110.00	20.62	36.09
LGEN	Laborer-General	1.00	1.75	MH	12.00	110.00	20.62	36.09
OPDZ9	Op Eng 3- Dozer to D9	1.00	1.75	MH	16.59	110.00	26.85	46.99
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	1.75	MH	13.24	110.00	22.31	39.04
OPLDR6	Op Eng 2- Loader <6Y	1.00	1.75	MH	16.59	110.00	26.85	46.99

Activity: 80 Landfill Survey Plat (LF-15) Quantity: 54.20 Unit: AC

U. Cost	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
605.20	62.55	26.04	88.59	0.00	0.00	0.00	516.61	0.00	0.00	0.00	605.20
Total	3,390.00	1,411.60	4,801.60	0.00	0.00	0.00	28,000.00	0.00	0.00	0.00	32,801.60

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
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79.0000	0.6861	1.4576	60.7797	62.5461
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Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4SURV01	Survey Crew	1.00	10.00	DY	2,800.00	100.00	2,800.00	28,000.00
X112	→ Sr Engineer	1.00	25.00	MH	60.00	100.00	84.98	2,124.60
X114	→ CADD	1.00	54.00	MH	35.00	100.00	49.57	2,677.00

Activity: 100 Certification of Closure (LF-16) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**210**

**Landfill Trench 23**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	560,237.88	292,563.05	852,800.93	1,995,820.71	935,327.29	93,948.47	493,079.26	1,484,971.94	0.00	0.00	5,855,948.60
Total	560,237.88	292,563.05	852,800.93	1,995,820.71	935,327.29	93,948.47	493,079.26	1,484,971.94	0.00	0.00	5,855,948.60

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	37,232.9600	0.0000	37,232.9600	157.2786	15.0468	22.9045	0.0000

Activity: 2 Load Undifferentiated Fill (LF-03) Quantity: 765064.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	0.34	0.00	0.03	0.00	0.00	0.00	0.00	0.63
Total	133,669.57	68,112.21	201,781.78	260,083.78	0.00	21,549.38	0.00	0.00	0.00	0.00	483,414.94

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.6037	0.0056	180.0000	108.6652	425.0356	1,799.9999	0.0006	1,137.3517

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	8,500.7200	89.9999	0.0111	23.7370	0.1747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1799.9999 Eff: 100.00 Crew Hrs: 4250.36 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	8,500.74	MH	1.50	109.00	1.64	13,898.71
8LDRW950	Loader Cat 950H 4CY	1.00	4,250.36	HR	61.19	100.00	61.19	260,083.78
9STGEN	Sm Tools - General	1.00	8,500.74	MH	0.90	100.00	0.90	7,650.67
LGEN	Laborer-General	1.00	4,250.36	MH	12.00	110.00	20.62	87,661.63
OPLDR6	Op Eng 2- Loader <6Y	1.00	4,250.36	MH	16.59	110.00	26.85	114,120.15

Activity: 4 Haul Undifferentiated Fill (LF-03) Quantity: 765064.00 Unit: CY

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0000	0.0167	60.0000	0.0000	1,275.1067	600.0000	0.0017	920.0002

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 60 Eff: 100.00 Crew Hrs: 12751.07 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	12,751.07	HR	92.00	100.00	92.00	1,173,098.44

Activity: 6 Place and Compact Undifferentiated Fill (LF-03) Quantity: 765064.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.33	0.17	0.51	1.79	0.00	0.06	0.00	0.00	0.00	0.00	2.35
Total	255,089.61	133,371.28	388,460.89	1,367,608.59	0.00	43,098.78	0.00	0.00	0.00	0.00	1,799,168.26

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.2953	0.0056	180.0000	413.1582	425.0356	1,799.9999	0.0006	4,232.9828

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
17,001.4400	45.0000	0.0222	22.8487	0.3334

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1799.9999 Eff: 100.00 Crew Hrs: 4250.36 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	17,001.49	MH	1.50	109.00	1.64	27,797.44
8BDZR08	Bulldozer Cat D8T	1.00	4,250.36	HR	192.35	100.00	192.35	817,561.00
8COMPACRT4	Compactor Dynapac CP271 30TN	1.00	4,250.36	HR	62.25	100.00	62.25	264,584.91
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4,250.36	HR	15.72	100.00	15.72	66,828.41
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	4,250.36	HR	51.44	100.00	51.44	218,634.27
9STGEN	Sm Tools - General	1.00	17,001.49	MH	0.90	100.00	0.90	15,301.34
GC	Grade Checker	1.00	4,250.36	MH	12.00	110.00	20.62	87,661.63
OPDZ9	Op Eng 3- Dozer to D9	1.00	4,250.36	MH	16.59	110.00	26.85	114,120.15
OPROLL	Op Eng - Rollers	1.00	4,250.36	MH	13.02	110.00	22.01	93,541.31
TDWT	Water Truck Driver	1.00	4,250.36	MH	12.95	110.00	21.91	93,137.80

Activity: 10 Load Clay (LF-04) Quantity: 66435.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	0.34	0.00	0.03	0.00	0.00	0.00	0.00	0.63
Total	11,607.20	5,914.52	17,521.72	22,584.37	0.00	1,871.26	0.00	0.00	0.00	0.00	41,977.35

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.6037	0.0056	180.0000	108.6641	36.9083	1,800.0002	0.0006	1,137.3408

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
738.1600	90.0008	0.0111	23.7370	0.1747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800.0002 Eff: 100.00 Crew Hrs: 369.08 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	738.17	MH	1.50	109.00	1.64	1,206.91
8LDRW950	Loader Cat 950H 4CY	1.00	369.08	HR	61.19	100.00	61.19	22,584.37
9STGEN	Sm Tools - General	1.00	738.17	MH	0.90	100.00	0.90	664.35
LGEN	Laborer-General	1.00	369.08	MH	12.00	110.00	20.62	7,612.10
OPLDR6	Op Eng 2- Loader <6Y	1.00	369.08	MH	16.59	110.00	26.85	9,909.62

Activity: 12 Haul Clay (LF-04) Quantity: 66435.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0167	60.0000	0.0000	110.7250	600.0000	0.0017	920.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 60 Eff: 100.00 Crew Hrs: 1107.25 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	1,107.25	HR	92.00	100.00	92.00	101,867.00

**Activity: 14 Place and Compact Clay (LF-04) Quantity: 66435.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.33	0.17	0.51	1.79	0.00	0.06	0.00	0.00	0.00	0.00	2.35
Total	22,150.70	11,581.29	33,731.99	118,756.29	0.00	3,742.53	0.00	0.00	0.00	0.00	156,230.81

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.2953	0.0056	180.0000	413.1541	36.9083	1,800.0002	0.0006	4,232.9417

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,476.3200	45.0004	0.0222	22.8487	0.3334

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800.0002 Eff: 100.00 Crew Hrs: 369.08 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,476.34	MH	1.50	109.00	1.64	2,413.82
8BDZR08	Bulldozer Cat D8T	1.00	369.08	HR	192.35	100.00	192.35	70,992.91
8COMPACRT4	Compactor Dynapac CP271 30TN	1.00	369.08	HR	62.25	100.00	62.25	22,975.23
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	369.08	HR	15.72	100.00	15.72	5,803.04
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	369.08	HR	51.44	100.00	51.44	18,985.11
9STGEN	Sm Tools - General	1.00	1,476.34	MH	0.90	100.00	0.90	1,328.71
GC	Grade Checker	1.00	369.08	MH	12.00	110.00	20.62	7,612.10
OPDZ9	Op Eng 3- Dozer to D9	1.00	369.08	MH	16.59	110.00	26.85	9,909.62
OPROLL	Op Eng - Rollers	1.00	369.08	MH	13.02	110.00	22.01	8,122.66
TDWT	Water Truck Driver	1.00	369.08	MH	12.95	110.00	21.91	8,087.61

**Activity: 16 Testing of Clay Liner (LF-04) Quantity: 37.00 Unit: DY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	1,766.49	0.00	0.00	0.00	1,766.49
Total	0.00	0.00	0.00	0.00	0.00	0.00	65,360.00	0.00	0.00	0.00	65,360.00

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	9.9826	0.1002	0.0000	36.9358	1.0017	0.9983	1,769.5583

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ \*\*\*CUSTOM CREW\*\*\* Prod: US 1.0017 Eff: 100.00 Crew Hrs: 369.36 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4QC01	Quality Control Tech	1.00	370.00	HR	125.00	100.00	125.00	46,250.00
4QC03	Shelby Tube Sample Prep	1.00	21.00	EA	125.00	100.00	125.00	2,625.00
4QC04	Permeability	1.00	21.00	EA	305.00	100.00	305.00	6,405.00
4QC05	Standard Proctor	1.00	21.00	EA	170.00	100.00	170.00	3,570.00
4QC06	Atterberg Limits	1.00	21.00	EA	90.00	100.00	90.00	1,890.00
4QC07	Density	1.00	21.00	EA	60.00	100.00	60.00	1,260.00
4QC08	Grain Size	1.00	21.00	EA	85.00	100.00	85.00	1,785.00
4QC09	Organic Content	1.00	21.00	EA	60.00	100.00	60.00	1,260.00
4QC10	Soil Classification	1.00	21.00	EA	15.00	100.00	15.00	315.00

**Activity: 20 Installation of Geomembrane (LF-05) Quantity: 896875.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.06	0.03	0.10	0.05	0.33	0.01	0.00	0.11	0.00	0.00	0.60
Total	56,969.93	31,150.80	88,120.73	41,286.76	297,677.29	10,420.57	0.00	99,652.50	0.00	0.00	537,157.85

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.1443	0.0004	2,400.0001	346.2890	37.3698	24,000.0011	0.0000	14,374.1201



Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
4,110.6800	218.1817	0.0046	21.4370	0.0635

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 24000.0011 Eff: 100.00 Crew Hrs: 373.70 Labor Pcs: 11.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2EG78	40 mil HDPE Liner	1.00	941,718.73	SF	0.29	109.00	0.32	297,677.29
31PPE004	Level D Supplies	1.00	4,110.68	MH	1.50	109.00	1.63	6,720.96
5WEDGE01	Wedge Welder Rental	2.00	398.61	DY	250.00	100.00	250.00	99,652.50
8FORK04	Forklift Cat TL1055 10K#, 55	1.00	373.70	HR	51.29	100.00	51.29	19,167.45
8GEN050	Generator 45 KW	1.00	373.70	HR	18.78	100.00	18.78	7,019.21
8TRKGS10	Flatbed Truck 15K 200HP	1.00	373.70	HR	24.68	100.00	24.68	9,224.41
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	373.70	HR	15.72	100.00	15.72	5,875.69
9STGEN	Sm Tools - General	1.00	4,110.68	MH	0.90	100.00	0.90	3,699.61
LFORMN	Laborer-Foreman	1.00	373.70	MH	14.00	110.00	23.34	8,721.02
LGEN	Laborer-General	9.00	3,363.28	MH	12.00	110.00	20.62	69,366.04
OPLDR6	Op Eng 2- Loader <6Y	1.00	373.70	MH	16.59	110.00	26.85	10,033.67

Activity: 22 Geomembrane Quality Control (LF-05) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	62,500.00	0.00	0.00	0.00	62,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	62,500.00	0.00	0.00	0.00	62,500.00

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4QC01	Quality Control Tech	1.00	380.00	HR	125.00	100.00	125.00	47,500.00
4QCL	Liner QC	1.00	1.00	LS	15,000.00	100.00	15,000.00	15,000.00

Activity: 30 Drainage Layer (LF-06) Quantity: 896975.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.04	0.02	0.07	0.04	0.71	0.01	0.00	0.00	0.00	0.00	0.83
Total	39,725.81	21,391.97	61,117.78	36,556.32	637,650.00	6,715.35	0.00	0.00	0.00	0.00	742,039.45

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.1089	0.0004	2,249.9997	245.0087	39.8656	22,499.9975	0.0000	18,613.5464

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,790.6000	321.4273	0.0031	21.9013	0.0443

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 22500 Eff: 100.00 Crew Hrs: 398.66 Labor Pcs: 7.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2EG56	Geocomposite (15' x 200')	1.00	300.00	ROLL	1,950.00	109.00	2,125.50	637,650.00
31PPE004	Level D Supplies	1.00	2,790.59	MH	1.50	109.00	1.63	4,562.61
8FORK04	Forklift Cat TL1055 10K#, 55	1.00	398.66	HR	51.29	100.00	51.29	20,447.67
8TRKGS10	Flatbed Truck 15K 200HP	1.00	398.66	HR	24.68	100.00	24.68	9,840.52
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	398.66	HR	15.72	100.00	15.72	6,268.13
9STGEN	Sm Tools - General	1.00	2,391.93	MH	0.90	100.00	0.90	2,152.74
LFORMN	Laborer-Foreman	1.00	398.66	MH	14.00	110.00	23.34	9,303.50
LGEN	Laborer-General	5.00	1,993.28	MH	12.00	110.00	20.62	41,110.45
OPLDR6	Op Eng 2- Loader <6Y	1.00	398.66	MH	16.59	110.00	26.85	10,703.83

Activity: 40 Load Common (LF-07) Quantity: 49826.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	0.34	0.00	0.03	0.00	0.00	0.00	0.00	0.63
Total	8,705.40	4,435.89	13,141.29	16,938.28	0.00	1,403.46	0.00	0.00	0.00	0.00	31,483.03

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.6037	0.0056	180.0000	108.6646	27.6811	1,800.0001	0.0006	1,137.3471

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
553.6200	90.0004	0.0111	23.7370	0.1747

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800.0001 Eff: 100.00 Crew Hrs: 276.81 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	553.63	MH	1.50	109.00	1.64	905.19
8LDRW950	Loader Cat 950H 4CY	1.00	276.81	HR	61.19	100.00	61.19	16,938.28
9STGEN	Sm Tools - General	1.00	553.63	MH	0.90	100.00	0.90	498.27
LGEN	Laborer-General	1.00	276.81	MH	12.00	110.00	20.62	5,709.07
OPLDR6	Op Eng 2- Loader <6Y	1.00	276.81	MH	16.59	110.00	26.85	7,432.22

Activity: 42 Haul Common (LF-07) Quantity: 49826.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0167	60.0000	0.0000	83.0433	600.0000	0.0017	919.9963

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 60 Eff: 100.00 Crew Hrs: 830.43 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	830.43	HR	92.00	100.00	92.00	76,399.56

Activity: 44 Place and Compact Earthern Layer (LF-07) Quantity: 49826.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.33	0.17	0.51	1.79	0.00	0.06	0.00	0.00	0.00	0.00	2.35
Total	16,613.03	8,685.96	25,298.99	89,067.21	0.00	2,806.88	0.00	0.00	0.00	0.00	117,173.08

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2.2953	0.0056	180.0000	413.1561	27.6811	1,800.0001	0.0006	4,232.9618

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,107.2400	45.0002	0.0222	22.8487	0.3334

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1800.0001 Eff: 100.00 Crew Hrs: 276.81 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	1,107.25	MH	1.50	109.00	1.63	1,810.35
8BDZR08	Bulldozer Cat D8T	1.00	276.81	HR	192.35	100.00	192.35	53,244.68
8COMPACRT4	Compactor Dynapac CP271 30TN	1.00	276.81	HR	62.25	100.00	62.25	17,231.42
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	276.81	HR	15.72	100.00	15.72	4,352.28
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	276.81	HR	51.44	100.00	51.44	14,238.83
9STGEN	Sm Tools - General	1.00	1,107.25	MH	0.90	100.00	0.90	996.53
GC	Grade Checker	1.00	276.81	MH	12.00	110.00	20.62	5,709.07
OPDZ9	Op Eng 3- Dozer to D9	1.00	276.81	MH	16.59	110.00	26.85	7,432.22
OPROLL	Op Eng - Rollers	1.00	276.81	MH	13.02	110.00	22.01	6,091.98
TDWT	Water Truck Driver	1.00	276.81	MH	12.95	110.00	21.91	6,065.72

Activity: 50 Load Topsoil (LF-08) Quantity: 16608.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.26	0.13	0.40	0.51	0.00	0.04	0.00	0.00	0.00	0.00	0.95
Total	4,352.54	2,217.87	6,570.41	8,468.83	0.00	701.69	0.00	0.00	0.00	0.00	15,740.93

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.9055	0.0083	120.0000	108.6650	13.8400	1,200.0000	0.0008	1,137.3504

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
276.8000	60.0000	0.0167	23.7370	0.2621

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1200 Eff: 100.00 Crew Hrs: 138.40 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	276.80	MH	1.50	109.00	1.64	452.57
8LDRW950	Loader Cat 950H 4CY	1.00	138.40	HR	61.19	100.00	61.19	8,468.83
9STGEN	Sm Tools - General	1.00	276.80	MH	0.90	100.00	0.90	249.12
LGEN	Laborer-General	1.00	138.40	MH	12.00	110.00	20.62	2,854.44
OPLDR6	Op Eng 2- Loader <6Y	1.00	138.40	MH	16.59	110.00	26.85	3,715.97

Activity: 52 Haul Topsoil (LF-08) Quantity: 16608.00 Unit: CY

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0222	45.0000	0.0000	36.9067	450.0000	0.0022	920.0082

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 45 Eff: 100.00 Crew Hrs: 369.07 Labor Pcs: 0.00 Equipment Pcs: 0.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKED	Trucking - End Dump	1.00	369.07	HR	92.00	100.00	92.00	33,954.44

Activity: 54 Place Topsoil (LF-08) Quantity: 16608.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	1.29	0.00	0.06	0.00	0.00	0.00	0.00	1.93
Total	6,324.05	3,279.11	9,603.16	21,405.64	0.00	1,052.53	0.00	0.00	0.00	0.00	32,061.33

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8671	0.0083	120.0000	224.0520	13.8400	1,200.0000	0.0008	2,316.5701

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
415.2000	40.0000	0.0250	23.1290	0.3808

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1200 Eff: 100.00 Crew Hrs: 138.40 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	415.20	MH	1.50	109.00	1.63	678.85
8LDRW966	Loader Cat 966H 5.5CY	1.00	138.40	HR	87.50	100.00	87.50	12,110.42
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	138.40	HR	15.72	100.00	15.72	2,176.06
8TRKWTR04	On Road Water Truck DSL 6X4 4000	1.00	138.40	HR	51.44	100.00	51.44	7,119.16
9STGEN	Sm Tools - General	1.00	415.20	MH	0.90	100.00	0.90	373.68
GC	Grade Checker	1.00	138.40	MH	12.00	110.00	20.62	2,854.44
OPLDR6	Op Eng 2- Loader <6Y	1.00	138.40	MH	16.59	110.00	26.85	3,715.97
TDWT	Water Truck Driver	1.00	138.40	MH	12.95	110.00	21.91	3,032.75

Activity: 60 Vegetative Cover - Soil Prep (LF-09) Quantity: 896875.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total	751.49	354.16	1,105.65	4,937.77	0.00	104.39	0.00	0.00	0.00	0.00	6,147.81

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0067	0.0000	21,780.0179	146.7605	4.1179	217,800.1787	0.0000	1,492.9551

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
41.1800	21,779.3832	0.0000	26.8492	0.0008

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 21780.1787 Eff: 100.00 Crew Hrs: 41.18 Labor Pcs: 1.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	41.18	MH	1.50	109.00	1.64	67.33
8DISKTR10	Rome 12' Wide Disk Harrow	1.00	41.18	HR	22.08	100.00	22.08	909.42
8DISKTR12	Case Magnum 290 Tractor	1.00	41.18	HR	97.82	100.00	97.82	4,028.35
9STGEN	Sm Tools - General	1.00	41.18	MH	0.90	100.00	0.90	37.06
OPLDR6	Op Eng 2- Loader <6Y	1.00	41.18	MH	16.59	110.00	26.85	1,105.65

Activity: 62 Vegetative Cover - Seeding (LF-09) Quantity: 20.60 Unit: AC

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4LAND	Landscape & Irrigation Sub	1.00	20.60	AC	3,500.00	100.00	3,500.00	72,100.00

Activity: 70 SW Control - Grass Ditches (LF-14) Quantity: 1900.00 Unit: LF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1.55	0.80	2.35	4.28	0.00	0.25	0.00	0.00	0.00	0.00	6.88
Total	2,943.55	1,512.10	4,455.65	8,126.87	0.00	481.65	0.00	0.00	0.00	0.00	13,064.17

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
6.6224	0.0200	50.0000	331.1189	3.8000	500.0000	0.0020	3,437.9395

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
190.0000	10.0000	0.1000	23.4508	1.5492

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 500 Eff: 100.00 Crew Hrs: 38.00 Labor Pcs: 5.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	190.00	MH	1.50	109.00	1.64	310.65
8BDZR04LGP	Bulldozer Cat D4K2 LGP	1.00	38.00	HR	52.92	100.00	52.92	2,011.07
8EXC011	Excavator Cat 329D L (28.1-33TN)	1.00	38.00	HR	97.30	100.00	97.30	3,697.48
8LDRW930	Loader Cat 930H 2.6 CY	1.00	38.00	HR	47.92	100.00	47.92	1,820.85
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	38.00	HR	15.72	100.00	15.72	597.47
9STGEN	Sm Tools - General	1.00	190.00	MH	0.90	100.00	0.90	171.00
GC	Grade Checker	1.00	38.00	MH	12.00	110.00	20.62	783.73
LGEN	Laborer-General	1.00	38.00	MH	12.00	110.00	20.62	783.73
OPDZ9	Op Eng 3- Dozer to D9	1.00	38.00	MH	16.59	110.00	26.85	1,020.28
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	38.00	MH	13.24	110.00	22.31	847.63
OPLDR6	Op Eng 2- Loader <6Y	1.00	38.00	MH	16.59	110.00	26.85	1,020.28

Activity: 80 Landfill Survey Plat (LF-15) Quantity: 20.60 Unit: AC

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	64.81	26.98	91.79	0.00	0.00	0.00	543.69	0.00	0.00	0.00	635.48
Total	1,335.00	555.89	1,890.89	0.00	0.00	0.00	11,200.00	0.00	0.00	0.00	13,090.89

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
31.0000	0.6645	1.5049	60.9965	64.8058

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4SURV01	Survey Crew	1.00	4.00	DY	2,800.00	100.00	2,800.00	11,200.00
X112	→ Sr Engineer	1.00	10.00	MH	60.00	100.00	84.98	849.84
X114	→ CADD	1.00	21.00	MH	35.00	100.00	49.57	1,041.05

Activity: 90 Treatment and Disposal (TD-02) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
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4TD05	Treat & Dispose - Onsite Leachate	1.00	4,027,418.00	GAL	0.07	100.00	0.07	281,919.26
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**Biditem**

**300**

**Unit 300**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,061.00	834.50	2,895.50	314.46	0.00	236.00	1,087.68	0.00	0.00	0.00	4,533.64
Total	2,061.00	834.50	2,895.50	314.46	0.00	236.00	1,087.68	0.00	0.00	0.00	4,533.64

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	52.0000	0.0192	52.0000	87.1854	39.6346	55.6827	0.0000

**Activity: 10 Verification of Clean Closure Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	784.00	303.14	1,087.14	314.46	0.00	236.00	1,087.68	0.00	0.00	0.00	2,725.28
Total	784.00	303.14	1,087.14	314.46	0.00	236.00	1,087.68	0.00	0.00	0.00	2,725.28

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	24.0000	0.0417	24.0000	45.2975	784.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	20.00	MH	10.00	109.00	10.90	218.00
4LAB05	Metals (SW 6010)	1.00	3.00	EA	13.73	100.00	13.73	41.19
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	3.00	EA	188.83	100.00	188.83	566.49
4LAB15	PCBs	1.00	3.00	EA	160.00	100.00	160.00	480.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	20.00	HR	15.72	100.00	15.72	314.46
9STGEN	Sm Tools - General	1.00	20.00	MH	0.90	100.00	0.90	18.00
X122	→ Field Technician	1.00	20.00	MH	28.00	110.00	42.46	849.18
X124	→ Chemist	1.00	4.00	MH	42.00	100.00	59.49	237.96

**Activity: 20 Certification of Closure Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**310**

**Unit 606**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,638.20	671.27	2,309.47	141.51	0.00	106.20	725.12	0.00	0.00	0.00	3,282.30
Total	1,638.20	671.27	2,309.47	141.51	0.00	106.20	725.12	0.00	0.00	0.00	3,282.30

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	39.0000	0.0256	39.0000	84.1615	42.0051	59.2172	0.0000

**Activity: 10 Verification of Clean Closure Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	361.20	139.91	501.11	141.51	0.00	106.20	725.12	0.00	0.00	0.00	1,473.94
Total	361.20	139.91	501.11	141.51	0.00	106.20	725.12	0.00	0.00	0.00	1,473.94

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	11.0000	0.0909	11.0000	45.5555	361.2000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	9.00	MH	10.00	109.00	10.90	98.10
4LAB05	Metals (SW 6010)	1.00	2.00	EA	13.73	100.00	13.73	27.46
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	2.00	EA	188.83	100.00	188.83	377.66
4LAB15	PCBs	1.00	2.00	EA	160.00	100.00	160.00	320.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	9.00	HR	15.72	100.00	15.72	141.51
9STGEN	Sm Tools - General	1.00	9.00	MH	0.90	100.00	0.90	8.10
X122	→ Field Technician	1.00	9.00	MH	28.00	110.00	42.46	382.13
X124	→ Chemist	1.00	2.00	MH	42.00	100.00	59.49	118.98

**Activity: 20 Certification of Closure Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**320**

**PK 700**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	5,567.03	2,308.96	7,875.99	3,274.45	0.00	1,115.87	25,517.80	2,866.00	0.00	0.00	40,650.11
Total	5,567.03	2,308.96	7,875.99	3,274.45	0.00	1,115.87	25,517.80	2,866.00	0.00	0.00	40,650.11

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	191.8000	0.0052	191.8000	211.9401	29.0252	41.0636	0.0647

**Activity: 10 Removal of Debris/Rubble/Soil Quantity: 114.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	6.16	2.90	9.06	8.75	0.00	0.85	0.00	19.74	0.00	0.00	38.39
Total	702.66	330.26	1,032.92	997.38	0.00	96.33	0.00	2,250.00	0.00	0.00	4,376.63

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
17.8096	0.0833	11.9999	213.7135	0.9500	119.9987	0.0083	4,606.9305

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	38.0000	3.0000	0.3333	27.1821	6.1637

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 9.50 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	38.00	MH	1.50	109.00	1.64	62.13
5DH80	Rolloff Bin Delivery	1.00	6.00	EA	250.00	100.00	250.00	1,500.00
5DH81	Bin Rental	6.00	30.00	DY	25.00	100.00	25.00	750.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	9.50	HR	83.58	100.00	83.58	794.05
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	9.50	HR	15.72	100.00	15.72	149.37
8TRKWTR02	Water Tank and Trailer 500 G	1.00	9.50	HR	5.68	100.00	5.68	53.96
9STGEN	Sm Tools - General	1.00	38.00	MH	0.90	100.00	0.90	34.20
LFORMN	Laborer-Foreman	1.00	9.50	MH	14.00	110.00	23.34	221.70
LGEN	Laborer-General	1.00	9.50	MH	12.00	110.00	20.63	195.94
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	9.50	MH	13.24	110.00	22.31	211.92
X122	Field Technician	1.00	9.50	MH	28.00	110.00	42.46	403.36

**Activity: 12 Transportation Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	12.00	MI	5.64	100.00	5.64	67.68

**Activity: 14 Treatment and Disposal Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	114.00	CY	96.38	100.00	96.38	10,987.32

**Activity: 20 Soil Testing to Determine Indicator Screen Parameters (Appendix IX Analysis) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,568.00	606.28	2,174.28	628.92	0.00	472.00	8,750.00	0.00	0.00	0.00	12,025.20
Total	1,568.00	606.28	2,174.28	628.92	0.00	472.00	8,750.00	0.00	0.00	0.00	12,025.20

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	48.0000	0.0208	48.0000	45.2975	1,568.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	40.00	MH	10.00	109.00	10.90	436.00
4LAB16	Appendix IX Analysis	1.00	7.00	EA	1,250.00	100.00	1,250.00	8,750.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	40.00	HR	15.72	100.00	15.72	628.92
9STGEN	Sm Tools - General	1.00	40.00	MH	0.90	100.00	0.90	36.00
X122	→ Field Technician	1.00	40.00	MH	28.00	110.00	42.46	1,698.37
X124	→ Chemist	1.00	8.00	MH	42.00	100.00	59.49	475.91

**Activity: 22 Verification of Clean Closure Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,568.00	606.28	2,174.28	628.92	0.00	472.00	5,780.48	0.00	0.00	0.00	9,055.68
Total	1,568.00	606.28	2,174.28	628.92	0.00	472.00	5,780.48	0.00	0.00	0.00	9,055.68

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	48.0000	0.0208	48.0000	45.2975	1,568.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	40.00	MH	10.00	109.00	10.90	436.00
4LAB05	Metals (SW 6010)	1.00	8.00	EA	13.73	100.00	13.73	109.84
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	8.00	EA	188.83	100.00	188.83	1,510.64

4LAB14	SVOCs	1.00	8.00	EA	360.00	100.00	360.00	2,880.00
4LAB15	PCBs	1.00	8.00	EA	160.00	100.00	160.00	1,280.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	40.00	HR	15.72	100.00	15.72	628.92
9STGEN	Sm Tools - General	1.00	40.00	MH	0.90	100.00	0.90	36.00
X122	→ Field Technician	1.00	40.00	MH	28.00	110.00	42.46	1,698.37
X124	→ Chemist	1.00	8.00	MH	42.00	100.00	59.49	475.91

Activity: 30 Backfill Quantity: 143.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.29
Total	451.37	234.78	686.15	1,019.23	0.00	75.54	0.00	548.32	0.00	0.00	2,329.24

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9257	0.0417	24.0001	286.2192	0.5958	240.0013	0.0042	3,909.2359

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
29.8000	4.7987	0.2084	23.0252	3.1564

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 5.96 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	29.80	MH	1.50	109.00	1.63	48.72
5TRKED	Trucking - End Dump	1.00	5.96	HR	92.00	100.00	92.00	548.32
8BDZR05	Bulldozer Cat D5K2 XL	1.00	5.96	HR	53.11	100.00	53.11	316.54
8BHLD426	BHL Cat 420E 1.25CY	1.00	5.96	HR	35.85	100.00	35.85	213.68
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	5.96	HR	60.65	100.00	60.65	361.45
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.96	HR	15.72	100.00	15.72	93.71
8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.96	HR	5.68	100.00	5.68	33.85
9STGEN	Sm Tools - General	1.00	29.80	MH	0.90	100.00	0.90	26.82
LFORMN	Laborer-Foreman	1.00	5.96	MH	14.00	110.00	23.34	139.09
LGEN	Laborer-General	1.00	5.96	MH	12.00	110.00	20.62	122.92
OPDZ9	Op Eng 3- Dozer to D9	1.00	5.96	MH	16.59	110.00	26.85	160.02
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.96	MH	13.24	110.00	22.31	132.95
OPROLL	Op Eng - Rollers	1.00	5.96	MH	13.02	110.00	22.01	131.17

Activity: 40 Certification of Closure Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**330**

**PK 1000**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	9,287.71	3,885.69	13,173.40	6,108.76	0.00	1,880.48	44,197.88	5,739.36	0.00	0.00	71,099.88
Total	9,287.71	3,885.69	13,173.40	6,108.76	0.00	1,880.48	44,197.88	5,739.36	0.00	0.00	71,099.88



Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
334.6800	0.0030	334.6800	212.4414	27.7510	39.3612	0.0321

**Activity: 10 Removal of Debris/Rubble/Soil Quantity: 230.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	6.16	2.90	9.06	8.75	0.00	0.85	0.00	19.57	0.00	0.00	38.22
Total	1,417.89	666.41	2,084.30	2,012.61	0.00	194.38	0.00	4,500.00	0.00	0.00	8,791.29

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
17.8127	0.0833	11.9999	213.7492	1.9167	119.9985	0.0083	4,586.7042

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
76.6800	2.9995	0.3334	27.1818	6.1647

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 19.17 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	76.68	MH	1.50	109.00	1.63	125.37
5DH80	Rolloff Bin Delivery	1.00	12.00	EA	250.00	100.00	250.00	3,000.00
5DH81	Bin Rental	12.00	60.00	DY	25.00	100.00	25.00	1,500.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	19.17	HR	83.58	100.00	83.58	1,602.31
8TRKP055	Leased 4x4, 3/4 Ton Gas Super	1.00	19.17	HR	15.72	100.00	15.72	301.41
8TRKWTR02	Water Tank and Trailer 500 G	1.00	19.17	HR	5.68	100.00	5.68	108.89
9STGEN	Sm Tools - General	1.00	76.68	MH	0.90	100.00	0.90	69.01
LFORMN	Laborer-Foreman	1.00	19.17	MH	14.00	110.00	23.34	447.37
LGEN	Laborer-General	1.00	19.17	MH	12.00	110.00	20.62	395.37
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	19.17	MH	13.24	110.00	22.31	427.61
X122	Field Technician	1.00	19.17	MH	28.00	110.00	42.46	813.95

**Activity: 12 Transportation Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	24.00	MI	5.64	100.00	5.64	135.36

**Activity: 14 Treatment and Disposal Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	230.00	CY	96.38	100.00	96.38	22,167.40

**Activity: 30 Backfill Quantity: 288.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.28
Total	908.82	472.67	1,381.49	2,052.16	0.00	152.10	0.00	1,104.00	0.00	0.00	4,689.75

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	24.0002	286.1399	1.2000	240.0020	0.0042	3,908.1576

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
60.0000	4.8000	0.2083	23.0248	3.1556

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0002 Eff: 100.00 Crew Hrs: 12.00 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	60.00	MH	1.50	109.00	1.64	98.10
5TRKED	Trucking - End Dump	1.00	12.00	HR	92.00	100.00	92.00	1,104.00
8BDZR05	Bulldozer Cat D5K2 XL	1.00	12.00	HR	53.11	100.00	53.11	637.33

8BHL426	BHL Cat 420E 1.25CY	1.00	12.00	HR	35.85	100.00	35.85	430.24
8COMPACT2	Compactor Dynapac CP221 23TN	1.00	12.00	HR	60.65	100.00	60.65	727.75
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	12.00	HR	15.72	100.00	15.72	188.68
8TRKWTR02	Water Tank and Trailer 500 G	1.00	12.00	HR	5.68	100.00	5.68	68.16
9STGEN	Sm Tools - General	1.00	60.00	MH	0.90	100.00	0.90	54.00
LFORMN	Laborer-Foreman	1.00	12.00	MH	14.00	110.00	23.34	280.05
LGEN	Laborer-General	1.00	12.00	MH	12.00	110.00	20.62	247.49
OPDZ9	Op Eng 3- Dozer to D9	1.00	12.00	MH	16.59	110.00	26.85	322.19
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	12.00	MH	13.24	110.00	22.31	267.67
OPROLL	Op Eng - Rollers	1.00	12.00	MH	13.02	110.00	22.01	264.09

Activity: 40 Certification of Closure Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

Activity: 20 Verification of Clean Closure Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	5,684.00	2,215.25	7,899.25	2,043.99	0.00	1,534.00	22,030.48	0.00	0.00	0.00	33,507.72
Total	5,684.00	2,215.25	7,899.25	2,043.99	0.00	1,534.00	22,030.48	0.00	0.00	0.00	33,507.72

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	170.0000	0.0059	170.0000	46.4662	5,684.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	130.00	MH	10.00	109.00	10.90	1,417.00
4LAB05	Metals (SW 6010)	1.00	8.00	EA	13.73	100.00	13.73	109.84
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	8.00	EA	188.83	100.00	188.83	1,510.64
4LAB14	SVOCs	1.00	8.00	EA	360.00	100.00	360.00	2,880.00
4LAB15	PCBs	1.00	8.00	EA	160.00	100.00	160.00	1,280.00
4LAB16	Appendix IX Analysis	1.00	13.00	EA	1,250.00	100.00	1,250.00	16,250.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	130.00	HR	15.72	100.00	15.72	2,043.99
9STGEN	Sm Tools - General	1.00	130.00	MH	0.90	100.00	0.90	117.00
X122	→ Field Technician	1.00	130.00	MH	28.00	110.00	42.46	5,519.70
X124	→ Chemist	1.00	40.00	MH	42.00	100.00	59.49	2,379.55

**Biditem**

**340**

**Roadways**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	21,874.47	9,578.85	31,453.32	20,832.42	0.00	4,077.08	107,890.08	23,642.72	0.00	0.00	187,895.62
Total	21,874.47	9,578.85	31,453.32	20,832.42	0.00	4,077.08	107,890.08	23,642.72	0.00	0.00	187,895.62

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
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921.2500	0.0011	921.2500	203.9573	23.7443	34.1420	0.0075
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**Activity: 10 Removal of Debris/Rubble/Soil Quantity: 984.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	6.16	2.90	9.06	8.75	0.00	0.85	0.00	18.67	0.00	0.00	37.33
Total	6,065.05	2,850.55	8,915.60	8,608.94	0.00	831.48	0.00	18,375.00	0.00	0.00	36,731.02

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
17.8095	0.0833	12.0000	213.7139	8.2000	120.0000	0.0083	4,479.3927

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
328.0000	3.0000	0.3333	27.1817	6.1637

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 82.00 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	328.00	MH	1.50	109.00	1.64	536.28
5DH80	Rolloff Bin Delivery	1.00	49.00	EA	250.00	100.00	250.00	12,250.00
5DH81	Bin Rental	49.00	245.00	DY	25.00	100.00	25.00	6,125.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	82.00	HR	83.58	100.00	83.58	6,853.89
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	82.00	HR	15.72	100.00	15.72	1,289.29
8TRKWTR02	Water Tank and Trailer 500 G	1.00	82.00	HR	5.68	100.00	5.68	465.76
9STGEN	Sm Tools - General	1.00	328.00	MH	0.90	100.00	0.90	295.20
LFORMN	Laborer-Foreman	1.00	82.00	MH	14.00	110.00	23.34	1,913.63
LGEN	Laborer-General	1.00	82.00	MH	12.00	110.00	20.62	1,691.21
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	82.00	MH	13.24	110.00	22.31	1,829.11
X122	Field Technician	1.00	82.00	MH	28.00	110.00	42.46	3,481.65

**Activity: 12 Transportation Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	98.00	MI	5.64	100.00	5.64	552.72

**Activity: 14 Treatment and Disposal Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	984.00	CY	96.38	100.00	96.38	94,837.92

**Activity: 22 Verification of Clean Closure Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	9,086.00	3,526.90	12,612.90	3,459.06	0.00	2,596.00	13,052.16	0.00	0.00	0.00	31,720.12
Total	9,086.00	3,526.90	12,612.90	3,459.06	0.00	2,596.00	13,052.16	0.00	0.00	0.00	31,720.12

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
275.0000	0.0036	275.0000	45.8651	9,086.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	220.00	MH	10.00	109.00	10.90	2,398.00
4LAB05	Metals (SW 6010)	1.00	36.00	EA	13.73	100.00	13.73	494.28
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	36.00	EA	188.83	100.00	188.83	6,797.88
4LAB15	PCBs	1.00	36.00	EA	160.00	100.00	160.00	5,760.00
8TRKPU55	→ Leased 4x4, 3/4 Ton Gas Super	1.00	220.00	HR	15.72	100.00	15.72	3,459.06
9STGEN	Sm Tools - General	1.00	220.00	MH	0.90	100.00	0.90	198.00

X122	→ Field Technician	1.00	220.00	MH	28.00	110.00	42.46	9,341.02
X124	→ Chemist	1.00	55.00	MH	42.00	100.00	59.49	3,271.88

**Activity: 30 Backfill Quantity: 1230.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.83	0.00	0.00	16.28
Total	3,881.42	2,018.75	5,900.17	8,764.42	0.00	649.60	0.00	4,715.00	0.00	0.00	20,029.19

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	24.0000	286.1383	5.1250	240.0000	0.0042	3,908.1346

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
256.2500	4.8000	0.2083	23.0251	3.1556

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24 Eff: 100.00 Crew Hrs: 51.25 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	256.25	MH	1.50	109.00	1.64	418.97
5TRKED	Trucking - End Dump	1.00	51.25	HR	92.00	100.00	92.00	4,715.00
8BDZR05	Bulldozer Cat D5K2 XL	1.00	51.25	HR	53.11	100.00	53.11	2,721.94
8BHLD426	BHL Cat 420E 1.25CY	1.00	51.25	HR	35.85	100.00	35.85	1,837.47
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	51.25	HR	60.65	100.00	60.65	3,108.11
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	51.25	HR	15.72	100.00	15.72	805.80
8TRKWTR02	Water Tank and Trailer 500 G	1.00	51.25	HR	5.68	100.00	5.68	291.10
9STGEN	Sm Tools - General	1.00	256.25	MH	0.90	100.00	0.90	230.63
LFORMN	Laborer-Foreman	1.00	51.25	MH	14.00	110.00	23.34	1,196.02
LGEN	Laborer-General	1.00	51.25	MH	12.00	110.00	20.62	1,057.01
OPDZ9	Op Eng 3- Dozer to D9	1.00	51.25	MH	16.59	110.00	26.85	1,376.04
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	51.25	MH	13.24	110.00	22.31	1,143.20
OPROLL	Op Eng - Rollers	1.00	51.25	MH	13.02	110.00	22.01	1,127.90

**Activity: 40 Certification of Closure Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36
Total	1,277.00	531.36	1,808.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,808.36

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
28.0000	0.0357	28.0000	64.5843	1,277.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	16.00	MH	42.00	100.00	59.49	951.82
X112	→ Sr Engineer	1.00	8.00	MH	60.00	100.00	84.98	679.87
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Activity: 45 Containment Buildings Certification of Closure (CB\_08-1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29
Total	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
34.0000	0.0294	34.0000	65.1850	1,565.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	20.00	MH	42.00	100.00	59.49	1,189.78
X112	→ Sr Engineer	1.00	10.00	MH	60.00	100.00	84.98	849.84

X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67
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**Biditem**

**400**

**Unit 2001 - Leachate Treatment Building**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	50,701.64	25,252.34	75,953.98	54,216.51	0.00	41,229.74	175,224.60	68,701.02	0.00	0.00	415,325.85
Total	50,701.64	25,252.34	75,953.98	54,216.51	0.00	41,229.74	175,224.60	68,701.02	0.00	0.00	415,325.85

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
2,998.7700	0.0003	2,998.7700	138.4987	16.9075	25.3284	0.0021

**Activity: 10 Removal of Waste (CB-03-1) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	375.00	0.00	0.00	375.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	375.00	0.00	0.00	375.00

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00

**Activity: 20 Demo and Removal of Building (CB-04-1) Quantity: 22770.00 Unit: CF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.06	0.03	0.09	0.14	0.00	0.01	0.00	0.71	0.00	0.00	0.94
Total	1,283.41	695.13	1,978.54	3,105.32	0.00	230.89	0.00	16,125.00	0.00	0.00	21,439.75

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2233	0.0010	1,000.0000	223.2701	2.2770	10,000.0000	0.0001	9,415.7883

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
91.0800	250.0000	0.0040	21.7231	0.0564

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 10000 Eff: 100.00 Crew Hrs: 22.77 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	91.08	MH	1.50	109.00	1.64	148.92
5DH80	Rolloff Bin Delivery	1.00	43.00	EA	250.00	100.00	250.00	10,750.00
5DH81	Bin Rental	43.00	215.00	DY	25.00	100.00	25.00	5,375.00
8DEMO10	Breaker Attach Excavator H140S	1.00	22.77	HR	31.39	100.00	31.39	714.77
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	22.77	HR	83.58	100.00	83.58	1,903.21
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	22.77	HR	15.72	100.00	15.72	358.01
8TRKWTR02	Water Tank and Trailer 500 G	1.00	22.77	HR	5.68	100.00	5.68	129.33
9STGEN	Sm Tools - General	1.00	91.08	MH	0.90	100.00	0.90	81.97
LFORMN	Laborer-Foreman	1.00	22.77	MH	14.00	110.00	23.34	531.39
LGEN	Laborer-General	2.00	45.54	MH	12.00	110.00	20.62	939.24
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	22.77	MH	13.24	110.00	22.31	507.91

**Activity: 30 Demo and Removal of Concrete Structures (CB-05-1) Quantity: 10000.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	3,757.66	2,035.25	5,792.91	9,092.33	0.00	676.01	0.00	0.00	0.00	0.00	15,561.25

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	149.9999	223.2785	6.6667	1,499.9993	0.0007	2,334.1863

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
266.6700	37.4995	0.0267	21.7231	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500 Eff: 100.00 Crew Hrs: 66.67 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	266.67	MH	1.50	109.00	1.64	436.01
8DEMO10	Breaker Attach Excavator H140S	1.00	66.67	HR	31.39	100.00	31.39	2,092.84
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	66.67	HR	83.58	100.00	83.58	5,572.55
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	66.67	HR	15.72	100.00	15.72	1,048.25
8TRKWTR02	Water Tank and Trailer 500 G	1.00	66.67	HR	5.68	100.00	5.68	378.69
9STGEN	Sm Tools - General	1.00	266.67	MH	0.90	100.00	0.90	240.00
LFORMN	Laborer-Foreman	1.00	66.67	MH	14.00	110.00	23.34	1,555.88
LGEN	Laborer-General	2.00	133.33	MH	12.00	110.00	20.62	2,749.88
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	66.67	MH	13.24	110.00	22.31	1,487.15

Activity: 32 Load Rollofs (CB-05-1) Quantity: 297.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	24.20	0.00	0.00	39.11
Total	1,068.31	571.79	1,640.10	2,598.42	0.00	188.23	0.00	7,187.50	0.00	0.00	11,614.25

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2711	0.0833	12.0000	171.2533	2.4750	120.0000	0.0083	4,692.6263

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
74.2500	4.0000	0.2500	22.0889	3.5970

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 12 Eff: 100.00 Crew Hrs: 24.75 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	74.25	MH	1.50	109.00	1.64	121.40
5DH80	Rolloff Bin Delivery	1.00	15.00	EA	250.00	100.00	250.00	3,750.00
5DH81	Bin Rental	15.00	75.00	DY	25.00	100.00	25.00	1,875.00
5TRKBT	Bin Truck	1.00	12.50	HR	125.00	100.00	125.00	1,562.50
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	24.75	HR	83.58	100.00	83.58	2,068.70
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	24.75	HR	15.72	100.00	15.72	389.14
8TRKWTR02	Water Tank and Trailer 500 G	1.00	24.75	HR	5.68	100.00	5.68	140.58
9STGEN	Sm Tools - General	1.00	74.25	MH	0.90	100.00	0.90	66.83
LFORMN	Laborer-Foreman	1.00	24.75	MH	14.00	110.00	23.34	577.58
LGEN	Laborer-General	1.00	24.75	MH	12.00	110.00	20.62	510.45
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	24.75	MH	13.24	110.00	22.31	552.07

Activity: 40 Removal of Soil (CB-07-1) Quantity: 371.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	19.20	0.00	0.00	34.11
Total	1,334.63	714.37	2,049.00	3,246.21	0.00	235.14	0.00	7,125.00	0.00	0.00	12,655.35

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2728	0.0833	11.9999	171.2723	3.0917	119.9991	0.0083	4,093.3438

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
92.7600	3.9996	0.2500	22.0893	3.5974

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 30.92 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	92.76	MH	1.50	109.00	1.63	151.66
5DH80	Rolloff Bin Delivery	1.00	19.00	EA	250.00	100.00	250.00	4,750.00
5DH81	Bin Rental	19.00	95.00	DY	25.00	100.00	25.00	2,375.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	30.92	HR	83.58	100.00	83.58	2,584.42
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	30.92	HR	15.72	100.00	15.72	486.16
8TRKWTR02	Water Tank and Trailer 500 G	1.00	30.92	HR	5.68	100.00	5.68	175.63
9STGEN	Sm Tools - General	1.00	92.76	MH	0.90	100.00	0.90	83.48
LFORMN	Laborer-Foreman	1.00	30.92	MH	14.00	110.00	23.34	721.58
LGEN	Laborer-General	1.00	30.92	MH	12.00	110.00	20.62	637.71
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	30.92	MH	13.24	110.00	22.31	689.71

Activity: 70 Backfill and Grading (BF-02-1) Quantity: 834.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.16	1.64	4.80	7.13	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	2,631.79	1,368.79	4,000.58	5,942.70	0.00	440.48	0.00	3,202.52	0.00	0.00	13,586.28

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9224	0.0417	23.9999	286.1367	3.4750	239.9993	0.0042	3,909.7096

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
173.7500	4.8000	0.2083	23.0249	3.1556

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 23.9999 Eff: 100.00 Crew Hrs: 34.75 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	173.76	MH	1.50	109.00	1.64	284.10
5TRKED	Trucking - End Dump	1.00	34.81	HR	92.00	100.00	92.00	3,202.52
8BDZR05	Bulldozer Cat D5K2 XL	1.00	34.75	HR	53.11	100.00	53.11	1,845.61
8BHLD426	BHL Cat 420E 1.25CY	1.00	34.75	HR	35.85	100.00	35.85	1,245.89
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	34.75	HR	60.65	100.00	60.65	2,107.45
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	34.75	HR	15.72	100.00	15.72	546.37
8TRKWTR02	Water Tank and Trailer 500 G	1.00	34.75	HR	5.68	100.00	5.68	197.38
9STGEN	Sm Tools - General	1.00	173.76	MH	0.90	100.00	0.90	156.38
LFORMN	Laborer-Foreman	1.00	34.75	MH	14.00	110.00	23.34	810.96
LGEN	Laborer-General	1.00	34.75	MH	12.00	110.00	20.62	716.70
OPDZ9	Op Eng 3- Dozer to D9	1.00	34.75	MH	16.59	110.00	26.85	933.01
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	34.75	MH	13.24	110.00	22.31	775.14
OPROLL	Op Eng - Rollers	1.00	34.75	MH	13.02	110.00	22.01	764.77

Activity: 80 Decontamination (DC-02-1) Quantity: 37900.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.92	0.00	0.00	0.00	0.00	2.73
Total	24,680.48	13,662.05	38,342.53	30,191.75	0.00	34,974.99	0.00	0.00	0.00	0.00	103,509.27

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8083	0.0080	125.0000	226.0365	30.3200	1,250.0000	0.0008	3,413.8941

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,819.2000	20.8333	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 303.20 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	67.00	ROLL	185.00	109.00	201.65	13,510.55

31PPE003	Level C Supplies	1.00	1,819.02	MH	10.00	109.00	10.90	19,827.32
8CONCEQ42	Pressure Washer 3,000psi	1.00	303.20	HR	6.07	100.00	6.07	1,839.82
8GEN100	Generator 125 KW	1.00	303.20	HR	47.42	100.00	47.42	14,378.35
8TRKGS10	Flatbed Truck 15K 200HP	1.00	303.20	HR	24.68	100.00	24.68	7,484.19
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	303.20	HR	15.72	100.00	15.72	4,767.21
8TRKWTR02	Water Tank and Trailer 500 G	1.00	303.20	HR	5.68	100.00	5.68	1,722.18
9STGEN	Sm Tools - General	1.00	1,819.02	MH	0.90	100.00	0.90	1,637.12
LFORMN	Laborer-Foreman	1.00	303.20	MH	14.00	110.00	23.34	7,075.76
LGEN	Laborer-General	5.00	1,516.00	MH	12.00	110.00	20.62	31,266.77

Activity: 90      Sampling and Analysis (SA-08-1)      Quantity: 1.00      Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	14,308.00	5,514.81	19,822.81	0.00	0.00	4,484.00	15,836.00	0.00	0.00	0.00	40,142.81
Total	14,308.00	5,514.81	19,822.81	0.00	0.00	4,484.00	15,836.00	0.00	0.00	0.00	40,142.81

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
442.0000	0.0023	442.0000	44.8480	14,308.0000

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	380.00	MH	10.00	109.00	10.90	4,142.00
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	100.00	EA	158.36	100.00	158.36	15,836.00
9STGEN	Sm Tools - General	1.00	380.00	MH	0.90	100.00	0.90	342.00
X122	→ Field Technician	1.00	380.00	MH	28.00	110.00	42.46	16,134.50
X124	→ Chemist	1.00	62.00	MH	42.00	100.00	59.49	3,688.31

Activity: 100      Transportation (TR-01)      Quantity: 1.00      Unit: LS

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	6,150.00	MI	5.64	100.00	5.64	34,686.00

Activity: 110      Treatment and Disposal (TD-01)      Quantity: 1.00      Unit: LS

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	1,620.00	CY	96.38	100.00	96.38	156,135.60

Activity: 112      T&D of Decon Fluid (TD-03)      Quantity: 37900.00      Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
Total	72.36	38.86	111.22	39.78	0.00	0.00	3,253.00	0.00	0.00	0.00	3,404.00

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0040	0.0001	14,999.8021	59.7617	0.2527	149,998.0211	0.0000	13,472.1178

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
5.0600	7,490.1186	0.0001	21.9802	0.0019

Calendar: 510      5 days @ 10hrs/day      Hrs/Shift: 10      WC: CCISP      CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\*      Prod: UH 15000      Eff: 100.00      Crew Hrs: 2.53      Labor Pcs: 2.00      Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	37,900.00	GAL	0.07	100.00	0.07	2,653.00
4TK01	10K gal Holding Tanks	1.00	4.00	DY	150.00	100.00	150.00	600.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	2.53	HR	15.72	100.00	15.72	39.78
LFORMN	Laborer-Foreman	1.00	2.53	MH	14.00	110.00	23.34	59.04
LGEN	Laborer-General	1.00	2.53	MH	12.00	110.00	20.62	52.18



**Activity: 120 Buildings Certification of Closure (CB-08-1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29
Total	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
34.0000	0.0294	34.0000	65.1850	1,565.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	20.00	MH	42.00	100.00	59.49	1,189.78
X112	→ Sr Engineer	1.00	10.00	MH	60.00	100.00	84.98	849.84
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem 410 Unit 2001 - Chemical Storage Building**  
 Takeoff Qty: 1.000 LS  
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	9,323.36	4,546.51	13,869.87	9,040.13	0.00	6,383.87	37,727.17	15,090.70	0.00	0.00	82,111.74
Total	9,323.36	4,546.51	13,869.87	9,040.13	0.00	6,383.87	37,727.17	15,090.70	0.00	0.00	82,111.74

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
503.8300	0.0020	503.8300	162.9751	18.5050	27.5289	0.0122

**Activity: 10 Removal of Waste (CB-03-1) Quantity: 1.00 Unit: LS**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	375.00	0.00	0.00	375.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	375.00	0.00	0.00	375.00

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Notes: DRY SWEEP STORAGE PROCESS, HANDLING AREA

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5DH80	Rolloff Bin Delivery	1.00	1.00	EA	250.00	100.00	250.00	250.00
5DH81	Bin Rental	1.00	5.00	DY	25.00	100.00	25.00	125.00

**Activity: 20 Demo and Removal of Building (CB-04-1) Quantity: 5253.00 Unit: CF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.06	0.03	0.09	0.14	0.00	0.01	0.00	0.71	0.00	0.00	0.95
Total	296.04	160.36	456.40	715.99	0.00	53.26	0.00	3,750.00	0.00	0.00	4,975.65

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2232	0.0010	1,000.0000	223.1848	0.5253	10,000.0000	0.0001	9,472.0160

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
21.0100	250.0238	0.0040	21.7230	0.0564

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 10000 Eff: 100.00 Crew Hrs: 5.25 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	21.01	MH	1.50	109.00	1.63	34.35
5DH80	Rolloff Bin Delivery	1.00	10.00	EA	250.00	100.00	250.00	2,500.00
5DH81	Bin Rental	10.00	50.00	DY	25.00	100.00	25.00	1,250.00
8DEMO10	Breaker Attach Excavator H140S	1.00	5.25	HR	31.39	100.00	31.39	164.80
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	5.25	HR	83.58	100.00	83.58	438.82
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	5.25	HR	15.72	100.00	15.72	82.55

8TRKWTR02	Water Tank and Trailer 500 G	1.00	5.25	HR	5.68	100.00	5.68	29.82
9STGEN	Sm Tools - General	1.00	21.01	MH	0.90	100.00	0.90	18.91
LFORMN	Laborer-Foreman	1.00	5.25	MH	14.00	110.00	23.34	122.53
LGEN	Laborer-General	2.00	10.51	MH	12.00	110.00	20.62	216.76
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	5.25	MH	13.24	110.00	22.31	117.11

Activity: 30	Demo and Removal of Concrete Structures (CB-05-1)	Quantity: 1683.00	Unit: SF
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.38	0.20	0.58	0.91	0.00	0.07	0.00	0.00	0.00	0.00	1.56
Total	632.41	342.52	974.93	1,530.16	0.00	113.77	0.00	0.00	0.00	0.00	2,618.86

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.4885	0.0067	150.0000	223.2701	1.1220	1,500.0000	0.0007	2,334.0998

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
44.8800	37.5000	0.0267	21.7230	0.3758

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1500 Eff: 100.00 Crew Hrs: 11.22 Labor Pcs: 4.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	44.88	MH	1.50	109.00	1.64	73.38
8DEMO10	Breaker Attach Excavator H140S	1.00	11.22	HR	31.39	100.00	31.39	352.21
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	11.22	HR	83.58	100.00	83.58	937.81
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	11.22	HR	15.72	100.00	15.72	176.41
8TRKWTR02	Water Tank and Trailer 500 G	1.00	11.22	HR	5.68	100.00	5.68	63.73
9STGEN	Sm Tools - General	1.00	44.88	MH	0.90	100.00	0.90	40.39
LFORMN	Laborer-Foreman	1.00	11.22	MH	14.00	110.00	23.34	261.84
LGEN	Laborer-General	2.00	22.44	MH	12.00	110.00	20.62	462.81
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	11.22	MH	13.24	110.00	22.31	250.28

Activity: 32	Load Rollofs (CB-05-1)	Quantity: 50.00	Unit: CY
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	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.53	8.76	0.00	0.63	0.00	27.75	0.00	0.00	42.67
Total	179.99	96.35	276.34	437.80	0.00	31.71	0.00	1,387.50	0.00	0.00	2,133.35

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2828	0.0833	11.9999	171.3922	0.4167	119.9990	0.0083	5,119.9990

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
12.5100	3.9968	0.2502	22.0895	3.5998

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 4.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	12.51	MH	1.50	109.00	1.63	20.45
5DH80	Rolloff Bin Delivery	1.00	3.00	EA	250.00	100.00	250.00	750.00
5DH81	Bin Rental	3.00	15.00	DY	25.00	100.00	25.00	375.00
5TRKBT	Bin Truck	1.00	2.10	HR	125.00	100.00	125.00	262.50
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	4.17	HR	83.58	100.00	83.59	348.55
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4.17	HR	15.72	100.00	15.72	65.56
8TRKWTR02	Water Tank and Trailer 500 G	1.00	4.17	HR	5.68	100.00	5.68	23.69
9STGEN	Sm Tools - General	1.00	12.51	MH	0.90	100.00	0.90	11.26
LFORMN	Laborer-Foreman	1.00	4.17	MH	14.00	110.00	23.34	97.32
LGEN	Laborer-General	1.00	4.17	MH	12.00	110.00	20.62	86.00
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	4.17	MH	13.24	110.00	22.31	93.02

**Activity: 40 Removal of Soil (CB-07-1) Quantity: 86.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.60	1.93	5.52	8.75	0.00	0.63	0.00	21.80	0.00	0.00	36.71
Total	309.48	165.65	475.13	752.76	0.00	54.53	0.00	1,875.00	0.00	0.00	3,157.42

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
14.2778	0.0833	11.9999	171.3327	0.7167	119.9994	0.0083	4,405.6818

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
21.5100	3.9981	0.2501	22.0888	3.5986

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 11.9999 Eff: 100.00 Crew Hrs: 7.17 Labor Pcs: 3.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	21.51	MH	1.50	109.00	1.64	35.17
5DH80	Rolloff Bin Delivery	1.00	5.00	EA	250.00	100.00	250.00	1,250.00
5DH81	Bin Rental	5.00	25.00	DY	25.00	100.00	25.00	625.00
8EXC010	Excavator Cat 324D (24.1-28TN)	1.00	7.17	HR	83.58	100.00	83.58	599.30
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	7.17	HR	15.72	100.00	15.72	112.73
8TRKWTR02	Water Tank and Trailer 500 G	1.00	7.17	HR	5.68	100.00	5.68	40.73
9STGEN	Sm Tools - General	1.00	21.51	MH	0.90	100.00	0.90	19.36
LFORMN	Laborer-Foreman	1.00	7.17	MH	14.00	110.00	23.34	167.32
LGEN	Laborer-General	1.00	7.17	MH	12.00	110.00	20.62	147.88
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	7.17	MH	13.24	110.00	22.31	159.93

**Activity: 70 Backfill and Grading (BF-02-1) Quantity: 170.00 Unit: CY**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	3.15	1.64	4.79	7.12	0.00	0.53	0.00	3.84	0.00	0.00	16.29
Total	536.20	278.90	815.10	1,210.77	0.00	89.74	0.00	653.20	0.00	0.00	2,768.81

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
11.9169	0.0417	24.0001	286.0065	0.7083	240.0011	0.0042	3,908.9266

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
35.4000	4.8023	0.2082	23.0254	3.1541

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 24.0001 Eff: 100.00 Crew Hrs: 7.08 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	35.40	MH	1.50	109.00	1.64	57.88
5TRKED	Trucking - End Dump	1.00	7.10	HR	92.00	100.00	92.00	653.20
8BDZR05	Bulldozer Cat D5K2 XL	1.00	7.08	HR	53.11	100.00	53.11	376.03
8BHLD426	BHL Cat 420E 1.25CY	1.00	7.08	HR	35.85	100.00	35.85	253.84
8COMPACRT2	Compactor Dynapac CP221 23TN	1.00	7.08	HR	60.65	100.00	60.65	429.37
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	7.08	HR	15.72	100.00	15.72	111.32
8TRKWTR02	Water Tank and Trailer 500 G	1.00	7.08	HR	5.68	100.00	5.68	40.21
9STGEN	Sm Tools - General	1.00	35.40	MH	0.90	100.00	0.90	31.86
LFORMN	Laborer-Foreman	1.00	7.08	MH	14.00	110.00	23.34	165.23
LGEN	Laborer-General	1.00	7.08	MH	12.00	110.00	20.63	146.03
OPDZ9	Op Eng 3- Dozer to D9	1.00	7.08	MH	16.59	110.00	26.85	190.09
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	7.08	MH	13.24	110.00	22.31	157.93
OPROLL	Op Eng - Rollers	1.00	7.08	MH	13.02	110.00	22.01	155.82

**Activity: 80 Decontamination (DC-02-1) Quantity: 5443.00 Unit: SF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
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U. Cost	0.65	0.36	1.01	0.80	0.00	0.94	0.00	0.00	0.00	0.00	2.75
Total	3,544.42	1,962.03	5,506.45	4,335.58	0.00	5,099.36	0.00	0.00	0.00	0.00	14,941.39

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8082	0.0080	125.0000	226.0249	4.3544	1,250.0000	0.0008	3,431.3315

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
261.2600	20.8337	0.0480	21.0765	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250 Eff: 100.00 Crew Hrs: 43.54 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	10.00	ROLL	185.00	109.00	201.65	2,016.50
31PPE003	Level C Supplies	1.00	261.26	MH	10.00	109.00	10.90	2,847.73
8CONCEQ42	Pressure Washer 3,000psi	1.00	43.54	HR	6.07	100.00	6.07	264.20
8GEN100	Generator 125 KW	1.00	43.54	HR	47.42	100.00	47.42	2,064.75
8TRKGS10	Flatbed Truck 15K 200HP	1.00	43.54	HR	24.68	100.00	24.68	1,074.74
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	43.54	HR	15.72	100.00	15.72	684.58
8TRKWTR02	Water Tank and Trailer 500 G	1.00	43.54	HR	5.68	100.00	5.68	247.31
9STGEN	Sm Tools - General	1.00	261.26	MH	0.90	100.00	0.90	235.13
LFORMN	Laborer-Foreman	1.00	43.54	MH	14.00	110.00	23.34	1,016.09
LGEN	Laborer-General	5.00	217.72	MH	12.00	110.00	20.62	4,490.36

Activity: 90 Sampling and Analysis (SA-08-1) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,156.00	833.64	2,989.64	0.00	0.00	941.50	2,692.12	0.00	0.00	0.00	6,623.26
Total	2,156.00	833.64	2,989.64	0.00	0.00	941.50	2,692.12	0.00	0.00	0.00	6,623.26

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
66.0000	0.0152	66.0000	45.2976	2,156.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	55.00	MH	10.00	109.00	10.90	599.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	17.00	EA	158.36	100.00	158.36	2,692.12
9STGEN	Sm Tools - General	1.00	380.00	MH	0.90	100.00	0.90	342.00
X122	→ Field Technician	1.00	55.00	MH	28.00	110.00	42.46	2,335.26
X124	→ Chemist	1.00	11.00	MH	42.00	100.00	59.49	654.38

Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	1,250.00	MI	5.64	100.00	5.64	7,050.00

Activity: 110 Treatment and Disposal (TD-01) Quantity: 1.00 Unit: LS

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	358.00	CY	96.38	100.00	96.38	34,504.04

Activity: 112 T&D of Decon Fluid (TD-03) Quantity: 5443.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.00	0.10	0.00	0.00	0.00	0.14
Total	103.82	55.77	159.59	57.07	0.00	0.00	531.01	0.00	0.00	0.00	747.67

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0398	0.0007	1,499.9862	59.7073	0.3629	14,999.8622	0.0001	2,060.4349

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
7.2600	749.7245	0.0013	21.9821	0.0191

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 1500 Eff: 100.00 Crew Hrs: 3.63 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	5,443.00	GAL	0.07	100.00	0.07	381.01
4TK01	10K gal Holding Tanks	1.00	1.00	DY	150.00	100.00	150.00	150.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	3.63	HR	15.72	100.00	15.72	57.07
LFORMN	Laborer-Foreman	1.00	3.63	MH	14.00	110.00	23.34	84.72
LGEN	Laborer-General	1.00	3.63	MH	12.00	110.00	20.63	74.87

Activity: 120 Buildings Certification of Closure (CB-08-1) Quantity: 1.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29
Total	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
34.0000	0.0294	34.0000	65.1850	1,565.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	20.00	MH	42.00	100.00	59.49	1,189.78
X112	→ Sr Engineer	1.00	10.00	MH	60.00	100.00	84.98	849.84
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67

**Biditem**

**Unit 2001 - Tanks**

**420**

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	90,733.51	48,943.97	139,677.48	123,531.16	0.00	82,801.33	833,597.16	26,508.00	0.00	0.00	1,206,115.13
Total	90,733.51	48,943.97	139,677.48	123,531.16	0.00	82,801.33	833,597.16	26,508.00	0.00	0.00	1,206,115.13

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
6,359.2800	0.0002	6,359.2800	189.6622	14.2679	21.9644	0.0005

Activity: 20 Tank System Purging (TS-04-1) Quantity: 348371.00 Unit: GAL

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.01	0.00	0.01	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.07
Total	1,916.07	1,052.46	2,968.53	2,062.18	0.00	18,956.30	0.00	0.00	0.00	0.00	23,987.01

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0144	0.0001	10,000.0000	144.4067	3.4837	100,000.0000	0.0000	6,885.4784

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
139.3500	2,499.9713	0.0004	21.3027	0.0055

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 10000 Eff: 100.00 Crew Hrs: 34.84 Labor Pcs: 4.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31DI01	Dry Ice	1.00	5,225.56	LB	2.75	109.00	3.00	15,663.62
31PPE003	Level C Supplies	1.00	279.04	MH	10.00	109.00	10.90	3,041.54
8GEN050	Generator 45 KW	1.00	34.84	HR	18.78	100.00	18.78	654.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	34.84	HR	24.68	100.00	24.68	859.99
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	34.84	HR	15.72	100.00	15.72	547.79
9STGEN	Sm Tools - General	1.00	279.04	MH	0.90	100.00	0.90	251.14

LFORMN	Laborer-Foreman	1.00	34.84	MH	14.00	110.00	23.34	813.06
LGEN	Laborer-General	3.00	104.51	MH	12.00	110.00	20.62	2,155.47

**Activity: 30 Flushing the Tank and Piping (TS-05) Quantity: 348893.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.07	0.04	0.12	0.11	0.00	0.06	0.00	0.00	0.00	0.00	0.29
Total	26,042.37	14,196.19	40,238.56	38,468.37	0.00	22,055.02	0.00	0.00	0.00	0.00	100,761.95

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2256	0.0018	560.0000	126.3307	62.3023	5,600.0001	0.0002	1,617.3065

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
1,869.0700	186.6666	0.0054	21.5287	0.0746

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 560 Eff: 100.00 Crew Hrs: 623.02 Labor Pcs: 3.00 Equipment Pcs: 4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	1,869.07	MH	10.00	109.00	10.90	20,372.86
8COMPR04	Compressor 185 CFM 80HP	1.00	623.02	HR	15.81	100.00	15.81	9,849.95
8GEN050	Generator 45 KW	1.00	623.02	HR	18.78	100.00	18.78	11,702.18
8PUMPS04	Pump Sub 4" Elec 25 HP	1.00	623.02	HR	11.43	100.00	11.43	7,120.50
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	623.02	HR	15.72	100.00	15.72	9,795.74
9STGEN	Sm Tools - General	1.00	1,869.07	MH	0.90	100.00	0.90	1,682.16
LFORMN	Laborer-Foreman	1.00	623.02	MH	14.00	110.00	23.34	14,539.38
LGEN	Laborer-General	2.00	1,246.05	MH	12.00	110.00	20.62	25,699.18

**Activity: 40 Excavation, Dissassembly & Loading (TS-06-1) Quantity: 3200.00 Unit: FT**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2.32	1.27	3.58	4.74	0.00	0.42	0.00	0.00	0.00	0.00	8.74
Total	7,420.26	4,048.34	11,468.60	15,157.69	0.00	1,351.97	0.00	0.00	0.00	0.00	27,978.26

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
8.3207	0.0333	30.0000	249.6212	10.6667	299.9996	0.0033	2,622.9586

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
533.3400	5.9999	0.1667	21.5034	2.3188

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 30 Eff: 100.00 Crew Hrs: 106.67 Labor Pcs: 5.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	533.32	MH	1.50	109.00	1.64	871.98
8COMPR04	Compressor 185 CFM 80HP	1.00	106.67	HR	15.81	100.00	15.81	1,686.45
8GEN050	Generator 45 KW	1.00	106.67	HR	18.78	100.00	18.78	2,003.58
8TRKGS05	Boom Truck 28,000# Cap	1.00	106.67	HR	67.10	100.00	67.10	7,157.45
8TRKGS10	Flatbed Truck 15K 200HP	1.00	106.67	HR	24.68	100.00	24.68	2,633.04
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	106.67	HR	15.72	100.00	15.72	1,677.17
9STGEN	Sm Tools - General	1.00	533.32	MH	0.90	100.00	0.90	479.99
LFORMN	Laborer-Foreman	1.00	106.67	MH	14.00	110.00	23.34	2,489.35
LGEN	Laborer-General	3.00	320.00	MH	12.00	110.00	20.62	6,599.85
OPLIFT	Op Eng 4- Boom Tk <10T	1.00	106.67	MH	13.24	110.00	22.31	2,379.40

**Activity: 42 Remove Tank (TS-06-1) Quantity: 348371.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Total	5,869.60	2,889.64	8,759.24	23,332.05	0.00	887.25	0.00	0.00	0.00	0.00	32,978.54

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0921	0.0001	6,967.4200	641.8258	5.0000	69,674.2000	0.0000	6,595.7080

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
350.0000	995.3457	0.0010	25.0264	0.0168

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: S 5 Eff: 100.00 Crew Hrs: 50.00 Labor Pcs: 7.00 Equipment Pcs: 6.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE004	Level D Supplies	1.00	350.00	MH	1.50	109.00	1.64	572.25
8COMPR04	Compressor 185 CFM 80HP	1.00	50.00	HR	15.81	100.00	15.81	790.50
8CRANETK060	Crane Grove GMK3055 60 TN Hy	2.00	100.00	HR	181.50	100.00	181.50	18,150.10
8GEN100	Generator 125 KW	1.00	50.00	HR	47.42	100.00	47.42	2,371.10
8TRKGS10	Flatbed Truck 15K 200HP	1.00	50.00	HR	24.68	100.00	24.68	1,234.20
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	50.00	HR	15.72	100.00	15.72	786.15
9STGEN	Sm Tools - General	1.00	350.00	MH	0.90	100.00	0.90	315.00
LFORMN	Laborer-Foreman	1.00	50.00	MH	14.00	110.00	23.34	1,166.85
LGEN	Laborer-General	4.00	200.00	MH	12.00	110.00	20.62	4,124.90
OPCR70	Op Eng 1- Crane 45-99T	2.00	100.00	MH	22.36	110.00	34.67	3,467.49

Activity: 80 Decontamination (DC-02-1) Quantity: 42104.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.65	0.36	1.01	0.80	0.00	0.94	0.00	0.00	0.00	0.00	2.74
Total	27,417.41	15,177.10	42,594.51	33,539.52	0.00	39,373.79	0.00	0.00	0.00	0.00	115,507.82

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
1.8082	0.0080	125.0030	226.0351	33.6824	1,250.0297	0.0008	3,429.3227

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
2,020.9400	20.8339	0.0480	21.0766	0.6512

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 1250.0297 Eff: 100.00 Crew Hrs: 336.82 Labor Pcs: 6.00 Equipment Pcs: 5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31EC132	Visquene (15.5' x 150')	1.00	77.00	ROLL	185.00	109.00	201.65	15,527.05
31PPE003	Level C Supplies	1.00	2,020.91	MH	10.00	109.00	10.90	22,027.92
8CONCEQ42	Pressure Washer 3,000psi	1.00	336.82	HR	6.07	100.00	6.07	2,043.82
8GEN100	Generator 125 KW	1.00	336.82	HR	47.42	100.00	47.42	15,972.68
8TRKGS10	Flatbed Truck 15K 200HP	1.00	336.82	HR	24.68	100.00	24.68	8,314.06
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	336.82	HR	15.72	100.00	15.72	5,295.82
8TRKWTR02	Water Tank and Trailer 500 G	1.00	336.82	HR	5.68	100.00	5.68	1,913.14
9STGEN	Sm Tools - General	1.00	2,020.91	MH	0.90	100.00	0.90	1,818.82
LFORMN	Laborer-Foreman	1.00	336.82	MH	14.00	110.00	23.34	7,860.35
LGEN	Laborer-General	5.00	1,684.12	MH	12.00	110.00	20.62	34,734.16

Activity: 90 Sampling and Analysis (SA-02-1) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	546.00	209.87	755.87	0.00	0.00	177.00	4,750.80	0.00	0.00	0.00	5,683.67
Total	546.00	209.87	755.87	0.00	0.00	177.00	4,750.80	0.00	0.00	0.00	5,683.67

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
17.0000	0.0588	17.0000	44.4629	546.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	15.00	MH	10.00	109.00	10.90	163.50
4LAB01	Pesticides/PCBs (SW 3540C /SW 8082)	1.00	30.00	EA	158.36	100.00	158.36	4,750.80
9STGEN	Sm Tools - General	1.00	15.00	MH	0.90	100.00	0.90	13.50
X122	→ Field Technician	1.00	15.00	MH	28.00	110.00	42.46	636.89

X124	→ Chemist	1.00	2.00	MH	42.00	100.00	59.49	118.98
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**Activity: 100 Transportation (TR-01) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRKST01	Transportation - Bulk Solid	1.00	4,700.00	MI	5.64	100.00	5.64	26,508.00

**Activity: 110 Treatment and Disposal (TD-02-1) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD01	Treat & Dispose - Solid Waste	1.00	1,726.00	CY	101.26	100.00	101.26	174,774.76

**Activity: 112 T&D of Decon Fluid (TD-03-1) Quantity: 1046679.00 Unit: GAL**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.02	0.01	0.03	0.01	0.00	0.00	0.62	0.00	0.00	0.00	0.66
Total	19,956.80	10,719.08	30,675.88	10,971.35	0.00	0.00	647,571.60	0.00	0.00	0.00	689,218.83

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0398	0.0007	1,499.9862	59.6843	69.7792	14,999.8624	0.0001	9,877.1329

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	1,395.5800	749.9957	0.0013	21.9807	0.0191

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 1499.9862 Eff: 100.00 Crew Hrs: 697.79 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD06	T&D Decon Liquid	1.00	1,046,679.00	GAL	0.40	100.00	0.40	418,671.60
4TK01	10K gal Holding Tanks	109.00	1,526.00	DY	150.00	100.00	150.00	228,900.00
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	697.79	HR	15.72	100.00	15.72	10,971.35
LFORMN	Laborer-Foreman	1.00	697.79	MH	14.00	110.00	23.34	16,284.29
LGEN	Laborer-General	1.00	697.79	MH	12.00	110.00	20.62	14,391.59

**Activity: 120 Post-Closure Care Deed Notation (PC\_07-1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	6,500.00	0.00	0.00	0.00	6,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	6,500.00	0.00	0.00	0.00	6,500.00

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4AT01	Attorney Fees	1.00	1.00	EA	1,500.00	100.00	1,500.00	1,500.00
4DN01	Clerical and Deed Filing Fees	1.00	1.00	EA	5,000.00	100.00	5,000.00	5,000.00

**Activity: 130 Tank Systems Certification of Closure (TS\_09-1) Quantity: 1.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29
Total	1,565.00	651.29	2,216.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,216.29

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	34.0000	0.0294	34.0000	65.1850	1,565.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X110	→ Staff Engineer	1.00	20.00	MH	42.00	100.00	59.49	1,189.78
X112	→ Sr Engineer	1.00	10.00	MH	60.00	100.00	84.98	849.84
X120	→ Site Safety Officer	1.00	4.00	MH	31.25	100.00	44.17	176.67



**Report Summary**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
Total	2,228,579	1,176,091	3,404,671	4,845,087	1,996,809	1,030,487	5,767,610	3,971,070	0	0	21,015,734

**Calendars Used In Estimate**

510

5 days @ 10hrs/day

**APPENDIX I-7**

**SECTION I**

**POST-CLOSURE COST ESTIMATES**

Revision No.

5.0

**APPENDIX I-7**  
**SECTION I**  
**POST-CLOSURE COST ESTIMATES**

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**HCSS HeavyBid Post-Closure Cost Report**

# APPENDIX I-7

## SECTION I

### POST-CLOSURE COST ESTIMATES

#### I-7-1 Introduction

5 In accordance with 40 CFR 264.144 and ADEM Administrative Code Rule 335-14-5-.08(5), the post-closure cost estimates in this Appendix assume that the post-closure activities will be performed by an independent third-party contractor. The basis, assumptions, and other specific cost information used in calculating the post-closure cost estimates are described in Appendix I-5. Additional assumptions which are only applicable to the post-closure cost estimates are  
10 discussed below.

As described in the Subsection I-1d of Section I, the post-closure care period is assumed to be thirty (30) years. During the thirty-year post-closure care period, the 802-acre Facility will undergo inspections and monitoring of all closed landfill and the leachate collection and storage  
15 systems. The "Facility Inspection" section of the post-closure cost estimate includes inspection of the applicable closed landfill units, the leachate tank storage systems unit (i.e., Unit 1700), and Leachate Treatment Plant (Unit 2001). The leachate tank storage system and Leachate Treatment Plant will remain in operation into the post-closure care period as required (i.e., these will be the only active units remaining). The tanks will remain in operation until the volume of  
20 leachate removed from the landfill units no longer warrants the maintenance of these leachate storage tank systems and the treatment system. The determination of when these tanks are no longer needed will be agreed to in writing by the Facility and ADEM.

The leachate collection and removal system will continue to operate throughout the post-closure  
25 care period in order to remove and/or treat any accumulated leachate. For cost estimating purposes, it is assumed that the landfill will generate leachate throughout the post-closure care period. From historic data for the Facility, it is estimated that leachate will be removed at a frequency of 12,600 gallons per month from the applicable landfill disposal trenches.

30 The primary focus of the post-closure care will be the inspection, maintenance and repair of the landfill disposal trenches. As previously mentioned, the landfill disposal trenches encompass 264 acres of the site. The size of each landfill disposal trench and the soil erosion loss as calculated per the Universal Soil Loss Equation are as follows:

35

**SOIL EROSION LOSSES FROM LANDFILLS  
CWM EMELLE FACILITY**

LANDFILL DISPOSAL TRENCHES	AREA OF TRENCH (square feet)	AREA OF TRENCH (acres)	SOIL EROSION LOSS (tons/acre/year)	TOTAL SOIL LOSS (tons/year)
8-18 & 20	2,806,200	65	1.8	117
19	150,000	4	0.78	4
21	2,156,350	50	0.69	35
22	2,362,500	54	1.8	97
23 (under construction)	3,960,000	91	0.79	72
<b>TOTAL</b>		<b>264</b>		<b>325</b>

Other assumptions used in the preparation of the post-closure cost estimates include the following:

- the 39,035 feet of perimeter security fencing will be replaced at the rate of 5% every five years;
- the routine erosion potential for each landfill disposal trench at the Facility is estimated to occur at the rate shown in the table above;
- Maintenance and inspection of the landfill was based on 10% of the total cost of the cap system installation;
- leachate to be removed (i.e., pumped) from the applicable landfill disposal trenches will be removed at the rate of 12,600 gal/month; and
- 10% of the groundwater monitoring wells will need to be replaced during the post-closure care period.

The assumptions included herein and in the following post-closure cost estimates are used for cost estimating purposes and are not to be inferred as the only procedure or alternative to be used during the post-closure care period.

[End of Appendix I-7 Text]

**APPENDIX I-7**  
**SECTION I**  
**POST-CLOSURE COST ESTIMATES**

**TABLES**

# Cost Report

Jacobs Engineering

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CWM: Emelle Post-Closure

12/10/2021 12:43 PM

## Biditem

# 500

## Post Closure Care

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	953,052.35	380,465.36	1,333,517.71	716,550.98	24,211.44	361,922.80	5,624,030.02	0.00	0.00	0.00	8,060,232.95
Total	953,052.35	380,465.36	1,333,517.71	716,550.98	24,211.44	361,922.80	5,624,030.02	0.00	0.00	0.00	8,060,232.95

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	31,210.5000	0.0000	31,210.5000	258.2539	30.5363	42.7266	0.0001

Activity: 10 Removal of Leachate (PC-02) Quantity: 4536000.00 Unit: GAL

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Notes: Volume of leachate to be removed per removal event 12,600.0 gal per Event  
 Number of leachate removal events per year 12 Events per yr  
 Volume of leachate to be removed per year 151,200.0 gal per Year  
 Number of years in the post-closure care period 30 Years

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4TD05	Treat & Dispose - Onsite Leachate	1.00	4,536,000.00	GAL	0.11	100.00	0.11	498,960.00

Activity: 20 Post-Closure Care Site Security: Fence (PC\_03-1) Quantity: 1920.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	4.04	2.16	6.20	2.47	5.72	0.71	0.00	0.00	0.00	0.00	15.09
Total	7,757.80	4,145.49	11,903.29	4,740.02	10,974.48	1,362.82	0.00	0.00	0.00	0.00	28,980.61

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	8.6684	0.0400	25.0000	216.7098	7.6800	250.0000	0.0040	3,773.5169

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	537.6000	3.5714	0.2800	22.1415	4.0405

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 250 Eff: 100.00 Crew Hrs: 76.80 Labor Pcs: 7.00 Equipment Pcs: 3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2LUC001	6' Fence Mesh Roll (50 ft)	1.00	40.00	ROLL	153.00	109.00	166.77	6,670.80
2LUC002	Hog Rings	1.00	2.00	BOX	14.79	109.00	16.12	32.24
2LUC003	Hog Ring Pliers	1.00	2.00	EA	41.73	109.00	45.49	90.97
2LUC004	Come Along	1.00	1.00	EA	163.45	109.00	178.16	178.16
2LUC007	Quickrete Fence Post Mix 80#	1.00	60.00	EA	4.74	109.00	5.17	310.00
2LUC008	Fence Post	1.00	60.00	EA	37.95	109.00	41.37	2,481.93
2LUC022	Top Rail	1.00	40.00	EA	27.60	109.00	30.08	1,203.36
2LUC023	Connector	1.00	2.00	EA	1.18	109.00	1.29	2.57
2LUC024	End Cap Post	1.00	2.00	EA	2.04	109.00	2.23	4.45
31PPE004	Level D Supplies	1.00	537.60	MH	1.50	109.00	1.64	878.98
8BHLD426	BHL Cat 420E 1.25CY	1.00	76.80	HR	35.85	100.00	35.85	2,753.51
8LDRSS232AUG	36" Auger Attachment	1.00	76.80	HR	1.18	100.00	1.18	90.78
8TRKGS10	Flatbed Truck 15K 200HP	1.00	76.80	HR	24.68	100.00	24.68	1,895.73
9STGEN	Sm Tools - General	1.00	537.60	MH	0.90	100.00	0.90	483.84
LFORMN	Laborer-Foreman	1.00	76.80	MH	14.00	110.00	23.34	1,792.27
LGEN	Laborer-General	4.00	307.20	MH	12.00	110.00	20.62	6,335.86
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	76.80	MH	13.24	110.00	22.31	1,713.12
OPLDR6	Op Eng 2- Loader <6Y	1.00	76.80	MH	16.59	110.00	26.85	2,062.04

**Activity: 22 Post-Closure Care Site Security: Signs (PC\_03-1) Quantity: 320.00 Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	11.00	5.82	16.82	6.17	41.37	10.00	0.00	0.00	0.00	0.00	74.36
Total	3,520.00	1,863.87	5,383.87	1,974.72	13,236.96	3,199.98	0.00	0.00	0.00	0.00	23,795.53

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
22.9956	0.2500	4.0000	91.9824	8.0000	40.0000	0.0250	2,974.4413

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
240.0000	1.3333	0.7500	22.4328	11.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: UH 4 Eff: 100.00 Crew Hrs: 80.00 Labor Pcs: 3.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2LUC005	Safety Warning Signs	1.00	320.00	EA	37.95	109.00	41.37	13,236.96
31EC126	Metal Tee Posts	1.00	320.00	EA	7.43	109.00	8.10	2,591.58
31PPE004	Level D Supplies	1.00	240.00	MH	1.50	109.00	1.64	392.40
8TRKGS10	Flatbed Truck 15K 200HP	1.00	80.00	HR	24.68	100.00	24.68	1,974.72
9STGEN	Sm Tools - General	1.00	240.00	MH	0.90	100.00	0.90	216.00
LFORMN	Laborer-Foreman	2.00	160.00	MH	14.00	110.00	23.34	3,733.91
LGEN	Laborer-General	1.00	80.00	MH	12.00	110.00	20.62	1,649.96

**Activity: 30 Maint. of Veg. Cover - Mowing (PC\_04-1) Quantity: 344994.00 Unit: MSF**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.17	0.09	0.26	1.38	0.00	0.00	0.00	0.00	0.00	0.00	1.63
Total	57,686.55	30,666.17	88,352.72	475,308.00	0.00	0.00	0.00	0.00	0.00	0.00	563,660.72

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.2561	0.0115	87.1000	22.3062	396.0896	871.0000	0.0011	1,423.0639

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
3,960.9000	87.0999	0.0115	22.3062	0.1672

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Crew: ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* Prod: US 871 Eff: 100.00 Crew Hrs: 3960.90 Labor Pcs: 1.00 Equipment Pcs: 0.00

**Notes:** Area of cover to be mowed = 11,499,840.0 ft<sup>2</sup>  
 Convert area in ft to area in MSF (thousand square feet) = 2 11,499.8 MSF  
 Number of mowing events per year = 1 Events per yr  
 Number of years in the post-closure care period = 30 Years  
 Number of mowing events during the post-closure care period = 30 Events

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8TRCT	Tractor/Mower Rental	1.00	3,960.90	DY	120.00	100.00	120.00	475,308.00
OPEXC3	Op Eng 3- Backhoe to 3Y	1.00	3,960.90	MH	13.24	110.00	22.31	88,352.72

**Activity: 32 Maint. of Veg. Cover - Seeding (PC\_04-1) Quantity: 689988.00 Unit: MSF**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

**Notes:** Area of cover to be fertilized = 11,499.8 MSF  
 Number of fertilizing events per year = 2 Events per yr  
 Number of years in the post-closure care period = 30 Years  
 Number of fertilizing events during the post-closure care period = 60 Events

RSM 320190130130 Fertilizing, dry granular, 4 lb./M.S.F., tractor towed spreader, 12' spread

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4FERT01	Fertilizing, dry granular, 4lb./MSF. tractor towed	1.00	689,988.00	MSF	2.48	100.00	2.48	1,711,170.24

**Activity: 40 Rep. and Insp. of Veg. Cover - Maint/Repair (PC\_05-1) Quantity: 1.00 Unit: LS**

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform



**Notes:** MAINTENANCE AND REPAIR OF FINAL COVER  
 Cost of installing undifferentiated fill \$0.00  
 Cost of installing clay layer \$4,749,252.26  
 Cost of installing geomembrane \$935,550.00  
 Cost of installing drainage layer \$0.00  
 Cost of installing earthen layer \$1,773,366.25  
 Cost of installing topsoil \$9,197,741.25  
 Cost of installing colloid clay layer \$0.00  
 Total cost of installing final cover \$16,655,909.76  
 Maintenance and repair factor 10.0 %  
 Cost to Maintain and Repair Final Cover \$1,665,590.98

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4CVMT	Cover Maintenance and Repair	1.00	1.00	LS	1,665,590.98	100.00	1,665,590.98	1,665,590.98

**Activity: 42** Rep. and Insp. of Veg. Cover - Instpections (PC\_05-1) **Quantity: 1620.00** **Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	123.20	46.64	169.84	62.89	0.00	0.00	0.00	0.00	0.00	0.00	232.73
Total	199,584.00	75,551.62	275,135.62	101,885.04	0.00	0.00	0.00	0.00	0.00	0.00	377,020.66

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
232.7288	4.0000	0.2500	58.1822	648.0000	2.5000	0.4000	581.8220

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
6,480.0000	0.2500	4.0000	42.4592	123.2000

**Calendar:** 510 5 days @ 10hrs/day **Hrs/Shift:** 10 **WC:** CCISP **CCI Self Perform**  
**Crew:** ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* **Prod:** HU 4 **Eff:** 100.00 **Crew Hrs:** 6480.00 **Labor Pcs:** 1.00 **Equipment Pcs:** 1.00

**Notes:** Number of inspections per year = 54 Inspections per Year  
 Number of years in post-closure care period = 30 Year

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	6,480.00	HR	15.72	100.00	15.72	101,885.04
X122	Field Technician	1.00	6,480.00	MH	28.00	110.00	42.46	275,135.62

**Activity: 50** Groundwater Monitoring (PC\_06-1) **Quantity: 60.00** **Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	10,752.00	4,197.31	14,949.31	2,210.72	0.00	5,956.00	16,800.00	0.00	0.00	0.00	39,916.03
Total	645,120.00	251,838.72	896,958.72	132,643.20	0.00	357,360.00	1,008,000.00	0.00	0.00	0.00	2,394,961.92

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
17,160.0320	80.0000	0.0125	214.5004	480.0000	0.1250	8.0000	4,989.5040

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
19,200.0000	0.0031	320.0000	46.7166	10,752.0000

**Calendar:** 510 5 days @ 10hrs/day **Hrs/Shift:** 10 **WC:** CCISP **CCI Self Perform**  
**Crew:** ZZZ (Mod) \*\*\*CUSTOM CREW\*\*\* **Prod:** SU 8 **Eff:** 100.00 **Crew Hrs:** 4800.00 **Labor Pcs:** 4.00 **Equipment Pcs:** 2.00

**Notes:** Number of sampling locations = 56 Sample Location  
 Number of sampling events per year = 2 Events per yr  
 Number of years of groundwater monitoring during the post closure = 30 Years  
 total events = 60 ea  
 GW analytical - assumed 4 analytes x \$75/ea per location

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
31PPE003	Level C Supplies	1.00	19,200.00	MH	10.00	109.00	10.90	209,280.00
3ST01	Sampling Supplies	1.00	480.00	DY	250.00	109.00	272.50	130,800.00
4LAB20	GW Analysis	1.00	3,360.00	EA	300.00	100.00	300.00	1,008,000.00
8GEN015	Generator 20 KW	1.00	4,800.00	HR	11.91	100.00	11.91	57,172.80
8TRKPU55	Leased 4x4, 3/4 Ton Gas Super	1.00	4,800.00	HR	15.72	100.00	15.72	75,470.40
9STGEN	Sm Tools - General	1.00	19,200.00	MH	0.90	100.00	0.90	17,280.00
X122	Field Technician	3.00	14,400.00	MH	28.00	110.00	42.46	611,412.48
X124	Chemist	1.00	4,800.00	MH	42.00	100.00	59.49	285,546.24

**Activity: 52** Groundwater Monitoring - Analytical (PC\_06-1) **Quantity: 3360.00** **Unit: EA**

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	220.33	0.00	0.00	0.00	220.33
Total	0.00	0.00	0.00	0.00	0.00	0.00	740,308.80	0.00	0.00	0.00	740,308.80

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4LAB05	Metals (SW 6010)	1.00	3,360.00	EA	13.73	100.00	13.73	46,132.80
4LAB06	Total dissolved sulfide (SW 9030)	1.00	3,360.00	EA	17.77	100.00	17.77	59,707.20
4LAB07	Volatile organic analysis (SW5030/SW 8240)	1.00	3,360.00	EA	188.83	100.00	188.83	634,468.80

Activity: 130 Certification of Completion of Post-Closure Care (PC\_11-1) Quantity: 18.00 Unit: EA

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
U. Cost	2,188.00	911.08	3,099.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,099.08
Total	39,384.00	16,399.49	55,783.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55,783.49

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
792.0000	0.0227	44.0000	70.4337	2,188.0000

Calendar: 510 5 days @ 10hrs/day Hrs/Shift: 10 WC: CCISP CCI Self Perform

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
X100	→ Project Manager	1.00	72.00	MH	55.00	100.00	77.90	5,608.94
X110	→ Staff Engineer	1.00	432.00	MH	42.00	100.00	59.49	25,699.16
X112	→ Sr Engineer	1.00	288.00	MH	60.00	100.00	84.98	24,475.39

Report Summary

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Services	Travel	Equip Rent	Total
Total	953,052	380,465	1,333,518	716,551	24,211	361,923	5,624,030	0	0	0	8,060,233

Calendars Used In Estimate

510 5 days @ 10hrs/day

**APPENDIX I-8**

**SECTION I**

**FINANCIAL ASSURANCE DOCUMENTS**

Revision No.

5.0

## **APPENDIX I-8**

### **SECTION I**

#### **FINANCIAL ASSURANCE DOCUMENTS**

5 The financial assurance mechanism used for partial or final closure of the Facility is closure  
insurance, which conforms to the requirements of 40 CFR 264.143(e), 40 CFR 761.65(g)(5),  
and ADEM Administrative Code Rule 335-14-5-.08(4)(e). The financial assurance mechanism  
used for post-closure care of the Facility is post-closure insurance, which conforms to the  
requirements of 40 CFR 264.145(e) and ADEM Administrative Code Rule 335-14-5-.08(6)(e).  
10 The most current proof of financial assurance for closure and post-closure for the Facility are  
currently on file with the Department.

[End of Appendix I-8 Text]

The following financial assurance instrument for closure and post-closure reflects the closure and post-closure costs presented in Table I-6.1 (Appendix I-6 of Section I) of the RCRA Part B Permit Application (Revision 5.0) with the exception that this financial assurance instrument does not include the closure costs for Trench 23 (T-23), as T-23 has not been constructed or approved to receive waste. Per 335-14-5-.08(e)1., T-23 closure costs will be added to the financial assurance instrument at least 60 days prior to receiving waste in T-23.

Received



May 24, 2022

MAY 25 2022

## Land Division

Ms. Linda Knickerbocker  
Alabama Department of Environmental Management  
1400 Coliseum Blvd.  
Montgomery, AL 36110  
(334) 271-7896  
[Lknickerbocker@adem.alabama.gov](mailto:Lknickerbocker@adem.alabama.gov)

**RE: CWM Emelle, Sumter County, Alabama  
EPA ID # ALD 000 622 464  
Updated Financial Assurance**

Dear Ms. Knickerbocker,

Enclosed please find updated financial assurance for the above-referenced facility. The enclosed COI reflects the annual submittal for Emelle's financial assurance obligation for the closure and post-closure. This financial assurance reflects updated and recalculated cost estimates.

If you have any questions, feel free to contact -

Diana Seng, Director of Treasury and Financial Assurance  
Waste Management  
800 Capitol Street  
Suite 3000  
Houston, TX 77002  
(713) 265-1322  
[dseng@wm.com](mailto:dseng@wm.com)

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Vuono", with a long, sweeping underline.

Mark Vuono,  
Divisional President - Environmental Division  
Great American Insurance Group  
397 Eagleview Blvd, Suite 100  
Exton, PA 19341  
484-212-7701 phone  
484-433-7445 cell  
[mvuono@gaig.com](mailto:mvuono@gaig.com)  
<http://www.greatamericaninsurance.com/environmental.html>



397 Eagleview Blvd, Suite 100  
Exton, PA 19341  
888.828.4320 ph

Environmental Division

## CERTIFICATE OF INSURANCE FOR CLOSURE AND/OR POST-CLOSURE CARE

Name and Address of Insurer (hereinafter called the "Insurer"):

Great American Insurance Company, 301 E. 4<sup>th</sup> Street, Cincinnati, Ohio 45202.

Name and Address of Insured (hereinafter called the "Insured"):

Chemical Waste Management, Inc. P.O. Box 55, Highway 17 North, Milemarker 163,  
Emelle, AL 35459-0055

Facilities Covered: (List for each facility: The EPA identification numbers, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered must total the face amount shown below).)

EPA ID. #: ALD 000622464

CWM Emelle, Highway 17 North, Milemarker 163, Emelle, AL 35459-0055

Closure Amount: \$26,157,165.00

Post-Closure Care Amount: \$13,781,261.00

Face Amount: \$39,938,426.00

Policy Number: CPC 1849580

Effective Date: 7/15/2022

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for closure and for post-closure care for the facility identified above. The Insurer further warrants that the policy conforms in all respects with the requirements of ADEM Admin. Code subparagraphs 335-14-5.08(4)(e), 335-14-5.08(6)(e), 335-14-6.08(4)(d), and 335-14-6.08(6)(d), as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the Department, the Insurer agrees to furnish to the Department a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in ADEM Admin. Code subparagraphs 335-14-5.08(12)(e), as such rules were constituted on the date shown immediately below.

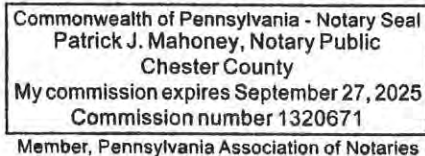


Mark Vuono, Divisional President - Environmental Division

Sworn to before me this day 23 of May, 2022.



Notary Public





# **APPENDIX I-9**

## **SECTION I**

### **LIABILITY REQUIREMENTS**

Revision No.

5.0

**APPENDIX I-9**  
**SECTION I**  
**LIABILITY REQUIREMENTS**

5 In accordance with 40 CFR 264.147 and ADEM Administrative Code Rule 335-14-5-.08(8), the  
Liability Requirements for the Facility are currently on file with the Department.

[End of Appendix I-9 Text]



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
12/6/2019

1/1/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LOCKTON COMPANIES 3657 BRIARPARK DRIVE, SUITE 700 HOUSTON TX 77042 866-260-3538	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED 1300436 WASTE MANAGEMENT HOLDINGS, INC. & ALL AFFILIATED, RELATED & SUBSIDIARY COMPANIES INCLUDING: WASTE MANAGEMENT EMELLE TREATMENT FACILITY #2256 P.O. BOX 55 EMELLE AL 35459	INSURER A: ACE American Insurance Company	22667
	INSURER B: Indemnity Insurance Co of North America	43575
	INSURER C: ACE Fire Underwriters Insurance Company	20702
	INSURER D: ACE Property & Casualty Insurance Co	20699
	INSURER E:	
	INSURER F:	

COVERAGES CERTIFICATE NUMBER: 3444524 REVISION NUMBER: XXXXXXXX  
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> XCU INCLUDED <input checked="" type="checkbox"/> ISO FORM CG00010413 GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:	N	N	HDO G71237345	1/1/2020	1/1/2021	EACH OCCURRENCE \$ 5,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 5,000,000 MED EXP (Any one person) \$ XXXXXXXX PERSONAL & ADV INJURY \$ 5,000,000 GENERAL AGGREGATE \$ 6,000,000 PRODUCTS - COMP/OP AGG \$ 6,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY <input checked="" type="checkbox"/> MCS-90	N	N	MMT H25290008	1/1/2020	1/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX
D	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$	N	N	XOO G27929242 005	1/1/2020	1/1/2021	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 \$ XXXXXXXX
B A C	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/ MEMBER EXCLUDED? (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WLR C66043058 (AOS) WLR C66043010 (AZ, CA & MA) SCF C66043095 (WI)	1/1/2020 1/1/2020 1/1/2020	1/1/2021 1/1/2021 1/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 3,000,000 E.L. DISEASE - EA EMPLOYEE \$ 3,000,000 E.L. DISEASE - POLICY LIMIT \$ 3,000,000
A	<input checked="" type="checkbox"/> EXCESS AUTO LIABILITY	N	N	XSA H25289961	1/1/2020	1/1/2021	COMBINED SINGLE LIMIT \$9,000,000 (EACH ACCIDENT)

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RECEIVED

JAN 07 2020

WASTE MANAGEMENT  
EMELLE, ALABAMA

CERTIFICATE HOLDER

CANCELLATION

3444524

CHEMICAL WASTE MANAGEMENT  
HIGHWAY 17 NORTH MILE MARKER 163  
EMELLE AL 35459

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
04/07/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services Southwest, Inc. Dallas TX Office 5005 Lyndon B Johnson Freeway Suite 1500 Dallas TX 75244 USA	<b>CONTACT NAME:</b> PHONE (A/C. No. Ext): (866) 283-7122      FAX (A/C. No.): 800-363-0105	
	<b>E-MAIL ADDRESS:</b>	
<b>INSURED</b> Waste Management, Inc. 800 Capitol Street Suite 3000 Houston TX 77002 USA	<b>INSURER(S) AFFORDING COVERAGE</b>	
	<b>INSURER A:</b> Ironshore Specialty Insurance Company	<b>NAIC #</b> 25445
	<b>INSURER B:</b>	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	

Holder Identifier :

**COVERAGES**      **CERTIFICATE NUMBER:** 570086940816      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. Limits shown as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG
	<b>AUTOMOBILE LIABILITY</b>  <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
A	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <input checked="" type="checkbox"/> <b>EXCESS LIAB</b> <input checked="" type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION			002830704 Env Excess Liability	07/01/2020	07/01/2021	EACH OCCURRENCE      \$24,000,000 AGGREGATE              \$24,000,000
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below <input type="checkbox"/> Y/N      N/A						<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT
A	Env Site Liab			002830604 Claims-Made	07/01/2020	07/01/2021	Each Incident Limit      \$1,000,000 Aggregate Limit          \$2,000,000 SIR                              \$5,000,000

570086940816

Certificate No :

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Named Insured Site Location: Chemical Waste Management, Emelle, 36964 AL Hwy. 17, Emelle, AL 35459.

**CERTIFICATE HOLDER****CANCELLATION**

Chemical Waste Management, Emelle 36964 AL Hwy. 17 Emelle AL 35459 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services Southwest, Inc.</i>





Environmental Division  
401 Plymouth Rd., Ste. 100  
Plymouth Meeting, PA 19462  
Tel: 1-888-828-4320

## Hazardous Waste Facility Certificate of Liability Insurance

1. Great American E&S Insurance Company, the “Insurer”, of 301 E. 4<sup>th</sup> Street, Cincinnati, Ohio 45202, hereby certifies that it has issued liability insurance covering bodily injury and property damage to Waste Management, Inc., the “insured”, of 800 Capitol Street, Suite 3000, Houston, Texas 77002 in connection with the Insured’s obligation to demonstrate financial responsibility under ADEM Admin. Code paragraph 335-14-5-.08 (8) or 335-14-6-.08 (8).

The coverage applies at EPA ID # ALD0006222464, Chemical Waste Management, 36964 Hwy 17, Emelle, AL 35459 for sudden and non-sudden accidental occurrences. The limits of liability are \$4,000,000 each occurrence and \$8,000,000 annual aggregate, exclusive of legal defense costs. The coverage is provided under policy number PRE 9994175 05, issued on 7/1/2021. The effective date of said policy is 7/1/2021.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
  - (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.
  - (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in ADEM Admin. Code paragraph 335-14-5-.08 (8) (f) or 335-14-6-.08 (8) (f).
  - (c) Whenever requested by the Alabama Department of Environmental Management (“the Department”), the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
  - (d) Cancellation of the insurance, whether by the Insurer, the Insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Department.
  - (e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Department.

I hereby certify that the wording of this instrument is identical to the wording specified in ADEM Admin. Code subparagraph 335-14-5-.08 (12) (j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in the State of Alabama.

---

Rick Ringenwald  
Divisional Vice President,  
Authorized Representative of Great American E&S Insurance Company  
397 Eagleview Boulevard  
Exton, PA 19341

Date: October 27, 2021

**APPENDIX I-10**

**SECTION I**

**PROCEDURES FOR MANAGEMENT OF EQUIPMENT  
REMOVED FROM HAZARDOUS WASTE SERVICE DURING  
CLOSURE**

Revision No.

5.0

**APPENDIX I-10**  
**SECTION I**  
**PROCEDURES FOR MANAGEMENT OF EQUIPMENT**  
**REMOVED FROM HAZARDOUS WASTE SERVICE DURING**  
**CLOSURE**

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**APPENDIX I-10**  
**SECTION I**  
**PROCEDURES FOR MANAGEMENT OF EQUIPMENT**  
**REMOVED FROM HAZARDOUS WASTE SERVICE DURING**  
**CLOSURE**

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**I-10-1 Introduction**

The purpose of this document is to provide procedures for the management of reusable or salvageable equipment subsequent to its cleansing and removal from hazardous/toxic waste service during closure as provided for within the various partial and final closures for units at the Facility. These procedures are applicable to potentially reusable or salvageable equipment such as pumps, agitators, valves, level instruments, pressure/vacuum relief devices, etc. that have been cleansed (as defined in Subsection I-1e of Section I Closure Plan, Post-closure Plan And Financial Requirements) in accordance with the procedures provided within an approved partial closure plan for a unit or final closure plan for the Facility, and not placed into hazardous waste service at the Facility prior to completion of partial closure for the subject unit, removed from the site prior to completion of final closure, or managed as a hazardous waste generated by the Facility. At any time that an equipment item is verified to be decontaminated via an approved sampling/testing procedure, the equipment is no longer subject to the requirements of the procedures provided herein.

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The procedures within this appendix are applicable to all closure activities at the Facility as described in Section I of the RCRA Part B Permit Application. In addition, the designated storage areas, which are described in Subsection I-10-2b of this appendix, are incorporated into Section B of the Part B Permit Application.

**I-10-2 General Management Procedures**

Potentially reusable or salvageable equipment that has come in contact with hazardous or toxic waste and is not placed into hazardous waste service at the Facility after cleansing in accordance with the procedures provided within an approved partial closure plan for a unit or final closure plan for the Facility, shall be identified and placed into a designated storage area as defined in Subsection I-10-2b of this appendix within 15 days of completion of partial closure, or managed off-site in accordance with Subsection I-10-4 of this appendix prior to completion of final closure.

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## I-10-2a Identification

Each piece of equipment subject to these procedures shall be affixed with a tag, which will include the following information:

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- Unique Equipment Identifier Number;
- Unit No. from which equipment was removed;
- Type of service from equipment was removed (e.g., organic, fuels, PCB, cyanide);
- Date upon which equipment was removed from service; and
- The following notation: **"THIS EQUIPMENT MAY ONLY BE REUSED IN HAZARDOUS or TOXIC WASTE SERVICE"**

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This information will be recorded in a Used Equipment Storage Log as part of the Facility Operating Record. In addition, the storage location and the date that equipment is returned to service, shipped off-site, or disposed will also be recorded in the log. Equipment that is taken out of a designated storage area for reuse or disposal will be removed from the Used Equipment Storage Log and, except as provided in Subsection I-10-4 below; its status will no longer be tracked.

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## I-10-2b Designated Storage Areas

Each piece of equipment subject to these procedures shall be placed in a designated area within one of the following locations at the Facility pending future reuse:

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- Heavy Equipment Maintenance Unit No. 300;
- Container Storage Unit No. 406 (i.e., in non-regulated areas of this unit prior to modification through the Part B Permit);
- Central Inventory Unit No. 605;
- Facility Maintenance Shop Unit No. 606; and
- Equipment Laydown Area (i.e., secured area north of Tank T-A).

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All equipment subject to these procedures (i.e., potentially reusable or salvageable equipment generated from a partial closure, and that has been cleansed but not verified to be decontaminated) shall not be stored on bare ground. In addition, any equipment that is stored

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in a location that is exposed to rainfall, such as the Equipment Laydown Area, will be stored within an appropriate container to prevent contact with rainfall or surface water runoff.

### **I-10-3 On-Site Management**

There are three (3) options available for the on-site disposition of potentially reusable or salvageable equipment that has been placed in storage:

- Equipment may be reused in hazardous or toxic waste service at the Facility without further cleansing, treatment, tracking or other management procedures.
- Equipment may be verified to be decontaminated via an approved sampling/testing procedure, and reused in non-hazardous waste service at the Facility. The sampling and testing procedures used to verify decontamination of such equipment will be agreed to in writing by the Facility and ADEM on a case-by-case basis. After decontamination is verified, this equipment will be removed from the Used Equipment Storage Log and its status will no longer be tracked and its disposition will no longer be encumbered.
- Equipment that meets the definition of hazardous waste debris and is no longer considered to be reusable or salvageable, may be verified to meet the 40 CFR 268.45, "clean debris surface" standard via visual inspection. The "clean debris surface" standard means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5% of each square inch of surface area. If the decontamination procedures performed at the time that the equipment was removed from service were not successful in achieving this "clean debris surface", the equipment will be subjected to additional debris treatment at any on-site RCRA unit approved for such treatment. After the equipment is verified to meet the 40 CFR 268.45, "clean debris surface" standard via visual inspection, the equipment may be landfill disposed at the Facility without further tracking or other management procedures.

### **I-10-4 Off-Site Management**

There are two (2) options available for the off-site disposition of potentially reusable or salvageable equipment that has been placed in storage at the Facility:

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- Equipment may be reused in hazardous or toxic waste service at another RCRA permitted TSDf or TSCA permitted facility provided that the Bill of Lading, Shipping Papers or other documentation that verifies the location to which the equipment was shipped, is placed in the Facility's - Used Equipment Storage Log, and that these papers clearly indicate to the equipment recipient that the **"EQUIPMENT MAY ONLY BE REUSED IN HAZARDOUS or TOXIC WASTE SERVICE"**. This equipment will be removed from the Used Equipment Storage Log and its status will no longer be tracked.

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- Equipment may be verified to be decontaminated via an ADEM approved sampling/testing procedure, and shipped off-site provided that the Bill of Lading, Shipping Papers or other documentation that verifies the location to which the equipment was shipped, is placed in the Facility's - Used Equipment Storage Log. This equipment will be removed from the Used Equipment Storage Log and its status will no longer be tracked and its disposition will no longer be encumbered.

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[End of Appendix I-10]