## DEQ's approval of the Units 1 & 2 Stage I and II Evaporation Ponds, Revised Remedy Evaluation - Integrated Report, and the Integrated Report Addendum (Remedy Evaluation Report) and selection of a remedial alternative for the Units 1 & 2 SOEP and STEP area.

#### Section 1 – Background

#### 1.1 – Introduction

The Colstrip Administrative Order on Consent (AOC) is the result of an enforcement action taken by DEQ that requires Talen Montana, LLC (Talen; formerly PPL Montana, LLC) to address groundwater contamination resulting from seepage from coal ash disposal ponds associated with the Colstrip Steam Electric Station (Colstrip SES). Six parties (Talen, PacifiCorp, Puget Sound Energy, Portland General Electric Company, Avista Corporation, and NorthWestern Energy) have split ownership of the Colstrip SES. However, Talen is responsible for operation of the plant and is, therefore, responsible for the remediation of the coal ash ponds under the AOC. Talen and DEQ executed the AOC in 2012. It provides a sequential process for site characterization, identification of clean-up criteria, remedy selection, and remedy implementation.

The Colstrip SES has been in service since 1975, and it consists of four units. Units 1 & 2 are the older of the four units, with operation beginning in 1975. Units 3 & 4 came on line in 1983 and 1985, respectively. The total capacity of all four Units is 2276-megawatts. Units 1 & 2 ceased operation permanently on January 2<sup>nd</sup> and 3<sup>rd</sup>, 2020, respectively. The AOC divides the site into three distinct areas in accordance with the configuration of the ponds: the Plant Site Area, the Units 1 & 2 Area, and the Units 3 & 4 Area.

#### 1.2 – Project Area Description

Under Talen's Major Facility Siting Act (MFSA) Certificate of Compatibility, the Colstrip SES uses a closedloop system for water and scrubber processes. Freshwater used in the system is obtained from the Yellowstone River through a 29-mile pipeline to Castle Rock Lake (also known as the Surge Pond). From the Surge Pond, freshwater is piped to holding tanks at the Plant Site for use in the boilers, cooling towers, and scrubber systems. Flyash from the scrubber system is slurried to the pond areas where the slurry is processed at a paste plant to remove water prior to depositing the ash in the disposal ponds. Clearwater from the paste plant is recirculated back to the Plant Site for use in the scrubbers. Bottom ash is dewatered at the Plant Site and transported by truck to the Units 3 & 4 Effluent Holding Ponds (EHP) for disposal. Clearwater from bottom ash dewatering is reused in the Units 3 & 4 bottom ash systems.

There are three general areas where ash/paste and wastewater are stored at the Colstrip SES:

- The Plant Site, containing Units 1 through 4 and several ponds associated with all four units;
- The Units 1 & 2 Stage I and Stage II Evaporation Ponds (referred to as "Stage I and Stage II Ponds" or "SOEP/STEP"), which contain several ponds used for ash/paste disposal from Units 1 & 2. The SOEP operated from 1975 until 1995 and was closed with an evapotranspiration cap in 2002. The STEP operated from 1993 until Units 1 & 2 closure in January 2020. These ponds are located approximately 2 miles northwest of the Plant Site;

• The Units 3 & 4 EHP are located approximately 2.5 miles southeast of the Plant Site and are used for disposal of ash/paste from Units 3 & 4 and bottom ash from Units 1 through 4. The ponds began operating in 1983 and will continue operating until closure of Units 3 & 4. These ponds are required to convert to dry stack storage by July 1, 2022.

This decision document addresses DEQ's selection of the remedy for the Units 1 & 2 SOEP/STEP area under the AOC.

#### 1.3 – Administrative Order on Consent

The AOC is an enforcement action taken by DEQ to enforce the Montana Water Quality Act and the Major Facility Siting Act. It requires Talen to address groundwater contamination resulting from seepage from the coal ash disposal ponds. The AOC divides the site into three areas: the Plant Site, the Units 1 & 2 Ponds, and the Units 3 & 4 Ponds. The AOC process is sequential and is followed for each of the three areas. Public involvement is also included in the process through public comment periods and public meetings.

Talen prepares and submits the reports required under the AOC to DEQ; DEQ then has 75 days to review and either approve, conditionally approve, or disapprove of the report. The process begins with a Site Characterization Report, which characterizes conditions at each area defined in the AOC. A Cleanup Criteria and Risk Assessment Report is then prepared, which identifies constituents of interest, risk for exposure, and numerical cleanup criteria. After determining cleanup criteria, Talen submits a Remedy Evaluation Report evaluating remediation alternatives and identifying Talen's preferred alternative. DEQ has the authority to select the remedy, or a modified remedy. Talen is required to submit financial assurance for the selected remedy within 60 days of DEQ's approval or conditional approval of the Remedy Evaluation Report.

#### 1.4 – DEQ's Role and Reason for Decision Document

DEQ administers the Montana Water Quality Act (WQA), the Major Facility Siting Act (MFSA), and administrative rules adopted under the WQA and MFSA. The AOC is an enforcement action taken by DEQ under the WQA and MFSA to address groundwater contamination. On September 18, 2020, Talen submitted to DEQ the *Units 1 & 2 Stage I and II Evaporation Ponds, Revised Remedy Evaluation - Integrated Report*, and *the Integrated Report Addendum* (Remedy Evaluation Report). Under the AOC, DEQ has 75 days to review and take action on the Remedy Evaluation Report and to select a remedy or a modified remedy as provided in Article XII of the AOC.

The reason for this decision document is to set forth DEQ's action on the Remedy Evaluation Report and selection of a remedial alternative for the Units 1 & 2 SOEP and STEP from the remedial alternatives identified and analyzed in the Remedy Evaluation Report. This decision document serves as a public notice of DEQ's decision, the reasons for the decision, and any special considerations surrounding the decision or its implementation.

#### Section 2 – Development of Alternatives

Talen first submitted a Remedy Evaluation Report for the Units 1 & 2 SOEP/STEP area on May 7, 2018. The May 2018 Report included evaluation of four remedial alternatives: 1. No further action; 2. Source Control upgrades; 3 Capture System upgrades and 4. In situ flushing with increased capture. Talen identified alternative 4 as its preferred alternative. On August 2, 2018, DEQ did not approve the May 2018 Report, as the cleanup criteria would not be met at the point of compliance (POC), and modeling results submitted by Talen showed plume re-emergence would occur after the capture/injection system shut down. DEQ requested more aggressive measures to meet the cleanup criteria in a reasonable time.

On January 21, 2019, Talen submitted a Revised Remedy Evaluation Report for the SOEP/STEP, analyzing seven remedial alternatives: 1. No further action; 2. Source control upgrades; 3. Source control upgrades and capture system upgrades; 4. Source control with in situ flushing and increased capture; 5: Source control upgrades, in situ flushing and increased capture and dewatering STEP A and E cells; 6: Source control upgrades, in situ flushing and increased capture and dewatering STEP A and E cells and capping SOEP with a geomembrane cap; 7. Source control upgrades, in situ flushing and increased capture, in situ flushing and increased capture, source control upgrades, in situ flushing and increased capture, in situ flushing and increased capture, dewatering STEP A and E cells, and removing SOEP. Talen identified Alternative 5 as its preferred remedy. On April 22, 2019, DEQ did not approve the January 2019 Report due to model concerns, leaving ash in place in direct contact with groundwater (SOEP), and the questionable integrity of the STEP liner and future contact with groundwater.

Based on a proposal from Talen, submission of the Remedy Evaluation Report for the Units 1 & 2 SOEP/STEP area was split into two parts. Part 1 was to address existing groundwater contamination resulting from seepage from the SOEP/STEP, while Part 2 was to address source control alternatives for the SOEP. Talen submitted Part 1 of the Remedy Evaluation Report on October 1, 2019. The Part 1 report included cap-in-place closure of the STEP. Although lined with a single HDPE liner, the bottom of the STEP would remain in contact with groundwater in perpetuity. On June 8, 2020, DEQ conditionally approved Part 1 of the Remedy Evaluation Report, approving only those aspects that can be implemented regardless of the source control methods proposed in the Part 2 Report.

DEQ continued to meet with Talen on the status of Part 2 of the Remedy Evaluation Report for the SOEP/STEP. During a meeting held on February 7, 2020, DEQ requested a more thorough analysis for a SOEP alternative. DEQ also requested an evaluation of a STEP excavation alternative.

DEQ and Talen followed up on the request for a full excavation scenario during a conference call on March 13, 2020. Talen agreed to DEQ's request and, by letter dated April 1, 2020, proposed additional steps and a schedule for completing Part 2 of the Remedy Evaluation Report. Talen projected submitting Part 2 of the Remedy Evaluation Report for the Units 1 & 2 SOEP/STEP area by September of 2020. Talen indicated that it would identify, develop, and screen a list of potential comprehensive source control alternatives for the Units 1 & 2 SOEP/STEP area.

During a conference call on April 16, 2020, DEQ requested a more detailed presentation of alternatives that would be evaluated. Talen presented approximately ten alternatives to DEQ (Alternatives 7A, 7B, 7C, 8A, 8B, 8C, 8D, 8E, 9 and 10), selecting five alternatives to be carried forward for further analysis (Alternatives 7A, 7B, 7C, 8D, and 10). Alternatives 7A, 7B, 7C and 8D included components allowing portions or all of the Stage I and Stage II ponds to be capped in-place, while Alternative 10 required complete excavation of the Stage I and Stage II ponds and placement of the excavated material into a

new landfill. Talen estimated that evaluating the five alternatives would extend the submittal date to September 2020.

By correspondence dated May 21, 2020, DEQ expressed to Talen its concerns regarding the use of a proposed gravity drain to draw water levels below the bottom of the ponds, a component that existed in the four alternatives that did not require excavation and removal of the Stage II ponds to a new landfill. DEQ indicated the State had not concurred with remediation plans relying on gravity drains for long-term remedies and had also advocated for source removal at waste disposal sites for the long-term benefit to groundwater. DEQ requested Talen not pursue the alternatives (Alternatives 7A, 7B, 7C, and 8D) that would leave a contamination source in contact with groundwater or would rely on gravity drains for eliminating the contact. DEQ requested Talen to submit a thorough analysis of Alternative 10 requiring full excavation and removal by July 3. DEQ subsequently clarified that the request to evaluate Alternative 10 was not intended to eliminate other alternatives from further review.

In a letter dated June 5, 2020, Talen indicated it was not feasible to complete a full evaluation of Alternative 10 by July 3, 2020. Talen indicated it understood DEQ's desire to limit the number of alternatives considered and to speed up the schedule from that set forth in Talen Montana's April 1 letter. Talen acknowledged DEQ's authority to set reasonable timeframes for submission of remedy evaluation reports after consultation with Talen under Articles VI.C and X of the Colstrip AOC. Based on its assertion that the July 3, 2020 deadline was not feasible, Talen stated it would limit its evaluation to three alternatives: 6A, 7C and 10. Talen recommended further evaluation of at least one alternative that considered removal of the SOEP but not the STEP (i.e., Alternative 7C). Since an evaluation of alternatives 6A-6C and a revised alternative 5 had already been submitted in a May 29, 2020 submittal to DEQ, Talen stated they would complete a Remedy Evaluation Report that includes an evaluation of Alternatives by August 31, 2020.

DEQ responded to Talen's assertion of an August 31, 2020 deadline by letter dated June 24, 2020. In an effort to balance Talen Montana's need for sufficient time to perform the analysis and DEQ's interest in minimizing delay in selection of the remedial alternative, DEQ requested Talen to submit Part 2 of the Remedy Evaluation Report evaluating Alternative 10 by August 7, 2020, and an addendum to Part 2 addressing Alternative 7C and a comparison of all alternatives by August 31, 2020. The intent of this compromise was to allow Talen sufficient time to conduct the analysis addressing Alternative 7C and the comparison of all alternatives while allowing DEQ to begin review of Alternative 10 before the August 31, 2020 deadline.

Finally, on July 3, 2020, Talen contacted DEQ indicating that it was on track to submit the Alternative 10 analysis on August 7, 2020. While indicating that it was trying to meet the August 31, 2020 deadline for evaluation of Alternative 7C, Talen stated it may not be able to submit the analysis for Alternative 7C until September 4, 2020. DEQ responded by email dated July 8, 2020, stating it was maintaining the August 31, 2020 deadline, but if Talen was unable to submit the Alternative 7C analysis until September 4, 2020, that would be acceptable to DEQ.

On July 31, 2020, Talen proposed inclusion of a new alternative, designated as Alternative 11. Under this alternative, Talen would excavate ash in the Stage I and Stage II ponds where ash and liner are in contact with groundwater. The ash would then be placed on top of the ash remaining in the Stage I and Stage II

ponds instead of in a new landfill. Talen indicated there was not sufficient time to include Alternative 11 in the August 31/September 4, 2020, submission and proposed a September 25, 2020, deadline for submission of the report, which would also include a comparison of Alternatives 6A, 7C, 10 and 11. At the time Alternative 11 was proposed for inclusion, Talen did not know if the alternative was viable due to technical concerns regarding slope stability. DEQ replied in a letter dated August 11, 2020, indicating that it would not accept the proposed deadline of September 25, 2020. However, DEQ asserted if Talen was able to include an analysis of Alternative 11 without affecting the August 31/September 4 deadline for submitting the last components of the remedy evaluation report, DEQ would consider Alternative 11 in its selection of the remedial alternative for the Units 1 & 2 SOEP/STEP area under the Colstrip AOC.

Talen subsequently responded and agreed to submit the Remedy Evaluation Report by September 4, 2020, including analysis of Alternative 11, with supplemental information for Alternative 11 provided to DEQ by September 18, 2020. DEQ agreed to this approach; and Talen submitted the report and supplemental information by the agreed-upon dates.

#### Section 3 – Public Involvement

The Administrative Order on Consent (AOC) provides for public involvement through public comment periods and public meetings. On September 21, 2020, DEQ issued a press release and legal notice indicating it would accept public comment on the Remedy Evaluation Report through October 26, 2020. The press release and legal notice also provided notice of a public meeting that would be held virtually on October 14, 2020. The public meeting provided an overview of report content, including the evaluated alternatives and Talen's preferred alternative.

During the public comment period, DEQ received 1,034 public comments, nearly all of which requested DEQ to select Alternative 10. Public concerns over Talen's proposed alternative (Alternative 11) were primarily related to the risk of continued seepage/groundwater contact from the unlined Stage I pond. These comments have been entered into the administrative record, and DEQ has provided a responsiveness summary for the comments.

#### Section 4 – Alternatives Considered in the Final Integrated Report

Talen's Final Integrated Remedy Evaluation Report considered four alternatives to address groundwater contamination resulting from seepage from the ponds at the Units 1 & 2 SOEP/STEP area. The alternatives consist of

<u>Alternative 6A:</u> This alternative was originally presented in the January 2019 version of the Remedy Evaluation Report and was re-evaluated in the Interim Remedy Report submitted by Talen in May 2020. The alternative includes installation of a groundwater capture/freshwater injection system, dewatering ash in three of the Stage II ponds (A Cell, E Cell, and the Old Clearwell), capping the Stage II Ponds in place with a CCR Rule-compliant geosynthetic cap, and constructing a new geosynthetic cap on the Stage I Pond. <u>Alternative</u> 7C: This alternative includes installation of the groundwater capture/freshwater injection system, dewatering ash in three of the Stage II ponds (A Cell, E Cell, and the Old Clearwell), capping the Stage II Ponds in place with a CCR Rule-compliant geosynthetic liner, installing a gravity drain beneath the Stage II Ponds in 2045 to permanently lower the water table in that area, and excavating and relocating the ash in the Stage I Pond to a new, lined landfill on Talen property, designed and constructed in accordance with the Federal CCR Rule.

<u>Alternative 10:</u> This alternative includes installation of the groundwater capture/freshwater injection system, dewatering ash in three of the Stage II ponds (A Cell, E Cell, and the Old Clearwell), and excavating and relocating all ash in Stage I and Stage II ponds to a new, lined landfill on Talen property, designed and constructed in accordance with the Federal CCR Rule.

<u>Alternative 11:</u> This alternative includes installation of the groundwater capture/freshwater injection system, dewatering ash in three of the Stage II ponds (A Cell, E Cell, and the Old Clearwell), and excavating all ash in the Stage I and Stage II ponds within five feet of the model-projected high water table and relocating the ash within the existing footprint of the ponds. Ash in the Stage I pond would be relocated within that pond; Stage II A Cell would be relocated within the Stage I pond; Stage II E Cell and the Old Clearwell would be relocated to Stage II D Cell and other areas of the existing cells if needed. The ponds would be closed and capped with CCR Rule-compliant geosynthetic liners.

Talen identified Alternative 11 as its preferred alternative in the Remedy Evaluation Report, but strongly urged DEQ to reconsider DEQ's opposition to Alternative 6A.

#### Section 5 – Legal Requirements

#### 5.1 – Montana Water Quality Act

Under Section 75-5-605(1)(a), MCA, it is unlawful to cause pollution of any state waters or to place or cause to be placed any wastes where they will cause pollution of state waters. "Pollution" is defined in Section 75-5-103(30)(a), MCA, to mean contamination or other alteration of the physical, chemical, or biological properties of state waters that exceeds that permitted by Montana water quality standards, including but not limited to standards relating to change in temperature, taste, color, turbidity, or odor; or the discharge, seepage, drainage, infiltration, or flow of liquid, gaseous, solid, radioactive, or other substance into state water that will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, or welfare, to livestock, or to wild animals, birds, fish, or other wildlife. "State waters" is defined in Section 75-5-103(34)(a), MCA, to mean a body of water, irrigation system, or drainage system, either surface or underground.

#### 5.2 – Montana Major Facility Siting Act

On July 22, 1976, the Montana Board of Natural Resources and Conservation ordered the issuance of a Certificate of Environmental Compatibility and Public Need ("Certificate") under the Major Facility Siting Act for Colstrip Units 3 and 4. In making the order, the Montana Board of Natural Resources and Conservation made 97 findings of fact including the following:

1. That the Board of Health and Environmental Sciences, (BHES) has, after a hearing held pursuant to notice, certified to the Board of Natural Resources and Conservation that the facilities as proposed will not violate state and federally established air and water quality standards and implementation plans, a duly certified copy of the Board of Health's Findings of Fact, Conclusion of Law and hereto, marked as Exhibit "A" for identification, and by this reference fully and completely incorporated herein and made a part hereof. (Finding of Fact, No. 8).

2. That the Board of Health and Environmental Sciences, the duly authorized agency empowered to determine whether or not the proposed facility will violate state and federally established standards and implementation plans insofar as air and water quality are concerned, has, after hearing duly noted and held, issued twenty-one (21) pages of Findings of Fact regarding air and water resources and impacts which Findings of Fact and Conclusions of Law are fully and completely incorporated and adopted herein. (Finding of Fact, No. 60).

3. Seepage from the wastewater ponds will be minimal and will be collected by wells and returned to the ponds (Finding of Fact, No. 61).

4. Effluents emanating from Colstrip 1-4 are not anticipated to impair the quality of the ground and surface water of the area and will not violate applicable standards, however, careful monitoring of seepage and complete sealing of sludge ponds will ensure that water quality of the area is not degraded. (Finding of Fact, No. 64).

5. The units as proposed will use a closed loop water system which does not discharge effluents from the plants into ground water or surface water or large evaporation ponds and therefore will have no effect on the ground or surface water in the area (Finding of Fact, No. 65).

6. The facility as proposed will not violate any applicable water quality standards. (Finding of Fact, No. 66).

7. That neither withdrawal of the water from the Yellowstone River under the conditions prescribed by the BHES, nor the minimum seepage from the ponds will have any effect on the plants, animals, wildlife, fish or vegetation in the areas directly and indirectly effected (sic) by such withdrawal. (Finding of Fact, No. 68).

8. Seepage from the surge ponds will be monitored by observation wells constructed at appropriate sites to ensure that any seepage will not exceed the estimated minimum amounts around the rim and through the foundation of the dam (Finding of Fact, Nos. 70 and 71).

9. That waste materials from scrubber units and boilers will be conveyed to sealed ash disposal ponds and eventually dried and the disposal ponds reclaimed. (Finding of Fact, No. 88).

10. That all effluents from seepage from the waste disposal ponds have been analyzed, and to insure no adverse effects on the area the waste disposal ponds will be sealed and monitoring wells installed. (Finding of Fact, No. 89).

11. That the ash and sludge disposal program projects temporary retention ponds located in a 40acre area south of the plants and then the wastes are slurred (sic) to permanent disposal ponds. The first two permanent disposal areas developed (112 and 147 acres each) will be located 10,000 feet northwest of the plants in Section 20, 21, 28 and 29, T2N, R41E. A third pond is proposed in Sections 5, 6, 7 and 8, T1 N, R42VV. When these ponds are filled, they will be dried up, covered with soil and reclaimed. (Finding of Fact, No. 90).

12. That the disposal ponds will not impair the quality of the ground or surface water of the area or violate any applicable standards. (Finding of Fact, No. 91).

13. That all three permanent ponds will service the 37-year life of the plant. (Finding of Fact, No, 92).

Based on the foregoing Findings of Fact, the Board of Natural Resources and Conservation reached 18 Conclusions of Law, including the following:

1. The only authorized state air and water quality agency, the Board of Health and Environmental Sciences, has certified that the proposed facility, Colstrip Units #3 and #4 and associated facilities will not violate state and federally established standards and implementation plans. (Conclusion of Law, No. 10).

2. That the seepage from the existing surge pond and any enlarged or additional surge ponds be monitored, as specified by the State Board of Health and Environmental Sciences, and that every feasible engineering means be taken by the Applicants to minimize such seepage. (Conclusion of Law, No. 12(c)).

3. The sludge pond or ponds shall be completely sealed. If the conventional means such as compaction and bentonite application do not seal the pond(s), as indicated by monitoring wells the Applicants shall install and operate, then extreme measures even up to complete sealing by a plastic membrane 5 shall be taken (Conclusion of Law 12(d) "later modified by stipulation" as further explained below).

4. The reclamation of the sludge ponds, when they are filled and dried out, shall follow the basic reclamation requirements and standards applicable to the proper covering of highly saline backfill in coal areas (Conclusion of Law 12(e)).

5. That all monitoring programs heretofore instituted in regard to Colstrip Units 1 and 2, and in the Application proposed, be implemented and instituted so as to provide a continual flow of factual data insofar as air, surface and ground water are concerned. (Conclusion of Law, No. 12(h)).

6. That the Applicants enter into a written agreement with the Board of Health and Environmental Sciences for the payment of the monitoring facilities and operation thereof required by said Board in their certification heretofore issued, and for any further monitoring required in the conditions set forth herein by the State Board of Natural Resources and Conservation. (Conclusion of Law, No. 12(i)).

Conclusion of Law 12(d) states that the sludge ponds will be sealed. However, under Finding of Fact 61, seepage from wastewater ponds was anticipated and would be collected and returned to the ponds. Conclusion of Law 12(d) was subsequently interpreted in litigation between the Board of Natural Resources and Conservation and the prior operator of 6 Colstrip Units 3 & 4. The Montana First Judicial District Court interpreted Conclusion of Law 12(d) as follows: "The clear meaning of condition 12(d), taken in the context of the Board's findings that some seepage was expected (see BNR findings numbers 61 64, 68, 71 and 89 and BHES finding XXXIX), is that the pond as constructed for Relators may leak in small amounts but if the leakage is detected by the monitoring wells, the Relators will have to resort to

more stringent measures, up to and including the installation of a plastic liner." (Findings of Fact and Conclusions of Law, p. 8,¶ 3 (June 29, 1983)), State of Montana v. Board of Natural Resources and Conservation, Cause No. 49348, District Court of the First Judicial District of the State of Montana, in and for the County of Lewis and Clark).

On July 23, 1976, the Montana Board of Health and Environmental Sciences issued a conditional approval of Colstrip Units 3 & 4, including the following findings of fact and conclusions of law:

1. A closed loop water system (a system which does not discharge effluents from the plants downstream or into other waters) was adopted for Colstrip Units 1-4 so that there would be no discharge from the plants into the Yellowstone River or other state waters. (Finding of Fact XXIX) 2. Much of the waste matter from the four units, such as ash from the scrubber and boiler systems, suspended solids, sediment, and other matter, will be disposed of by using water to convey them to their eventual destinations, the disposal ponds. In some instances the wastes will be further processed and clean water will be returned into the system in order to reduce the amount of water used. Waste ash from various systems and some other waste will be first sluiced to temporary retention ponds located in a 40-acre area just south of the plants. These wastes will eventually be moved to the ultimate disposal ponds by slurry pipeline. The first two permanent disposal areas developed will be located approximately 10,000 feet northwest from the plants in Sections 20, 21, 28, and 29, Township 2 North, Range 41 East. During the life of Units 3 and 4, it will be necessary to develop further disposal ponds to be located in Sections 5, 6, 7, and 8, Township 1 North, Range 42 East. After these ponds are filled with waste they will be dried up, covered with dirt and reclaimed. The first permanent retention pond will contain a surface acreage of approximately 112 acres and it, like all the other retention ponds, will be sealed, using normal construction methods. The first permanent retention pond will have a useful life of approximately six years if the pond is utilized for all four units. Its useful life will be approximately 12 years in the event that it is utilized for the wastes from Units 1 and 2 only. (Finding of Fact XXXI)

3. The various ponds which will be used for storage of water in the evaporation and disposal of water and waste materials emanating from Colstrip Units 1-4 will have seepage not anticipated to impair the quality of the groundwater in the area. (Finding of Fact XXXIX)

4. All ponds, surge ponds, settling ponds and impoundments shall be properly sealed. They shall be monitored for seepage, including the installation of test wells to determine the extent of ground water pollution, and the necessities of correction thereof. (Conclusion of Law 6).

#### 5.3 – Administrative Order on Consent

DEQ entered into the Administrative Order on Consent (AOC) with PPL Montana, LLC, Talen's predecessor in interest, pursuant to DEQ's enforcement authority under § 75-5-612, MCA, of the Montana Water Quality Act and DEQ's general enforcement authority under the Montana Major Facility Siting Act. In addition to remedies created under the Montana Water Quality Act, § 75-5-612, MCA, broadly authorizes DEQ to take appropriate enforcement action on its own initiative to prevent, abate, and control the pollution of state waters.

Attachment A to the AOC provides a description of each of the ponds comprising the closed-loop system at the Colstrip SES. While all of the ponds listed on Attachment A may not be subject to the Certificate, DEQ and Talen agreed that all ponds listed in Attachment A would be subject to the provisions of the AOC.

In the AOC, DEQ and PPL Montana acknowledged that while many of the systems and actions discussed in Attachment A were effective in stopping the migration of seepage, the migration of seepage continued beyond these initial recovery systems in certain areas. DEQ and PPL Montana concluded in the AOC that a comprehensive, risk-based approach incorporating all tools and requirements applicable under Montana's generally applicable environmental laws, including adaptive management practices available thereunder, is needed to address ground water contamination from seepage.

This comprehensive approach identified areas of groundwater contamination from seepage including the Plant Site, areas at or downgradient of Units 1 & 2 Stage 1 and Stage II evaporation ponds northwest of the main plant site, and areas at or downgradient of Units 3 & 4 Effluent Holding Ponds southeast of the main plant site. For each of these areas, Talen was required to submit reports to DEQ approval that 1) identified constituents of concern; 2) identified cleanup criteria and risk assessment relative to the constituents of concern; and 3) identified and evaluated the effectiveness of remedial alternatives, including an identification of Talen's preferred remedial alternative.

Finally, Section XV of the AOC provides that compliance with the AOC constitutes the means, as between the parties, for attaining and assuring compliance with PPLM's obligation under its Certificate and water quality laws and rules within the scope of the AOC.

1. Constituents of Interest

The AOC defines Constituents of Interest (COIs) as "those parameters found in soil, groundwater or surface water that (1) result from Site operations and the wastewater facilities and (2) exceed background or unaffected reference areas concentrations." Constituents of Interest were determined in the Cleanup Criteria and Risk Assessment Report required under Section VI.B of the AOC.

2. Identification of Cleanup Criteria

As required in the AOC, a list of Constituents of Interest (COIs; also referred to as Contaminants of Concern or COCs) and the respective cleanup criteria for these COIs, was determined in the Cleanup Criteria and Risk Assessment Report. Cleanup criteria are based on DEQ-7 numerical groundwater standards; EPA Maximum Contaminant Levels (MCLs), DEQ Risk-Based Corrective Action Levels, EPA Regional Screening Levels (RSLs), and background concentrations based on the Background Screening Levels Report (Neptune, 2016). Exposure pathways and risks to human health and the environment were also required to be identified in the Report. For the Units 1 & 2 Area, Talen determined the following list of COIs and corresponding cleanup criteria (ranges are given for COIs with cleanup criteria that varies based on individual aquifers):

Boron – 4 mg/L Sulfate – 3,000 – 3,140 mg/L Cobalt – 0.0232 – 0.006 mg/L Lithium – 0.072 – 0.09 mg/L Manganese – 0.43 – 2.48 mg/L Selenium – 0.05 mg/L

3. Point of Compliance

The Point of Compliance (POC) is the boundary where the groundwater must meet cleanup criteria. The POC was determined by DEQ to be the downgradient edge of the ponds, in accordance with CCR Rule requirements.

#### 5.4 – Federal Coal Combustion Residuals Rule

The Federal Coal Combustion Residuals Rule, 40 C.F.R. Part 257, Subpart D (CCR Rule), establishes minimum national criteria for the disposal of CCR in landfills and surface impoundments. The CCR Rule applies to new and existing landfills and surface impoundments, including any lateral expansions of such units that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. 40 C.F.R. § 257.50(a), (b). The CCR Rule establishes location restrictions, design criteria, operating criteria, standards for groundwater management and corrective action, closure and post-closure care requirements, and recordkeeping and notification requirements.

When originally promulgated in 2015, the provisions in the CCR Rule were self-implementing—that is, there were no state or federal permitting procedures to enforce the provisions of the CCR Rule. Subsequent action by the U.S. Congress has provided the U.S. Environmental Protection Agency (EPA) with the authority to implement a federal permitting program, as well as authority for states to operate permit programs, provided EPA determines that the state's requirements are as protective as the federal standards. At present, the State of Montana has not sought authorization to run a state CCR permitting program. EPA has proposed, but not yet adopted, rules establishing a federal permitting program, 85 Fed. Reg. 9940 (Feb. 20, 2020). If adopted, these federal permitting requirements would apply in Montana unless and until the State of Montana seeks and obtains authorization to establish a state-specific permitting program.

Talen states that, within the Colstrip SES Units 1&2 Stage I and Stage II Ponds area, STEP D Cell, E Cell, and Old Clearwell are subject to the requirements of the CCR Rule. While DEQ does not directly enforce the CCR Rule, DEQ has stated repeatedly throughout the AOC process that it would not accept a remedy that violates provisions of the CCR Rule.

#### 5.5 – Coal-Fired Generating Unit Remediation Act.

In 2017, the Montana Legislature enacted the Coal-Fired Generating Unit Remediation Act. (Title 75, chapter 8, part 1, MCA.) This Act requires the owner(s) of a coal-fired generating unit to submit to DEQ a proposed remediation plan that includes information such as the current and reasonably anticipated future uses of affected property and information related to remediation, including specific remediation measures already completed or under way pursuant to any applicable legal obligation. Under § 75-8-107(1), MCA, the remediation plan must "attain a degree of cleanup of the affected property consistent with, but no more stringent than, applicable legal obligations, giving consideration to reasonably anticipated future uses of affected property."

In August 2020, Talen submitted a revised proposed remediation plan under the Act for the Colstrip SES Units 1&2 area. This remediation plan is currently under review by DEQ in accordance with § 75-8-106, MCA. Talen's proposed remediation plan incorporates the remediation activities required under the AOC as part of its remediation obligations under the Act.

#### Section 6 – Decisions and Rationale for Decisions

Pursuant to DEQ's authority under Article VI.C.3 of the AOC, DEQ is approving the Remedy Evaluation Report and selecting Alternative 10 as the remedy for the Units 1 & 2 SOEP and STEP area. Alternative 10 is the only alternative that permanently eliminates mass discharge of COIs from the ash to the groundwater, resulting in a permanent achievement of cleanup criteria at the point of compliance, and provides the most effective source control management through construction of a new landfill.

From the technical discussion set forth in the integrated report, DEQ does not believe Alternatives 6A, 7C or 11 will permanently achieve the cleanup criteria for the following reasons:

# Alternative 6A leaves ash in contact with groundwater permanently, resulting in a long-term source of COIs to the aquifers.

Talen determined the SOEP was a source to groundwater in the ISS Treatability Study provided to DEQ in April 2020 (Geosyntec, 2020). This study determined that leachate from the Stage I Pond ash produced concentrations of COIs well above the cleanup criteria, and release of that leachate into groundwater would cause exceedances of the cleanup criteria past the POC.

Due to a similar ash profile, when in contact with water, STEP ash will also act as a source of COIs to groundwater. The STEP liners are predicted to last 400 to 1,000 years, indicating the liners will eventually fail, leaving STEP in contact with groundwater. Under § 75-5-605(1)(a), MCA, waste may not be placed where it will cause pollution to state waters, with pollution being defined in § 75-5-103(30)(ii), MCA, as the discharge, seepage, drainage, infiltration, or flow of liquid,... or other substance into state water that will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, or welfare, to livestock, or to wild animals, birds, fish, or other wildlife. The placement of this waste has been demonstrated to cause pollution to groundwater above risk-based criteria, as documented in the *Cleanup Criteria and Risk Assessment*, and recent leaching studies (Geosyntec, 2020) have shown the ash is and will continue to act as a source when it comes into contact with groundwater.

Please also refer to comments below regarding ash as a source and pond seepage.

# Alternative 7C relies on the successful construction and maintenance of a Gravity Drain in perpetuity to avoid leaving a source (coal ash) in contact with groundwater.

Background water chemistry of the region causes scaling in existing wells, and will result in gravity drain maintenance and thus higher risk and uncertainty of the gravity drain performing long-term without failure. It is infeasible to assume the gravity drain will be maintained in perpetuity. *See also* 40 C.F.R. 102(b)(4)(d)(iv) (CCR Units closed in placed under the CCR Rule must "minimize the need for future maintenance of the CCR Unit). The gravity drain has the potential to act as a conduit for COIs after 2050 when capture systems are turned off and COI concentrations increase above cleanup criteria beneath the SOEP and STEP. However, water flowing through the gravity drain will not be treated prior to discharge into alluvial material near Armells Creek.

The threat of contamination to groundwater in the event the drain is not maintained and the threat of uncontrolled contaminant migration through the gravity drain creates an unacceptable level of risk and, therefore, DEQ does not approve of alternative 7C.

# Alternative 11 depends on groundwater model projections of groundwater levels and does not account for changes in groundwater elevation resulting from the upgradient Rosebud Mine.

As agreed upon by Talen and DEQ, the model is designed to be used for comparative purposes and not for specific quantitative evaluations. However, the feasibility of Alternative 11 relies heavily on quantitative predictions of future high groundwater levels to determine where and how much ash is to be removed. This creates a high level of uncertainty and risk.

Additionally, Appendix D of the groundwater model presented in the Interim Remedy Evaluation Report (May 2020) discusses the impacts to the SOEP/STEP area when dewatering at the upgradient Rosebud Mine stops in 2031. The model shows that this would cause water levels in the SOEP/STEP area to increase by 3 to 4 feet. This is not carried forward into the models presented in the Integrated Remedy Evaluation Report. This is especially crucial in Alternative 11, which is heavily reliant on accurate predictions of the water table elevation in the future. When this is accounted for in the model, a much larger amount of ash would be required to be removed to maintain the 5 foot separation zone above the water table, and would also decrease the area available for ash placement above the water table. This creates uncertainty in the feasibility of Alternative 11.

#### Contribution of COIs from the SOEP is underestimated.

Seepage rates from the SOEP assume that placing a geosynthetic cap would make seepage negligible. This evaluation is based on simplified assumptions without field testing. Seepage rates also do not account for the increase in water levels in 2031 resulting from cessation of Rosebud Mine dewatering, which would lead to increased groundwater elevation (head) and additional saturated ash within the SOEP and, therefore, additional mass loading of COIs from the ash.

# The "source" calculation using Darcy's Law oversimplifies the scenario and underestimates the mass discharge from STEP.

Talen asserts the ash should not be considered a "source" of contamination to groundwater and, therefore, leaving ash in place would still achieve source control objectives. However, Talen demonstrated, both in its *ISS Treatability Study* (Geosyntec, 2020) (Treatability Study) and through observation of groundwater plumes that have resulted from years of pond seepage, when the ash is in contact with water – regardless of whether water is from precipitation infiltration or contact with groundwater – the resulting leachate contains concentrations of COIs that adversely impact groundwater and result in exceedance of cleanup criteria.

The Treatability Study discussed the results of leaching studies from both saturated ash from the SOEP and underlying sediments using the leaching environmental assessment framework (LEAF) method. Results showed that leachate with low liquid to solid ratios (representing pore water within the ash) were well above cleanup criteria (33 mg/L in leachate vs 4 mg/L cleanup criteria for boron). Leachate with higher liquid to solid ratios (representing background groundwater

impacted by ash leachate) had lower concentrations than the low ratio leachate, but concentrations were still above cleanup criteria (11 mg/L in leachate vs 4 mg/L cleanup criteria for boron).

The Treatability Study concludes that "baseline source material characterization results indicate that saturated CCR in SOEP is likely a source of COIs and that additional source control measures should be evaluated to mitigate impacts to groundwater." Additionally, baseline source material characterization from underlying sediment indicates it is a weak source of COIs. Talen indicates that, although the STEP ash was not specifically sampled from leaching data, the STEP ash has similar properties to SOEP ash, and the SOEP data can be used to represent STEP ash. For example, Talen uses results of leaching data from the Treatability Study in the Darcy's Law source calculation in Appendix D. Therefore, if the SOEP was determined to be a source, the STEP would also be a source.

The underlying sediment, determined to be a weak source of COIs in the Treatability Study, is cited as being the source for plume re-emergence in the alternatives where ash removal is proposed. However, if this weak source contributes enough mass of COIs to the aquifer to cause plume re-emergence after capture system shutdown causes re-saturation of these layers, then re-saturation of ash (the primary source) would also contribute COIs to groundwater for alternatives that leave ash in place.

The evaluation of the potential risk of STEP liner failure is conducted through a simple calculation using Darcy's Law. The input parameters include the model-predicted groundwater elevation and hydraulic gradient, a single hydraulic conductivity value, and the assumption of only horizontal flow in the STEP ash. The conclusion provided indicates the STEP cells are not a long-term source and do not contribute to plume re-emergence. It is not acceptable to discount the large volume of ash that has the potential to become saturated with groundwater and act as a long-term source of groundwater contamination without a comprehensive evaluation. Additionally, the groundwater flow and transport model predicts upward flow into the ash and a steeper gradient from the STEP Cells to the downgradient alluvium (east of STEP). Therefore, the Darcy equation likely underestimates the quantity of COIs that would leach from the STEP and migrate downgradient in the event of STEP liner failure.

Additionally, if the liner fully fails, the water table would rise to a level within the ash and would present an unacceptable condition where ash and groundwater separation is no longer sustained (such as in Alternative 6A). Even with the presumed low hydraulic conductivity of the ash, this situation is likely to result in COI migration from the STEP to areas east of the STEP main dam and to off-site locations. Using NewFields' groundwater model, Weston simulated STEP seepage by activating Layer 1 in the STEP area, assigning a hydraulic conductivity of 0.075 ft/day and a concentration of 33 mg/L for boron and 7900 mg/L for sulfate (values used by Talen in the Darcy equation). The General Head Boundary (GHB) upgradient of the pond was also adjusted to accommodate for cessation of Rosebud Mine dewatering. Although this represents a preliminary evaluation of source evaluation for the STEP, the model qualitatively showed that the STEP cells would produce enough leachate to cause plume re-emergence should the liners in the STEP completely fail.

# The model does not account for removal of secondary sources in alternatives involving excavation; therefore, the model overpredicts plume re-emergence for Alternative 7C and especially for Alternative 10.

Alternatives with an excavation component allow access to underlying sediments, which act as secondary sources and affect plume re-emergence. Talen has stated the sediments would be sampled and removed if determined to be a source. However, the model does not account for this, and therefore, underpredicts remedy performance for Alternative 7C and Alternative 10. Additionally, the model does not include injection wells in the footprint of SOEP for Alternative 10, which would also address secondary sources in the underlying sediment.

#### DEQ does not concur with Talen's selection of metrics to compare and select an alternative.

Section 8 of the Integrated Report reviews metrics used to compare the alternatives. Talen suggests that Alternative 6A performs the best when all evaluation criteria are balanced. Specifically, Talen refers to five metrics that weigh in favor of Alternative 6A: fastest achievement of cleanup criteria; start date of capture/injection system; lowest environmental and implementation risk; lowest GSR impact; and lowest cost. However, three of these five criteria do not affect the remedy performance (lowest environmental/implementation risk, GSR impact, and cost); and although the cleanup criteria may be met the fastest, they are not met permanently, which does not comply with the AOC.

Evaluation of metrics such as reduction in plume mass and reduction in mass discharge are useful ways of evaluating remedy effectiveness. However, Talen has stated the model is not capable of a quantitative evaluation, and therefore, evaluating these metrics based on model predictions introduces uncertainty. Additionally, the model did not account for removal of secondary sources in excavation alternatives; these alternatives would perform better than simulated in model predictions because additional plume mass would be removed.

Of the metrics listed in Section 8, DEQ believes compliance with the AOC should be the top priority. Additionally, permanent achievement of cleanup criteria should be evaluated as a metric. When these metrics are evaluated, Alternative 10 is the most effective at achieving the cleanup criteria at the point of compliance. It is the only alternative that removes the source of groundwater contamination and allows cleanup criteria to be achieved permanently. Alternative 6A does not comply with the AOC because it violates the Montana Water Quality Act by leaving a source of pollution in place. Alternatives 7C and 11 have an unacceptable level of uncertainty of compliance with the Water Quality Act in part due to uncertainty around the cessation of dewatering at Rosebud Mine, gravity drain failure and model limitations and assumptions.

#### **Compliance with CCR Rule**

Alternative 10, which includes closure by removal of the existing CCR surface impoundments and disposal of the CCR in a new CCR Rule-compliant landfill, complies with the provisions of the CCR Rule.

During the public comment period on the Integrated Report, DEQ received a comment suggesting that Alternative 11, as proposed, would violate provisions of the CCR Rule. Under Alternative 11, Talen proposes to remove the deeper CCR within the SOEP and STEP A Cell and

relocate it within the footprint of the SOEP, and to remove the deeper CCR in STEP E Cell and Old Clearwell and relocate it within STEP D Cell and other STEP areas (Integrated Report Addendum, p. 34). In suggesting that Alternative 11 would violate provisions of the CCR Rule, the commenter requested DEQ evaluate whether relocating ash into CCR units currently exempt from the CCR Rule would result in those units being subject to the requirements of the CCR Rule (specifically SOEP and STEP A Cell).

Talen has asserted these actions, and Alternative 11 as a whole, would comply with standards for management of wastes and, where applicable, the Federal CCR Rule (Integrated Report, p. 142). Additionally, Talen provided DEQ a response to this comment, stating that

Under Alternative 11, the current plan is to consolidate ash from regulated impoundments within regulated impoundments, and to separately consolidate ash from exempt impoundments within exempt impoundments. Accordingly, there is no plan to move ash from ponds under the jurisdiction of the CCR Rule into ponds exempt from the CCR Rule. Further, for units that are subject to the CCR Rule, the regulations and EPA generally support consolidation between and among units at the same facility during closure. See, e.g., 40 C.F.R. 257.53 (definition of "CCR unit" can include "a combination of more than one of these units" for purposes of certain provisions, which EPA has since confirmed include the closure provisions such that consolidation of ash between multiple closing units is permitted).

DEQ reached out to EPA for clarification regarding the potential application of the CCR Rule to currently exempt CCR units if Alternative 11 is selected. EPA indicated that relocating CCR from locations outside of the Stage I Pond footprint into the Stage I Pond would trigger application of the CCR Rule to the Stage I Pond.

The addition of CCR from locations external to the "unlined pond" (such as moving coal ash from a different impoundment) would result in the unlined pond being subject to the federal CCR regulations. Any disposal unit that receives CCR after Oct 19, 2015 (the rule's effective date) would be subject to the federal CCR regulations, with one exception. The one exception is for municipal solid waste landfills, which is not at issue here.

(Email from Kendra Morrison to Sara Edinberg, Nov 2, 2020.)

Given EPA's statement, DEQ has concerns as to whether Alternative 11 would meet the requirements of the CCR Rule. Talen has asserted Alternative 11 would not trigger CCR Rule regulation for currently exempt units but has not demonstrated to DEQ that the disposal of additional CCR into the Stage I Pond, which is both unlined and located within five feet of the groundwater table, in 2024 and 2025 would meet the requirements of the CCR Rule, especially in light of the waste acceptance prohibition deadline in 40 CFR 257.101. In addition, Talen has not demonstrated the SOEP/STEP area impoundments would be eligible for the alternative closure requirements in 40 CFR 257.103. Furthermore, while EPA in March 2020 proposed amendments to the CCR Rule that would have allowed for CCR consolidation after the waste acceptance prohibition deadline during closure (85 FR 12463, Mar. 20, 2020), EPA did not adopt that proposal when it finalized its rulemaking. (85 FR 72506, Nov. 12, 2020.)

DEQ has stated it will not approve a remedy that does not comply with the CCR Rule. The uncertainty as to whether Alternative 11, as presented, would comply with the requirements of the CCR Rule weighs against selection of Alternative 11.

#### Section 7 – Financial Assurance

Talen is required to submit financial assurance for the selected remedy within 60 days of DEQ's approval or conditional approval of the Remedy Evaluation Report. DEQ has calculated financial assurance for the amount it would cost DEQ to perform Alternative 10 in the event Talen was no longer a viable party. Financial Assurance is reviewed yearly and adjusted as necessary. The details of the financial assurance calculation are provided in Appendix A. Financial Assurance for Alternative 10 was calculated in 2020 dollars with the 3% discount rate in the amount of \$285,438,000.00 and without the 3% discount rate in the amount of \$191,054,000. Although Talen's estimate has been determined to be accurate if Talen performs the work, the financial assurance is designed to cover the costs of the remedy in the event that Talen were unable to perform the work and remedy completion was left to the State. Therefore, the financial assurance reflects the estimated cost to the State to implement the selected alternative based on standard industry costs.

#### Section 8 – Dispute Resolution

Talen may invoke the dispute resolution provisions set forth in Article XIII of the AOC by sending written notice of its election to invoke the dispute resolution provisions to DEQ no later than 30 days after receiving this decision document.

#### **References:**

Geosyntec, 2020. Source Investigation and In Situ Stabilization/Solidification Treatability Study Report of Coal Combustion Residuals (CCR) Units 1 & 2 Stage I Evaporation Pond, Colstrip Steam Electric Station. Geosyntec Consultants, Inc., Columbia, Maryland. April 2020.

**Appendix A – Financial Assurance Calculations** 

Site:	Colstrip Steam I	Electric Station								
Location:	Colstrip, MT									
						-	SOEP and STEP C	losure by Removal to	New Landfill	
Site: Co Location: Co Item A 1 2 3 4 P\ 5		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9
ltem	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030
1	Capital Cost	\$4,489,728.40	\$6,238,176	\$360,687	\$89,900	\$63,250	\$45,257,040.07	\$180,597,937	\$2,094,253	\$60,776,021
2	Escalation	\$276,675.89	\$252,022	\$14,572	\$1,798	\$1,265	\$5,219,958.88	\$24,858,776	\$128,185	\$12,583,280
3	Subtotal	\$4,766,404.29	\$6,490,198.48	\$375,258.84	\$91,697.89	\$64,515.00	\$50,476,998.95	\$205,456,713.60	\$2,222,437.74	\$73,359,301.02
4	PV Discount (\$)	\$441,197.78	\$603,397.14	\$17,869.47	\$0.00	\$0.00	\$9,938,907.50	\$48,311,625.95	\$206,621.20	\$24,900,744.97
5	Total	\$4,325,206.51	\$5,886,801.34	\$357,389.37	\$91,697.89	\$64,515.00	\$40,538,091.46	\$157,145,087.65	\$2,015,816.54	\$48,458,556.04

Site:	Colstrip Steam E									
Location:	Colstrip, MT									
								Capture Syst	em upgrades	
Site: Col Location: Col Item I Alt 1 2 3 4 PV 5		Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
ltem	Units 1&2, Alternative 10	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies
1	Capital Cost	\$3,010,112	\$966,265.90	\$48,986	\$837,865	\$104,451	\$532,486	\$1,152,238.05	\$0.00	\$96,745
2	Escalation	\$695,891	\$223,385.57	\$980	\$417,927	\$2,089	\$10,650	\$252,333.70	\$0.00	\$1,935
3	Subtotal	\$3,706,002.43	\$1,189,651.47	\$49,966.04	\$1,255,792.66	\$106,540.07	\$543,135.45	\$1,404,571.75	\$0.00	\$98,679.80
4	PV Discount (\$)	\$1,374,522.48	\$441,230.87	\$0.00	\$753,935.85	\$0.00	\$0.00	\$499,172.28	\$0.00	\$0.00
5	Total	\$2,331,479.95	\$748,420.59	\$49,966.04	\$501,856.81	\$106,540.07	\$543,135.45	\$905,399.47	\$0.00	\$98,679.80

Site:	Colstrip Steam E									
Location:	Colstrip, MT									
				In Situ Flushing		Injectio	on Capture System Sh	utdown		
Location: Co		Task 19	Task 20	Task 21	Task 22	Task 23	Task 24	Task 25	Task 26	Task 27
ltem	Units 1&2, Alternative 10	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022
1	Capital Cost	\$52,040	\$493,262	\$2,244,944	\$901,490.39	\$1,043,757.12	\$105,976	\$205,187	\$0	\$457,219
2	Escalation	\$1,041	\$9,865	\$491,630	\$105,358.57	\$532,875.86	\$6,487	\$49,937	\$0	\$27,985
3	Subtotal	\$53,081.30	\$503,127.28	\$2,736,573.94	\$1,006,848.96	\$1,576,632.98	\$112,462.16	\$255,124.25	\$0.00	\$485,204.23
4	PV Discount (\$)	\$0.00	\$0.00	\$972,553.98	\$196,980.54	\$963,207.77	\$10,455.67	\$98,500.09	\$0.00	\$45,109.69
5	Total	\$53,081.30	\$503,127.28	\$1,764,019.96	\$809,868.42	\$613,425.21	\$102,006.49	\$156,624.16	\$0.00	\$440,094.54

Site:	Colstrip Steam	E			
Location:	Colstrip, MT				
	_	Water Management	_		
ltem		Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
1	Capital Cost	\$663,378.96	\$65,463.75	\$26,617,625	\$339,566,484.28
2	Escalation	\$98,634.94	\$9,733.52	\$12,914,051	\$59,189,323.62
3	Subtotal	\$762,013.91	\$75,197.27	\$39,531,676.16	\$398,755,807.90
4	PV Discount (\$)	\$193,387.40	\$19,083.91	\$23,329,303.38	\$113,317,807.90
5	Total	\$568,626.51	\$56,113.36	\$16,202,372.78	\$285,438,000.00

Site:	Colstrip Steam E	Electric Station											
Looution	eolouip, int						SOEP and STEP C	osure by Removal to	New Landfill				
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
Item	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
1	Capital Cost	\$4,489,728.40	\$6,238,176	\$360,687	\$89,900	\$63,250	\$45,257,040.07	\$180,597,937	\$2,094,253	\$60,776,021	\$3,010,112	\$966,265.90	\$48,986
	Escalation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020													
2021	1.000	\$915,904.59	\$124,764	\$7,214	\$91,698	\$64,515	\$46,162,181	\$184,209,896	\$2,136,138	\$61,991,542	\$3,070,314	\$985,591	\$49,966
2022	0.952	\$934,222.69	\$127,259	\$375,259			\$47,085,424	\$187,894,094	\$2,178,861	\$63,231,372	\$3,131,720	\$1,005,303	
2023	0.907	\$952,907.14	\$6,490,198				\$48,027,133	\$191,651,976	\$2,222,438	\$64,496,000	\$3,194,355	\$1,025,409	
2024	0.864	\$971,965.28					\$12,246,918.91	\$195,485,015		\$65,785,920	\$3,258,242	\$1,045,917	
2025	0.823	\$991,404.59					\$12,491,857.29	\$49,848,679		\$67,101,638	\$3,323,407	\$1,066,836	
2026	0.784						\$12,741,694.43	\$50,845,652.44		\$68,443,671	\$3,389,875	\$1,088,172	
2027	0.746						\$12,996,528.32	\$51,862,565.49		\$69,812,545	\$3,457,672	\$1,109,936	
2028	0.711							\$52,899,816.80		\$71,208,795	\$3,526,826	\$1,132,135	
2029	0.677									\$36,316,486	\$3,597,362	\$1,154,777	
2030	0.645									\$37,042,815	\$1,834,655	\$588,936	
2031	0.614										\$1,871,348	\$600,715	

Site:	Colstrip Steam I	Electric Station											
Location:	Colstrip, MT						SOEP and STEP C	losure by Removal to	New Landfill				
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
Item	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
2032	0.585												
2033	0.557												
2034	0.530												
2035	0.505												
2036	0.481												
2037	0.458												
2038	0.436												
2039	0.416												
2040	0.396												
2041	0.377												
2042	0.359												
2043	0.342												
2044	0.326												
2045	0.310												

Site:	Colstrip Steam I	Electric Station											
Location:	Coistrip, MI						SOEP and STEP C	osure by Removal to	New Landfill				
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
Item	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
2046	0.295												
2047	0.281												
2048	0.268												
2049	0.255												
2050	0.243												
2051	0.231												
-													
Total		\$4,766,404.29	\$6,490,198	\$375,259	\$91,698	\$64,515	\$50,476,998.95	\$205,456,714	\$2,222,438	\$73,359,301	\$3,706,002	\$1,189,651	\$49,966
	PV Calc												
2020													
2021	1.000	\$915,904.59	\$124,763.52	\$7,213.74	\$91,697.89	\$64,515.00	\$46,162,180.87	\$184,209,895.85	\$2,136,137.77	\$61,991,541.64	\$3,070,313.91	\$985,591.22	\$49,966.04
2022	0.952	\$889,735.89	\$121,198.85	\$357,389.37	\$0.00	\$0.00	\$44,843,261.42	\$178,946,755.97	\$2,075,105.26	\$60,220,354.73	\$2,982,590.65	\$957,431.47	\$0.00

Site:	Colstrip Steam I	Electric Station											
Location.							SOEP and STEP C	losure by Removal to	New Landfill				
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
Item	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
2023	0.907	\$864,314.87	\$5,886,801.34	\$0.00	\$0.00	\$0.00	\$43,562,025.38	\$173,833,991.51	\$2,015,816.54	\$58,499,773.17	\$2,897,373.78	\$930,076.28	\$0.00
2024	0.864	\$839,620.16	\$0.00	\$0.00	\$0.00	\$0.00	\$10,579,349.02	\$168,867,306.04	\$0.00	\$56,828,351.08	\$2,814,591.67	\$903,502.67	\$0.00
2025	0.823	\$815,631.01	\$0.00	\$0.00	\$0.00	\$0.00	\$10,277,081.91	\$41,010,631.47	\$0.00	\$55,204,683.91	\$2,734,174.76	\$877,688.31	\$0.00
2026	0.784	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,983,450.99	\$39,838,899.14	\$0.00	\$53,627,407.22	\$2,656,055.49	\$852,611.50	\$0.00
2027	0.746	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,698,209.54	\$38,700,644.88	\$0.00	\$52,095,195.59	\$2,580,168.19	\$828,251.17	\$0.00
2028	0.711	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37,594,912.17	\$0.00	\$50,606,761.43	\$2,506,449.09	\$804,586.86	\$0.00
2029	0.677	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24,580,426.98	\$2,434,836.26	\$781,598.66	\$0.00
2030	0.645	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,878,129.07	\$1,182,634.76	\$379,633.63	\$0.00
2031	0.614	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,148,845.19	\$368,786.96	\$0.00
2032	0.585	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2033	0.557	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2034	0.530	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2035	0.505	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2036	0.481	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Site:	Colstrip Steam I	Electric Station											
Location:	Coistrip, MI						SOEP and STEP C	losure by Removal to	New Landfill				
-		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
ltem	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
2037	0.458	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2038	0.436	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2039	0.416	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2040	0.396	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2041	0.377	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2042	0.359	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2043	0.342	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2044	0.326	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2045	0.310	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2046	0.295	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2047	0.281	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2048	0.268	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2049	0.255	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2050	0.243	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Site:	Colstrip Steam E	Electric Station											
Location:	Colstrip, MT												
							SOEP and STEP C	losure by Removal to	New Landfill				
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11	Task 12
ltem	Units 1&2, Alternative 10	Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025	B Cell and D Cell Dewater, Decommission and Removed 2023	Units 1 and 2 Flyash Scrubber Slurry and Clearwater Return Pipe Lines, North 1AD Drain Pond Decommission 2022	Install Monitoring Well Network new Landfill 2021	Hydro/Geological Investigation new Landfill 2021	Construct New Landfill 2024-2027	Remove Ash and Impacted Soil from SOEP and STEP Cells to New Landfill 2025-2028	Relocate 230kV Transmission Line	Remove SOEP and STEP main Dams to New Landfill 2029-2030	Reclaim footprint of Former SOEP and STEP Celss 2030-2031	Reclaim SOEP and STEP Main Dams 2030-2031	Facility Closure Plan
2051	0.231	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total		\$4,325,206.51	\$5,886,801	\$357,389	\$91,698	\$64,515	\$40,538,091.46	\$157,145,088	\$2,015,817	\$48,458,556	\$2,331,480	\$748,421	\$49,966

Site:	Colstrip Steam I	E											
Looution	eolotiip, mi				Capture Syst	em upgrades				In Situ Flushing		Injectio	on Capture System Sh
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
1	Capital Cost	t \$837,865	\$104,451	\$532,486	\$1,152,238.05	\$0.00	\$96,745	\$52,040	\$493,262	\$2,244,944	\$901,490.39	\$1,043,757.12	\$105,976
	Escalation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
2020													
2021	1.000	\$854,623	\$106,540	\$543,135	\$1,175,283	\$0	\$98,680	\$53,081	\$503,127	\$2,289,843	\$91,952	\$1,064,632	\$108,095
2022	0.952	\$871,715			\$1,198,788					\$2,335,640	\$93,791	\$1,085,925	\$110,257
2023	0.907	\$889,149			\$1,222,764					\$2,382,352	\$95,667	\$1,107,643	\$112,462
2024	0.864	\$906,932			\$1,247,220					\$2,429,999	\$97,580	\$1,129,796	
2025	0.823	\$925,071			\$1,272,164					\$2,478,599	\$99,532	\$1,152,392	
2026	0.784	\$943,572			\$1,297,607					\$2,528,171	\$101,522	\$1,175,440	
2027	0.746	\$962,444			\$1,323,559					\$2,578,735	\$103,553	\$1,198,949	
2028	0.711	\$981,693			\$1,350,031					\$2,630,309	\$105,624	\$1,222,928	
2029	0.677	\$43,536			\$1,377,031					\$2,682,916	\$107,736	\$1,247,386	
2030	0.645	\$44,407			\$1,404,572					\$2,736,574	\$109,891	\$1,272,334	
2031	0.614	\$45,295										\$64,889	

Site: Location:	Colstrip Steam E Colstrip, MT	E											
					Capture Syst	em upgrades				In Situ Flushing		Injectio	on Capture System Sh
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
2032	0.585	\$46,201										\$66,187	
2033	0.557	\$47,125										\$67,511	
2034	0.530	\$48,067										\$68,861	
2035	0.505	\$49,029										\$70,238	
2036	0.481	\$50,009										\$71,643	
2037	0.458	\$51,009										\$73,076	
2038	0.436	\$52,029										\$74,537	
2039	0.416	\$53,070										\$76,028	
2040	0.396	\$54,131										\$77,548	
2041	0.377	\$55,214										\$79,099	
2042	0.359	\$56,318										\$80,681	
2043	0.342	\$57,445										\$82,295	
2044	0.326	\$58,594										\$83,941	
2045	0.310	\$59,766										\$85,620	

Site:	Colstrip Steam I	E											
Looution					Capture Syst	tem upgrades				In Situ Flushing		Injectio	on Capture System Sh
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
2046	0.295	\$60,961										\$87,332	
2047	0.281	\$62,180										\$89,079	
2048	0.268	\$63,424										\$90,860	
2049	0.255	\$64,692										\$92,678	
2050	0.243	\$65,986										\$94,531	
2051	0.231	\$67,306											
Total		\$1,255,793	\$106,540.07	\$543,135.45	\$1,404,571.75	\$0	\$98,680	\$53,081	\$503,127	\$2,736,574	\$1,006,848.96	\$1,576,632.98	\$112,462
	PV Calc	;											
2020													
2021	1.000	\$854,622.68	\$106,540.07	\$543,135.45	\$1,175,282.81	\$0.00	\$98,679.80	\$53,081.30	\$503,127.28	\$2,289,842.66	\$91,952.02	\$1,064,632.26	\$108,095.11
2022	0.952	\$830,204.89	\$0.00	\$0.00	\$1,141,703.30	\$0.00	\$0.00	\$0.00	\$0.00	\$2,224,418.58	\$89,324.82	\$1,034,214.20	\$105,006.68

Site: Location:	Colstrip Steam	E											
					Capture Syst	em upgrades				In Situ Flushing		Injectio	n Capture System Sh
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
2023	0.907	\$806,484.75	\$0.00	\$0.00	\$1,109,083.21	\$0.00	\$0.00	\$0.00	\$0.00	\$2,160,863.76	\$86,772.68	\$1,004,665.22	\$102,006.49
2024	0.864	\$783,442.33	\$0.00	\$0.00	\$1,077,395.11	\$0.00	\$0.00	\$0.00	\$0.00	\$2,099,124.80	\$84,293.46	\$975,960.50	\$0.00
2025	0.823	\$761,058.26	\$0.00	\$0.00	\$1,046,612.40	\$0.00	\$0.00	\$0.00	\$0.00	\$2,039,149.81	\$81,885.08	\$948,075.91	\$0.00
2026	0.784	\$739,313.74	\$0.00	\$0.00	\$1,016,709.19	\$0.00	\$0.00	\$0.00	\$0.00	\$1,980,888.38	\$79,545.50	\$920,988.03	\$0.00
2027	0.746	\$718,190.49	\$0.00	\$0.00	\$987,660.35	\$0.00	\$0.00	\$0.00	\$0.00	\$1,924,291.57	\$77,272.78	\$894,674.09	\$0.00
2028	0.711	\$697,670.76	\$0.00	\$0.00	\$959,441.48	\$0.00	\$0.00	\$0.00	\$0.00	\$1,869,311.81	\$75,064.98	\$869,111.97	\$0.00
2029	0.677	\$29,466.84	\$0.00	\$0.00	\$932,028.87	\$0.00	\$0.00	\$0.00	\$0.00	\$1,815,902.90	\$72,920.27	\$844,280.20	\$0.00
2030	0.645	\$28,624.93	\$0.00	\$0.00	\$905,399.47	\$0.00	\$0.00	\$0.00	\$0.00	\$1,764,019.96	\$70,836.83	\$820,157.91	\$0.00
2031	0.614	\$27,807.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39,836.24	\$0.00
2032	0.585	\$27,012.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38,698.06	\$0.00
2033	0.557	\$26,240.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37,592.40	\$0.00
2034	0.530	\$25,491.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36,518.34	\$0.00
2035	0.505	\$24,762.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35,474.95	\$0.00
2036	0.481	\$24,055.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34,461.38	\$0.00

Site: Location:	Colstrip Steam	E											
				-	Capture Syst	em upgrades	-	-		In Situ Flushing	-	Injectio	on Capture System Sh
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
2037	0.458	\$23,367.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33,476.77	\$0.00
2038	0.436	\$22,700.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32,520.29	\$0.00
2039	0.416	\$22,051.71	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31,591.14	\$0.00
2040	0.396	\$21,421.66	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30,688.54	\$0.00
2041	0.377	\$20,809.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29,811.72	\$0.00
2042	0.359	\$20,215.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28,959.96	\$0.00
2043	0.342	\$19,637.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28,132.53	\$0.00
2044	0.326	\$19,076.41	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27,328.75	\$0.00
2045	0.310	\$18,531.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26,547.92	\$0.00
2046	0.295	\$18,001.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25,789.41	\$0.00
2047	0.281	\$17,487.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25,052.57	\$0.00
2048	0.268	\$16,987.92	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24,336.78	\$0.00
2049	0.255	\$16,502.55	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,641.45	\$0.00
2050	0.243	\$16,031.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22,965.98	\$0.00

Site:	Colstrip Steam E												
Location:	Colstrip, MT												
					Capture Sys	tem upgrades				In Situ Flushing		Injection Capture System Sh	
		Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	Task 19	Task 20	Task 21	Task 22	Task 23	Task 24
ltem	Units 1&2, Alternative 10	Post Closure Care New Landfill	Increase Pump Rates at (8) Existing Vertical Capture Wells 2021	(8) New Vertical Capture Wells 2021	(17) new Vertical or Angled Capture Wells 2030	Not Used	MNA Demonstration Studies	Institutional Controls Point of use Treatment	(7) new Vertical or angled Injection Wells for Surge Pond 2021	(36) New Vertical Injection Wells 2030	Small Scale In Situ Flusing System 2021 Full Scale in 2030	Injection System Stops Pumping 2050	Post Pumping Modeled Until 2150
2051	0.231	\$15,573.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total		\$501,857	\$106,540.07	\$543,135.45	\$905,399.47	\$0.00	\$98,679.80	\$53,081.30	\$503,127.28	\$1,764,020	\$809,868.42	\$613,425.21	\$102,006

Site:	Colstrip Steam E							
Location:	Colstrip, MT	utdown			Water Management			[
		Took 25	Took 26	Took 27	Teak 29	Teek 20	Taak 20	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
1	Capital Cost	\$205,187	\$0	\$457,219	\$663,378.96	\$65,463.75	\$26,617,625	\$339,566,484.28
	Escalation	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
2020								\$0.00
2021	1.000	\$209,291	\$0	\$466,363	\$676,647	\$66,773	\$27,149,977	\$335,267,764.17
2022	0.952	\$213,477	\$0	\$475,690	\$690,179	\$68,108	\$27,692,977	
2023	0.907	\$217,746	\$0	\$485,204	\$703,983	\$69,471	\$28,246,836	
2024	0.864	\$222,101			\$718,063	\$70,860	\$28,811,773	
2025	0.823	\$226,543			\$732,424	\$72,277	\$29,388,008	
2026	0.784	\$231,074			\$747,072	\$73,723	\$29,975,769	
2027	0.746	\$235,695			\$762,014	\$75,197	\$30,575,284	
2028	0.711	\$240,409					\$1,299,450	
2029	0.677	\$245,217					\$1,325,439	
2030	0.645	\$250,122					\$1,351,947	
2031	0.614	\$255,124					\$1,378,986	

Site:	Colstrip Steam B							
Location:	Colstrip, MT	utdown			Water Management			[
		Task 25	Task 26	Task 27	Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
2032	0.585						\$1,406,566	
2033	0.557						\$1,434,697	
2034	0.530						\$1,463,391	
2035	0.505						\$1,492,659	
2036	0.481						\$1,522,512	
2037	0.458						\$1,552,963	
2038	0.436						\$1,584,022	
2039	0.416						\$1,615,702	
2040	0.396						\$1,648,016	
2041	0.377						\$1,680,977	
2042	0.359						\$1,714,596	
2043	0.342						\$1,748,888	
2044	0.326						\$1,783,866	
2045	0.310						\$1,819,543	

Site:	Colstrip Steam E							
Location:	Colstrip, MT	utdown			Water Management			
		Task 25	Task 26	Task 27	Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
2046	0.295						\$1,855,934	
2047	0.281						\$1,893,053	
2048	0.268						\$1,930,914	
2049	0.255						\$1,969,532	
2050	0.243						\$2,008,923	
2051	0.231						\$2,049,101	
Total		\$255,124	\$0	\$485,204	\$762,014	\$75,197	\$39,531,676	\$398,755,807.90
								\$63,488,043.72
	PV Calc							
2020								
2021	1.000	\$209,290.74	\$0.00	\$466,363.15	\$676,646.54	\$66,773.03	\$27,149,977.23	\$335,267,764.1
2022	0.952	\$203,311.01	\$0.00	\$453,038.49	\$657,313.78	\$64,865.22	\$26,374,263.59	

Site:	Colstrip Steam B							
Location:	Colstrip, MT	utdown			Water Management			
		Task 25	Task 26	Task 27	Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
2023	0.907	\$197,502.12	\$0.00	\$440,094.54	\$638,533.39	\$63,011.93	\$25,620,713.20	
2024	0.864	\$191,859.20	\$0.00	\$0.00	\$620,289.58	\$61,211.59	\$24,888,692.83	
2025	0.823	\$186,377.51	\$0.00	\$0.00	\$602,567.02	\$59,462.69	\$24,177,587.32	
2026	0.784	\$181,052.44	\$0.00	\$0.00	\$585,350.82	\$57,763.75	\$23,486,799.11	
2027	0.746	\$175,879.51	\$0.00	\$0.00	\$568,626.51	\$56,113.36	\$22,815,747.71	
2028	0.711	\$170,854.38	\$0.00	\$0.00	\$0.00	\$0.00	\$923,494.55	
2029	0.677	\$165,972.83	\$0.00	\$0.00	\$0.00	\$0.00	\$897,108.99	
2030	0.645	\$161,230.75	\$0.00	\$0.00	\$0.00	\$0.00	\$871,477.31	
2031	0.614	\$156,624.16	\$0.00	\$0.00	\$0.00	\$0.00	\$846,577.95	
2032	0.585	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$822,390.01	
2033	0.557	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$798,893.16	
2034	0.530	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$776,067.64	
2035	0.505	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$753,894.28	
2036	0.481	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$732,354.44	

Site:	Colstrip Steam B							
Location:	Colstrip, MT	utdown			Water Management			
		Task 25	Task 26	Task 27	Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
2037	0.458	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$711,430.03	
2038	0.436	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$691,103.45	
2039	0.416	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$671,357.64	
2040	0.396	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$652,175.99	
2041	0.377	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$633,542.39	
2042	0.359	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$615,441.18	
2043	0.342	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$597,857.15	
2044	0.326	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$580,775.52	
2045	0.310	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$564,181.93	
2046	0.295	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$548,062.45	
2047	0.281	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$532,403.52	
2048	0.268	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$517,191.99	
2049	0.255	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$502,415.08	
2050	0.243	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$488,060.36	

Site:	Colstrip Steam	E						
Location:	Colstrip, Wi	utdown			Water Management			
		Task 25	Task 26	Task 27	Task 28	Task 29	Task 30	
ltem	Units 1&2, Alternative 10	PRB Feasilbility Studies Boron Beneath STEP Main Dam	Paste Process Forced Evaporation Shutdown 2020	Manage Clearwater from Paste Plant STEP B Cell Untill 2022	Landfill Stormwater Pond Constructed 2027	Additional Stormwater Drainage Features Around Former SOEP and STEP	Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053	Total
2051	0.231	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$474,115.78	
Total		\$156,624	\$0	\$440,095	\$568,627	\$56,113	\$16,202,373	\$285,438,000.0

	Task 1 Ash in A Cell, E Cell and Old Clearwell Dewater 2021-2025									
CAPITAL COST:										
				Team						
Did them No.		<b>OT</b> (		Production	<i>"</i> <b>-</b>	Duration	Unit Or at			
BIG ITEM NO.	Description	QIY	Unit	(Units/Day)	# Teams	<u>(vveeks)</u>	Unit Cost	lotal		
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00		
0120	Site Management	0.00	WK	1.00	1	1	21 158 55	0.00		
0130	Mobilization	1.00	LS	N/A	N/A	N/A	26.845.08	26.845.08		
0140	Install Pumps	10.00	Ea	1.0	1.0	0.0	10,321.25	103,212.50		
0150	Install piping	5,280.00	LF	N/A	N/A	N/A	50.60	267,168.00		
0160	Install power	1.00	Ea	N/A	N/A	N/A	9,013.13	9,013.13		
0180	Survey	10.00	DY	1.0	1.0	0.0	3,220.00	32,200.00		
0180a	Install Well	10.00	Ea	1.0	1.0	0.0	2,875.00	28,750.00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	AC	1.0	1.0	0.0	3,450.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	0.0	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	0.0	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	0.0	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	N/A	1.73	0.00		
0240	I ransport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Grading	0.00	LUY	1.0	1.0	0.0	3.45	0.00		
02508	Soil Amondmonto	0.00	ST CV	1.0	1.0	0.0	2.30	0.00		
02500	Topsoil	0.00	CY	1.0	1.0	0.0	10.61	0.00		
02500	Seeding	0.00	AC	N/A	N/A	0.0 N/A	1 178 75	0.00		
0255	Dewatering Excavation (Per Day)	0.00		1.0	10	0.0	1 150 00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00		
0280	Analysis per well (Analytes from 2019 report table 3-1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
0290	PRB Feasilbility Studies Boron Beneath STEP Main D	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	500.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	LS	1.0	1.0	0.0	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner	4,347,288.00	SF	N/A	N/A	N/A	0.72	3,112,114.80		
0360	Demobilization	1.00	LS	1.0	N/A	0.0	18,687.50	18,687.50		
0400	Final Report	0.20	LS	N/A	N/A	N/A	70,094.87	14,018.97		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							3,612,009.98		
	Contingency	10%						361,201.00		
	Sub-Total							3,973,210.97		
	Infrastructure Improvements	2%						79 464 22		
	Project Management	4%						158.928.44		
	Remedial Design (not applicable)	0%						0.00		
	Construction Management	7%						278,124.77		
	Total Capital Cost							4.489.728.40		

Task 2									
		0-11 0			Bernard				
APITAL COST:	B Cell and D	Cell Dewat	er, Deco	ommission and	Removed				
				Team					
				Production		Duration			
Bid Item No.	Description	<u>QTY</u>	<u>Unit</u>	<u>(Units/Day)</u>	<u># Teams</u>	(Weeks)	Unit Cost	Total	
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00	
0110	Work Plans(WP/APP/SSHP & GSV) Site Management	0.00	LS	N/A 1.00	N/A	N/A	81,273.38	0.00	
0120	Mobilization	1.44	15	N/A	N/A	2/4	21,138.33	26 845 08	
0140	Install Pumps	5.00	Fa	1.0	1.0	0.0	10.321.25	51 606 25	
0150	Install piping	5,000.00	LF	N/A	N/A	N/A	50.60	253,000.00	
0160	Install power	5.00	Ea	N/A	N/A	N/A	9,013.13	45,065.63	
0180	Survey	5.00	DY	1.0	1.0	0.0	3,220.00	16,100.00	
0180a	Install Well	0.00	Ea	1.0	1.0	0.0	2,875.00	0.00	
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00	
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00	
0210	Excavation Bulk	137,133.00	CY	1.0	1.0	10.0	6.90	946,217.70	
215	Excavation Trench	0.00	CY	1.0	1.0	10.0	9.20	0.00	
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	10.0	4.60	0.00	
0230	Loading	171,416.25	LCY	N/A	N/A	N/A	1.73	295,693.03	
0240	I ransport Haul Earth	171,416.25	LCY	N/A	N/A	N/A	5.43	930,447.41	
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00	
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00	
0250a	Grading Soil Amondmonto	205,700.00	SY	200.0	1.0	205.7	2.30	4/3,110.00	
02508	Topsoil	24 292 22	CY	250.0	1.0	27.4	10.61	75,097.42	
02500	Seeding	42.60	40	230.0	1.U	27.4	1 179 75	50 006 99	
0255	Dewatering Excavation (Per Dav)	42.50	DV NC	1.0	1.0	0.0	1,178.75	11 595 81	
0260	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287 50	0.00	
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00	
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00	
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00	
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00	
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00	
	Analysis per well (Analytes from 2019 report table 3-								
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00	
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00	
	PRB Feasilbility Studies Boron Beneath STEP Main								
0290	Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00	
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00	
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00	
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00	
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00	
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00	
0330a	Sile Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00	
0340	Remove Liner	1,851,300.00	ST	N/A	N/A	N/A	0.72	1,325,299.39	
0360	Einal Report	1.00	10	1.0	N/A	0.0	10,007.00	10,007.00	
0400	Land Use Controls/Deed Restriction	0.25	15	N/A	N/A	N/A	22 425 00	0.00	
0410	Sub-Total	0.00	20	N/A	N/A	100	22,423.00	4 931 364 55	
	Contingency	10%						493.136.46	
	Sub-Total							5,424,501.01	
	Infrastructure Improvements	001						400 400 00	
	minasi uciure improvements Project Management	2%						108,490.02	
	Remedial Design/ Pre-Constructrion	470						210,900.04	
	Construction Management	2 /0 7%						379 715 07	
	Total Capital Cost	170						575,715.07	
	i otai oapitai oost							6.238.176.16	

Task 3										
	Units 1 and 2 Flyash Scrubber Slurry a	nd Clearwa	ater Retu	ırn Pipelines, N	orth 1AD Drai	in Pond Decom	mission			
CAPITAL COST:										
				Team						
				Production		Duration				
Bid Item No.	Description	<u>QTY</u>	<u>Unit</u>	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	1809	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install power	2,000.00	LP Eo	N/A	N/A N/A	N/A	0.012.12	0.012.12		
0180	Survey	0.00	DY	1.0	1.0	10	3 220 00	9,013.13		
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2.875.00	0.00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Contirmation & waste Sampling/\Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Contextile Entrie	0.00	IONS	1.0	1.0	0.0	29.90	0.00		
0275	Liper	0.00	87 85	1.0	1.0	0.0	1.50	0.00		
0275.6	Pine Demolition	9,000,00	IE	1.0	1.0	1800.0	2.00	174 915 00		
0275.0	MNA Demonstration Studies	9,000.00	0	1.0	1.0	1800.0	76 479 49	0.00		
270	Analysis per well (Analytes from 2019 report table 3-		0	1.0	1.0	0.0	70,470.10	0.00		
0280	1)	0.00	CY	500.0	10	0.0	1 74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath STEP Main									
0290	Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner	0.00	Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							285,128.13		
	Contingency	10%						28,512.81		
	Sub-Total							313,640.94		
	Infrastructure Improvements	2%						6.272.82		
	Project Management	4%						12,545.64		
l .	Remedial Design/ Pre-Constructrion	2%						6,272.82		
	Construction Management	7%						21,954.87		
	Total Capital Cost							360,687.08		

Task 4										
	L			II Natural 000						
	Inst	all Monit	oring We	II Network 202	1					
APITAL COST:										
				Team Production		Duration				
Bid Item No.	Description	QTY	Unit	(Units/Day)	# Teams	(Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	2.00	WK	1.00	1	9	21,158.55	42,317.11		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Survey	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Install Well	10.00	En	1.0	1.0	1.0	3,220.00	28 750 00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	2,875.00	28,750.00		
0200	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	Analysis naryysll (Analytas from 2010 report table 2		0	1.0	1.0	0.0	76,478.18	0.00		
0000	Analysis per well (Analytes from 2019 report table 3-	0.00	OV	500.0	10	0.0	4.74	0.00		
0260	r) Facility Closure Plan	0.00	0-1	500.0	1.0	0.0	1.74	0.00		
0200.1	PRB Feasibility Studies Boron Beneath STEP Main	0.00	Gal	1000.0	1.0	0.0	30.72	0.00		
0290	Dam	0.00	CY	500.0	10	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Fa	1.0	1.0	0.0	83 775 18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Fa	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1 655 535 75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner	0.00	Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							71,067.11		
	Contingency	10%						7,106.71		
	Sub-Total							78,173.82		
	Infrastructure Improvements	2%						1,563.48		
	Project Management	4%						3,126.95		
	Remedial Design/ Pre-Constructrion	2%						1,563.48		
	Construction Management	7%						5,472.17		
	Total Capital Cost							89,899.89		

Task 5										
	Hv	dro/Geof	tech Inve	stigation 2021						
		uro, ecc.		aligation 202.						
APITAL COST:										
Bid Item No.	Description	QTY	Unit	<u>Team</u> <u>Production</u> (Units/Day)	# Teams	Duration (Weeks)	Unit <u>Cost</u>	Total		
0100	Pre-Design Investigation	0.00	IS	N/A	N/A	N/A	85 496 18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey Install Well	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200a	Clear and Grub	0.00	Fa	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
U25UC	I Opsoli Socializa	0.00	UY AC	250.0	1.0	0.0	10.61	0.00		
0252	Dewatering Excavation (Per Day)	0.00	AC	N/A 1.0	N/A 1.0	N/A	1,1/0./0	0.00		
0255	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	10	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies Analysis per well (Analytes from 2019 report table 3-		0	1.0	1.0	0.0	76,478.18	0.00		
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan PRB Feasilbility Studies Boron Beneath STEP	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
0290	Main Dam	0.00	CY -	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Unul 2100	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Relocate 230kV/Transmission Line	0.00	Ea E-	1.0	1.0	N/A	20.70	0.00		
0320	Stormwater Basin	0.00	CE	N/A N/A	N/A N/A	N/A N/A	1,000,030.70	0.00		
0330	Post Closure Care New Landfill	0.00	AC.	50	10	0.0	662 344 17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7.417.50	0.00		
0330b	Hydro Geotech Investigation	1.00	AC	5.0	1.0	0.2	50,000.00	50,000.00		
0340	Remove Liner	0.00	Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total	10%						50,000.00		
		10 %						5,000.00		
	Sub-Total	2%						55,000.00		
	Project Management	4%						2.200.00		
	Remedial Design/ Pre-Constructrion	2%						1,100.00		
	Construction Management	7%						3,850.00		
	Total Capital Cost							62 250 00		

Task 6										
	c c	Construct N	ew Land	IFill 2024-2027						
				11111 2024-2027						
APITAL COST:										
Bid Item No.	Description	ΟΤΥ	Unit	Team Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.30	18	N/A	N/A	N/A	85 496 18	25.648.85		
0100	Work Plans(WP/APP/SSHP & GSV)	0.50	LS IS	N/A N/A	N/A N/A	N/A N/A	81 273 38	25,048.85		
0120	Site Management	52.00	WK	1.00	1	52	21,158.55	1,100,244.81		
0130	Mobilization	1.00	LS	N/A	N/A	N/A	26,845.08	26,845.08		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	22.75	DY	1.0	1.0	1.0	3,220.00	73,255.00		
0180a	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200	Clear and Grub	91.00	AC.	1.0	1.0	1.8	3 450 00	313 950 00		
0210	Excavation Bulk	1.981.980.00	CY	1.0	1.0	N/A	6.90	13.675.662.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	10,560.00	LF	1.0	1.0	N/A	4.60	48,576.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	1,981,980.00	Ea	N/A	N/A	N/A	3.06	6,062,876.82		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	441,350.00	SY	200.0	1.0	441.4	2.30	1,015,105.00		
0250b	Soli Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
02500	Seeding	01.00	40	250.0	1.0	56.7 N/A	1 179 75	107 266 25		
0252	Dewatering Excavation (Per Day)	91.00	AC	N/A 1.0	N/A 1.0	N/A	1,176.75	200.000.00		
0260	Confirmation & Waste Sampling/Analysis	820.00	Fa	1.0	1.0	0.0	287 50	235,000.00		
0270	Stone	15.840.00	Tons	1.0	1.0	3168.0	29.90	473.616.00		
0275	Geotextile Fabric	23,466.67	SY	1.0	1.0	4693.3	1.56	36,701.87		
0275.5	Liner	3,963,960.00	SF	1.0	1.0	792792.0	2.86	11,350,799.46		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies Analysis per well (Analytes from 2019 report table 3		0	1.0	1.0	0.0	76,478.18	0.00		
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Pacility Closure Plan PRB Feasilbility Studies Boron Beneath STEP	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
0290	Main Dam Bost Rumping Medeled Lintil 2150	0.00	CY E-	500.0	1.0	0.0	191.84	0.00		
02908	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	0.0	03,775.10	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	1.U	N/A	1 655 535 75	0.00		
0320	Stormwater Basin	0.00	CE	N/A	N/A	N/A	0 17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662.344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner	0.00	Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	1.00	LS	1.0	N/A	0.0	18,687.50	18,687.50		
0400	Final Report	1.00	LS	N/A	N/A	N/A	70,094.87	70,094.87		
0410	Land Use Controls/Deed Restriction	1.00	LS	N/A	N/A	N/A	22,425.00	22,425.00		
	Sub-Total							35,776,316.26		
	Contingency	10%						3,577,631.63		
	Sub-Total							39,353,947.89		
	Infrastructure Improvements	2%						787,078.96		
	Project Management	4%						1,574,157.92		
	Remedial Design/ Pre-Constructrion	2%						787,078.96		
	Construction Management	1%						2,/54,//6.35		
	Total Capital Cost							45 257 040 07		

Task 7										
	Remove Ash and I	mpacted So	11 from S	OEP and STEP	Cells to Land	T111				
CAPITAL COST:			2023-202	.0						
				-						
				Team Production		Duration				
Bid Item No.	Description	QTY	<u>Unit</u>	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.30	LS	N/A	N/A	N/A	85,496.18	25,648.85		
0110	Work Plans(WP/APP/SSHP & GSV)	0.50	LS	N/A	N/A	N/A	81,273.38	40,636.69		
0120	Site Management	0.00	WK	1.00	1	796476	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF C-	N/A	N/A	N/A	50.60	0.00		
0160	Superv	0.00	Ea	N/A 1.0	N/A	N/A	3,013.13	0.00		
0180	Install Well	0.00	DT Eo	1.0	1.0	1.0	3,220.00	0.00		
01804	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40 250 00	0.00		
0200	Clear and Grub	0.00	Fa	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	5 350 000 00	CY	1.0	1.0	N/A	6.90	36 915 000 00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	10,000.00	LF	1.0	1.0	N/A	4.60	46,000.00		
0230	Loading	6,687,500.00	LCY	N/A	N/A	6	1.73	11,535,937.50		
0240	Transport Haul Earth	6,687,500.00	LCY	N/A	N/A	N/A	5.43	36,299,750.00		
0245	Backfill	6,687,500.00	Ea	N/A	N/A	N/A	3.06	20,457,062.50		
0250	Compaction	6,687,500.00	LCY	500.0	1.0	2675.0	3.45	23,071,875.00		
0250a	Grading	982,036.00	SY	200.0	1.0	982.0	2.30	2,258,682.80		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geolexille Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Pine Demolition	3,963,960.00	SF LF	1.0	1.0	192192.0	2.00	11,350,799.46		
0275.0	MNA Demonstration Studies	0.00	0	1.0	1.0	0.0	76 478 18	0.00		
270	Analysis per well (Analytes from 2019 report table 3-		U	1.0	1.0	0.0	70,478.18	0.00		
0280	1)		CY	500.0	10	0.0	1 74	0.00		
0280 1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasibility Studies Boron Beneath STEP									
0290	Main Dam		CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150		Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	91.00	AC	5.0	1.0	18.2	7,417.50	674,992.50		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	1.00	LS	1.0	N/A	0.0	18,687.50	18,687.50		
0400	Final Report	1.00	LS	N/A	N/A	N/A	70,094.87	70,094.87		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							142,765,167.67		
	Contingency	10%						14,276,516.77		
	Sub-Total							157,041,684.44		
	Infrastructure Improvements	2%						3,140,833.69		
	Project Management	4%						6,281,667.38		
	Remedial Design/ Pre-Constructrion	2%						3,140,833.69		
	Construction Management	7%						10,992,917.91		
	Total Capital Cost							180 597 937 11		

Task 8										
	Rel	ocate 23	0 kV Trar	smission Line	•					
APITAL COST:										
				Team						
Bid Item No.	Description	QTY	Unit	Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	15	N/A	N/A	N/A	85 496 18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200	Clear and Grub	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Excavation Bulk	0.00	CV	1.0	1.0	0.0	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	I F	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & Waste Sampling/\Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	ST	1.0	1.0	0.0	1.56	0.00		
0275.6	Pine Demolition	0.00	55	1.0	1.0	0.0	2.00	0.00		
276	MNA Demonstration Studies	0.00	0	1.0	10	0.0	76 478 18	0.00		
2.0	Analysis per well (Analytes from 2019 report table 3-		5			0.0	10,410.10	0.00		
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath STEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Stormwater Basin	1.00	LS	N/A	N/A	N/A	1,655,535.75	1,655,535.75		
0320	Post Closure Care New Landfill	0.00		N/A	N/A	N/A	0.17	0.00		
03309	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7 417 50	0.00		
0340	Remove Liner	0.00	Fa	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	1.5	10	N/A	0.0	18 687 50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70.094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							1,655,535.75		
	Contingency	10%						165,553.57		
	Sub-Total							1,821,089.32		
	Infrastructure Improvements	2%						36,421.79		
	Project Management	4%						72,843.57		
	Remedial Design/ Pre-Constructrion	2%						36,421.79		
	Construction Management	7%						127,476.25		
	Total Capital Cost							2 004 252 72		

Task 9										
	Remove SOEP a	and STEP M	lain Dan	ns to New Land	Ifill 2029-2030					
CAPITAL COST:										
				Team Production		Duration				
Bid Item No.	Description	QTY	Unit	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.30	LS	N/A	N/A	N/A	85,496.18	25,648.85		
0110	Work Plans(WP/APP/SSHP & GSV)	0.50	LS	N/A	N/A	N/A	81,273.38	40,636.69		
0120	Site Management	0.00	WK	1.00	1	1009	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Hydro/Coologia Investigation	0.00	Ea E-	1.0	1.0	1.0	2,875.00	0.00		
0200-	Clear and Crub	0.00	Ea E-	1.0	1.0	0.0	40,250.00	0.00		
0200a	Excavation Bulk	2 000 000 00	Ea	1.0	1.0	0.0	345.00	12 800 000 00		
215	Excavation Dank	2,000,000.00	CY	1.0	1.0	N/A	0.90	0.00		
0220	Erosion and Sediment Control	5 000 00	LE	1.0	1.0	N/A	4.60	23 000 00		
0230	Loading	2 500 000 00	LCY	N/A	N/A	6	1.73	4 312 500 00		
0240	Transport Haul Earth	2,500,000.00	LCY	N/A	N/A	N/A	5.43	13.570.000.00		
0245	Backfill	2,500,000,00	Ea	N/A	N/A	N/A	3.06	7.647.500.00		
0250	Compaction	2,500,000.00	LCY	500.0	1.0	1000.0	3.45	8,625,000.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner Dina Damalitian	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	MNA Demonstration Studion	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	Analysis nervell (Analytan from 2010 report table 2		0	1.0	1.0	0.0	/6,4/8.18	0.00		
0000	Analysis per well (Analytes from 2019 report table 3-	0.00	01/	500.0	4.0		4.74	0.00		
0280 1	r) Eacility Closure Plan	0.00	Cal	1000.0	1.0	0.0	1.74	0.00		
0200.1	PRB Feasibility Studies Boron Beneath STEP	0.00	Gai	1000.0	1.0	0.0	30.72	0.00		
0290	Main Dam	0.00	CY	500.0	10	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83.775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							48,044,285.54		
	Contingency	10%						4,804,428.55		
	Sub-Total							52,848,714.10		
	Infrastructure Improvements	2%						1,056,974.28		
	Project Management	4%						2,113,948.56		
	Remedial Design/ Pre-Constructrion	2%						1,056,974.28		
	Construction Management	7%						3,699,409.99		
	Total Capital Cost							60.776.021.21		

Task 10										
	Reclaim Land in	Footprint o	of Forme	er SOEP and S	TEP 2030-203 <sup>,</sup>	1				
CAPITAL COST.				<b>T</b>						
				<u>Ieam</u> Production		Duration				
Bid Item No.	Description	QTY	Unit	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	634	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200	Hydro/Geologic investigation	0.00	Ea -	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	I ransport Haui Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	551,760.00	SY	200.0	1.0	551.8	2.30	1,269,048.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	lopsoil	91,960.00	CY	250.0	1.0	73.6	10.61	976,109.42		
0252	Seeding	114.00	AC	N/A	N/A	N/A	1,178.75	134,377.50		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & waste Sampling/vanalysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00		
	Analysis per well (Analytes from 2019 report table 3-									
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath SIEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							2,379,534.92		
	Contingency	10%						237,953.49		
	Sub-Total							2,617,488.41		
	Infrastructure Improvements	2%						52,349.77		
	Project Management	4%						104,699.54		
	Remedial Design/ Pre-Constructrion	2%						52,349.77		
	Construction Management	7%						183,224.19		
	Total Capital Cost							3 010 111 67		

#### Weston Solutions, Inc. Contract No.: 421034, TO5 Project No.: 15409.105.001.0030

Task 11										
	Reclaim	SOEP and	STEP	Aain Dams 203	0-2031					
		002. 4								
CAPITAL COST:										
				Team						
Bid Item No.	Description	ΟΤΥ	Unit	Production (Units/Dav)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100		0.00	19	N/A	M/A	N/A	85 496 18	0.00		
0100	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A N/A	N/A N/A	81.273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	163	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	5	1.73	0.00		
0240	Poolefil	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0240	Dackilli	0.00	LCV	N/A 500.0	N/A 1.0	N/A	3.00	0.00		
02509	Gradina	130 680 00	SV	200.0	1.0	130.7	3.40 2.30	300 564 00		
0250a	Soil Amendments	0.00	CV	100.0	1.0	0.0	2.30	0.00		
02500	Tonsoil	21 780 00	CY	250.0	1.0	17.4	10.61	231 183 81		
02500	Seeding	27,700.00	AC.	N/A	N/A	N/A	1 178 75	31 826 25		
0255	Dewatering Excavation (Per Day)	0.00	DY	10	10	0.0	1 150 00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00		
	Analysis per well (Analytes from 2019 report table 3-									
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath STEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landini	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	27.00	AC E-	5.0	1.0	5.4	/,41/.50	200,272.50		
0340	Remove Liner Demobilization	0.00	Ea	N/A 1.0	N/A	N/A	U.72	0.00		
0300	Einal Peport	0.00	1.5	1.U N/A	N/A N/A	U.U N/A	10,007.00	0.00		
0400	Land Use Controls/Deed Restriction	0.00	19	N/A	N/A	N/A	22 425 00	0.00		
0410	Lund Obe Control Dood noothouth	0.00	13	DVA.	IN/A	DV/A	22,423.00	0.00		
	Sub-Total							763,846.56		
	Contingency	10%						76,384.66		
	Sub-Total							840,231.22		
	Infrastructure Improvements	2%						16,804.62		
	Project Management	4%						33,609.25		
	Remedial Design/ Pre-Constructrion	2%						16,804.62		
	Construction Management	7%						58,816.19		
	Total Capital Cost							966 265 90		

Weston Solutions, Inc. Contract No.: 421034, TO5 Project No.: 15409.105.001.0030

Task 12										
	D	114.0			1511					
_	Prepare F	acility C	osure Pi	an and Close L	andfill		_			
APITAL COST:										
				Team						
Bid Item No.	Description	QTY	Unit	Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	1.5	N/A	N/A	N/A	85 496 18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY 5-	1.0	1.0	1.0	3,220.00	0.00		
0180a	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00		
0200	Clear and Grub	0.00	Fa	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Stone	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Geotextile Fabric	0.00	SV	1.0	1.0	0.0	29.90	0.00		
0275 5	Liner	0.00	SE	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LE	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies	0.00	0	1.0	1.0	0.0	76,478.18	0.00		
	Analysis per well (Analytes from 2019 report table 3-									
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	1.00	Ea	1000.0	1.0	0.0	38,724.36	38,724.36		
	PRB Feasilbility Studies Boron Beneath STEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Site Restoration Trace and Shruha	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
03308	Remove Liner	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Demobilization	0.00	Ea	N/A	N/A	N/A	10 607 60	0.00		
0300	Final Report	0.00	1.5	N/A	N/A	0.0 N/A	70 094 87	0.00		
0400	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22.425.00	0.00		
							,			
	Sub-Total							38,724.36		
	Contingency	10%						3,872.44		
	SUD-10(a)							42,596.80		
	Infrastructure Improvements	2%						851.94		
	Project Management	4%						1,703.87		
	Remedial Design/ Pre-Constructrion	2%						851.94		
	Construction Management	7%						2,981.78		
	Total Capital Cost							48 986 32		

	Task 13											
	Post Closure Care											
		100	. 010501	e oure								
CAPITAL COST:				-								
Bid Item No.	Description	QTY	Unit	<u>Ieam</u> <u>Production</u> (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total				
0100	Pre-Design Investigation	0.00	IS	N/A	N/A	N/A	85 496 18	0.00				
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00				
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00				
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00				
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00				
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00				
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00				
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00				
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00				
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00				
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00				
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00				
215	Excavation Trench Erasion and Sodiment Control	0.00	CY	1.0	1.0	N/A	9.20	0.00				
0220	Looding	0.00	LF	1.0	1.0	N/A	4.60	0.00				
0230	Transport Haul Earth	0.00	LOT	N/A	N/A	D N/A	1.73	0.00				
0240	Backfill	0.00	Eo	N/A	N/A	N/A	2.43	0.00				
0245	Compaction	0.00	LCY	500.0	10	0.0	3.45	0.00				
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00				
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00				
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00				
0252	Seeding	0.00	AC	N/A	N/A	N/A	1 178 75	0.00				
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1.150.00	0.00				
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00				
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00				
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00				
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00				
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00				
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00				
	Analysis per well (Analytes from 2019 report table 3-											
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00				
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00				
	PRB Feasilbility Studies Boron Beneath STEP											
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00				
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00				
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00				
0310	Stermweter Basin	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00				
0320	Post Closure Care New Landfill	0.00		N/A	N/A	N/A	0.17	0.00				
0330	Site Restoration Trees and Shrubs	0.00	10	5.0	1.0	0.2	7 417 50	002,344.17				
0340	Remove Liner	0.00	Eo.	5.0 N/A	N/A	0.0 N/A	0.72	0.00				
0360	Demobilization	0.00	La	10	N/A	0.0	18 687 50	0.00				
0400	Final Report	0.00	15	N/A	N/A	N/A	70 094 87	0.00				
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00				
	Sub-Total							662,344.17				
	Contingency	10%						66,234.42				
	Sub-Total							728,578.58				
	Infrastructure Improvements	2%						14,571.57				
	Project Management	4%						29,143.14				
	Remedial Design/ Pre-Constructrion	2%						14,571.57				
	Construction Management	7%						51,000.50				
	Total Capital Cost							837.865.37				

	Task 14										
		Captu	re Systen	n Upgrade							
	Incre	ease Pur	nping Ra	ites 8 weils 202	1						
CAPITAL COST:											
				Team							
Bid Item No.	Description	QTY	Unit	Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	Unit Cost	Total			
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00			
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00			
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00			
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00			
0140	Install Pumps	8.00	Ea	1.0	1.0	1.0	10,321.25	82,570.00			
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00			
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00			
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00			
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00			
0200	Rydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00			
0200a	Exervation Bulk	0.00	Ea	1.0	1.0	0.0	345.00	0.00			
0210	Excavation Durk	0.00	CY	1.0	1.0	N/A	0.90	0.00			
213	Erosion and Sediment Control	0.00	LE	1.0	1.0	N/A	9.20	0.00			
0230	Loading	0.00	LCY	N/A	N/A	6	1 73	0.00			
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00			
0245	Backfill	0.00	Fa	N/A	N/A	N/A	3.06	0.00			
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00			
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00			
0250b	Soil Amendments	0.00	CY	100.0	10	0.0	0.17	0.00			
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00			
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00			
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00			
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00			
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00			
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00			
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00			
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00			
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00			
	Analysis per well (Analytes from 2019 report table 3-										
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00			
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00			
	PRB Feasibility Studies Boron Beneath STEP										
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00			
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00			
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00			
0310	Relocate 250KV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00			
0320	Stormwater Basin Best Cleaves Care New Landfill	0.00	CF	N/A	N/A	N/A	0.17	0.00			
0330	Site Restoration Trees and Shruhs	0.00	AC	5.0	1.0	0.0	562,344.17	0.00			
03308	Bamava Linar	0.00	AC	5.0	1.0	0.0	7,417.50	0.00			
0340	Demobilization	0.00	La	10	N/A	N/A	10 697 60	0.00			
0300	Final Report	0.00	1.5	N/A	N/A	0.0 N/A	70 094 87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	1.5	N/A	N/A	N/A	22 425 00	0.00			
0410		0.00	20				22,420.00	0.00			
	Sub-Total							82,570.00			
	Contingency	10%						8,257.00			
	Sub-Total	26						90,827.00			
	Project Management	∠% 40/						1,010.54			
	Remedial Design/ Pre-Constructrion	4%						3,033.08			
	Construction Management	∠ 70 7%						6 357 89			
		1 70						0,001.00			
	i otal Capital Cost							104,451.05			

Weston Solutions, Inc. Contract No.: 421034, TO5 Project No.: 15409.105.001.0030

#### Task 15 Capture System Upgrades Install 8 new Vertical Capture Wells 2021 CAPITAL COST: Team Production Duration Bid Item No. (Units/Day) #<u>Teams</u> (Weeks) Unit Cost Description QTY Unit Total 0100 Pre-Design Investigation 0.00 LS N/A N/A N/A 0.00 0.00 Work Plans(WP/APP/SSHP & GSV) 0110 0.10 LS N/A N/A N/A 0.00 0.00 Site Management 21.158.55 31.737.83 0120 1.50 WK 1.00 1 9 Mobilization 0130 1.00 LS N/A N/A N/A 2,684.51 2,684.51 Install Pumps 82,570.00 8 00 10 321 25 0140 Fa 1.0 10 10 Install piping 0150 4 000 00 LE N/A N/A N/A 50.60 202 400 00 0160 Install power 9.013.13 72 105 00 8.00 Fa N/A N/A N/A Survey Install Well 0180 2.00 DY 1.0 10 10 3 220 00 6 440 00 0180a 8.00 Ea 1.0 1.0 1.0 2.875.00 23,000.00 Hydro/Geologic Investigation 0200 0.00 Ea 1.0 1.0 0.0 40.250.00 0.00 0200a Clear and Grub 0.00 Ea 1.0 1.0 0.0 345.00 0.00 0210 Excavation Bulk 0.00 CY 1.0 1.0 N/A 6.90 0.00 215 Excavation Trench 0.00 CY 1.0 1.0 N/A 9.20 0.00 Erosion and Sediment Control 0220 0.00 LF 1.0 1.0 N/A 4.60 0.00 0230 Loading 0.00 LCY N/A N/A 1.73 0.00 6 0240 Transport Haul Earth 0.00 LCY N/A N/A N/A 5.43 0.00 Backfill 0245 0.00 Ea N/A N/A N/A 3.06 0.00 Compaction 0250 0.00 LCY 500.0 3.45 0.00 1.0 0.0 0250a Grading 0.00 SY 200.0 1.0 0.0 2.30 0.00 Soil Amendments 0250b 0.00 CY 0 17 100.0 10 0.0 0.00 0250c Topsoil 0.00 CY 250.0 10.61 10 0.0 0.00 Seeding 0252 0.00 AC N/A N/A N/A 1.178.75 0.00 Dewatering Excavation (Per Day) DY 1 150 00 0255 0.00 10 10 0.0 0.00 Confirmation & Waste Sampling/Analysis Ea 0260 0.00 1.0 1.0 0.0 287 50 0.00 0270 Stone 0.00 Tons 1.0 10 0.0 29.90 0.00 Geotextile Fabric 0275 0.00 SY 1.0 10 0.0 1.56 0.00 0275.5 Liner 0.00 SF 1.0 1.0 0.0 2.86 0.00 Pipe Demolition 0275.6 0.00 LF 1.0 1.0 0.0 19.44 0.00 . MNA Demonstration Studies 276 0 1.0 1.0 0.0 76,478.18 0.00 Analysis per well (Analytes from 2019 report table 3-0280 1) 0.00 CY 500.0 1.0 0.0 1.74 0.00 0280.1 Facility Closure Plan 0.00 Gal 1000.0 1.0 0.0 38.72 0.00 PRB Feasilbility Studies Boron Beneath STEP 0290 Main Dam 0.00 CY 500.0 1.0 0.0 191.84 0.00 Post Pumping Modeled Until 2150 83,775.18 0290a 0.00 Ea 1.0 1.0 0.0 0.00 Monitoring Well Abandonment in place 0300 0.00 Ea 1.0 10 N/A 20 70 0.00 Relocate 230kV Transmission Line 0310 0.00 Ea N/A N/A N/A 1.655.535.75 0.00 Stormwater Basin 0.00 CF 0320 N/A N/A N/A 0.17 0.00 Post Closure Care New Landfill 662,344.17 0330 0.00 AC 5.0 10 0.0 0.00 Site Restoration Trees and Shrubs 0330a 0.00 AC 50 10 0.0 7 417 50 0.00 Remove Liner 0340 0.72 Ea N/A N/A N/A 0.00 Demobilization 0360 0.00 LS 1.0 N/A 0.0 18 687 50 0.00 Final Report Land Use Controls/Deed Restriction 0400 0.00 LS N/A N/A N/A 70,094.87 0.00 0410 0.00 1.5 N/A N/A N/A 22,425.00 0.00 Sub-Total 420,937.34 Contingency 10% 42,093.73 Sub-Total 463,031.07 Infrastructure Improvements 9 260 62 2% Project Management 18.521.24 4% Remedial Design/ Pre-Constructrion 2% 9 260 62 7% Construction Management 32,412.18 Total Capital Cost 532,485.73

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## Capture System Upgrades Install 17 New Capture Wells 2030

С

Distribution         Description         QTV         Unit         Distribution         Distribution         Distribution           0100         Pre-Design Investigation         0.00         1.5         N/A         N/A         N/A         0.00         0.00         0.00           0100         Void Heast(PVPR)SUP A CoV)         0.00         1.5         N/A         N/A         N/A         0.00 <td< th=""><th>APITAL COST:</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	APITAL COST:								
Bit Item No.         Description         QTY         Unit         Disadedata (Meesbal         <					_				
Bit Item No.         Description         DTY         Unit         Production         Trade           010         Pre-Design Investigation         0.00         1.5         N/A         N/A         N/A         0.00         0.00           010         Work Plans(V/PR/PSNP AGVP)         0.00         1.5         N/A         N/A         N/A         0.00         0.00           010         Work Plans(V/PR/PSNP AGVP)         0.00         1.5         N/A         N/A         N/A         0.00         0.00           010         Work Plans(V/PR/PSNP AGVP)         0.00         1.5         N/A         N/A         N/A         0.00         0.00           010         Modulation         1.00         0.00					Team				
010         Pr-B-stiggin Investigation         0.00         L3         NA         PA         NA         0.00         0.00           010         Wick Phart(WPAPPSHP APPSHP & GSV)         0.00         L3         NA         PA         NA         0.00         0.00           010         Wick Phart(WPAPPSHP & GSV)         0.00         L3         NA         NA         NA         NA         21,95.65         20,475.66         28,445.66           0130         Mobilization         1.00         L5         NA         NA         NA         20,456.66         28,445.66           0140         Install Plang         1.700         Ea         NA         NA         NA         80.66         435,100.00           0160         Install Plang         1.700         Ea         NA         NA         NA         NA         23,223.00         12,223.00	Bid Item No.	Description	QTY	Unit	(Units/Day)	# Teams	(Weeks)	Unit Cost	Total
one         Work Plane(WPiAPPSSHP & GSV)         0.00         IS         NA         NA         NA         NA         0.00         0.00           0130         Mobilization         1.00         US         NA         NA         NA         28.45.68         28.45.68           0130         Mobilization         1.00         US         NA         NA         NA         28.45.68         28.45.68           0140         Install Purps         17.00         Ea         1.0         1.0         1.0.22.25         17.54.41.25           0160         Install Purps         17.00         Ea         1.0         1.0         0.22.25         17.54.41.25           0160         Install Purps         17.00         Ea         1.0         1.0         0.0         42.05.00         42.05.00         1.0         1.0         0.0         42.05.00         42.05.00         42.05.00         42.05.00         42.05.00         0.00         42.05.00         42.05.00         42.05.00         42.05.00         0.00         42.05.00         0.00         42.05.00         0.00         42.05.00         0.00         42.05.00         0.00         42.05.00         0.00         42.05.00         0.00         1.0         0.0         42.00	0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	0.00	0.00
chool         Site Management         1.00         VW         1.00         1         9         21,158.55         28,375.66           0130         Mobilization         1.00         1.5         NA         NA         NA         28,375.66           0140         Install Pring         8.300.0         LF         NA         NA         NA         80.00         40,010.00           0160         Install pring         8.300.0         LF         NA         NA         NA         80.00         40,010.00           0160         Install pring         1.700         LF         NA         NA         NA         80.00         40,200.00 <td>0110</td> <td>Work Plans(WP/APP/SSHP &amp; GSV)</td> <td>0.00</td> <td>LS</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>0.00</td> <td>0.00</td>	0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	0.00	0.00
onsol         Mobilization         1.00         LS         N.A         N.A        N.A         <	0120	Site Management	3.00	WK	1.00	1	9	21,158.55	63,475.66
0100         Install Pumpie         17.00         Ea         1.0         1.0         1.0         1.0.21:25         175,41:25           0100         Install power         77.00         Ea         NA         NA         NA         NA         0.01         1.0         1.02:12.5         1.0	0130	Mobilization	1.00	LS	N/A	N/A	N/A	26,845.08	26,845.08
ensal         Install polyng         8.500.00         LF         N.A	0140	Install Pumps	17.00	Ea	1.0	1.0	1.0	10,321.25	175,461.25
0160         Install power         17.00         Ea         NA         NA         NA         NA         NA         Poil         1.0 <th< td=""><td>0150</td><td>Install piping</td><td>8,500.00</td><td>LF</td><td>N/A</td><td>N/A</td><td>N/A</td><td>50.60</td><td>430,100.00</td></th<>	0150	Install piping	8,500.00	LF	N/A	N/A	N/A	50.60	430,100.00
oise Dise Dise Dise Dise Dise Dise Dise D	0160	Install power	17.00	Ea	N/A	N/A	N/A	9,013.13	153,223.13
ensise         Install Well         17.00         Ea         1.0         1.0         1.0         2.875.00         48.975.00           0200         Clear and Grub         0.00         Ea         1.0         1.0         0.0         44.250.00         0.00           0200         Clear and Grub         0.00         CV         1.0         1.0         NA         4.250.00         0.00           0210         Excavation Trench         0.00         CV         1.0         1.0         NA         9.20         0.00           0251         Excavation Trench         0.00         CV         1.0         1.0         NA         9.20         0.00           0252         Backfill         0.00         LCV         NA         NA         NA         5.4         0.00           0256         Grading         0.00         CV         2.50         1.0         0.0         0.77         0.00           0256         Sold Amendments         0.00         CV         2500         1.0         0.0         1.17         0.00           0256         Sold Amendments         0.00         CV         2500         1.0         0.0         1.16         0.0         0.00         0.00	0180	Survey	4.00	DY	1.0	1.0	1.0	3,220.00	12,880.00
0000         Hydro(Seelogic Investigation         0.00         Ea         1.0         1.0         0.0         345.00         0.00           0200a         Clear and Grub         0.00         CY         1.0         1.0         N/A         6.30         0.00           0210         Excavation Bulk         0.00         CY         1.0         1.0         N/A         6.30         0.00           0210         Excavation Trench         0.00         LF         1.0         1.0         N/A         4.20         0.00           0230         Loading         0.00         LF         1.0         N/A         4.20         0.00           0230         Loading         0.00         LCY         N/A         N/A         6         1.73         0.00           0230         Loading         0.00         LCY         N/A         N/A         N/A         4.40         0.0	0180a	Install Well	17.00	Ea	1.0	1.0	1.0	2,875.00	48,875.00
coba         Cher and Grub         0.00         Ea         1.0         1.0         0.0         345.00         0.00           215         Excavation Trench         0.00         CY         1.0         1.0         NA         9.20         0.00           220         Loading         0.00         CY         1.0         1.0         NA         9.20         0.00           020         Loading         0.00         LCV         NA         NA         NA         0.00           0230         Loading         0.00         LCV         NA         NA         NA         0.00           0240         Transport Haul Earth         0.00         Ea         NA         NA         NA         3.06         0.00           0250         Compaction         0.00         SY         20.00         1.0         0.0         0.17         0.00           0250         Sal Amentments         0.00         CY         20.00         1.0         0.0         1.075.0         0.00           0252         Saeding         Saeding         0.00         CY         1.0         0.0         1.075.0         0.00           0253         Baektile Fabric         0.00         CY	0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00
Description         Excavation Fault         0.00         CY         1.0         1.0         NA         6.80         0.00           2216         Excavation rench         0.00         LF         1.0         1.0         NA         4.60         0.00           0220         Encision and Sediment Control         0.00         LF         1.0         1.0         NA         4.60         0.00           0230         Transport Haul Earth         0.00         LCY         NA         NA         6         1.7.3         0.00           0246         Transport Haul Earth         0.00         LCY         NA         NA         NA         8.4         0.00           0255         Sold Aradiments         0.00         CY         280.0         1.0         0.0         2.60         0.00         1.06         0.0         1.06         0.0         2.60         0.00         0.00         1.06         0.0         2.60         0.00         2.60         0.00         1.06         0.0         1.06         0.0         2.60         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00
215       Excavation Trench       0.00       CY       1.0       N/A       8.20       0.00         0220       Loading       0.00       L/Y       N/A       N/A       6.40       0.00         0230       Loading       0.00       L/Y       N/A       N/A       6.40       1.73       0.00         0240       Transport Haul Earth       0.00       Ea       N/A       N/A       N/A       6.40       0.00         0243       Backfill       0.00       Ea       N/A       N/A       N/A       3.06       0.00         0246       Grading       0.00       CY       200.0       1.0       0.0       2.30       0.00         0258       Solf Amendments       0.00       CY       200.0       1.0       0.0       1.15       0.00         0250       Toppail       0.00       CY       200.0       1.0       0.0       1.150.00       0.00         0250       Seeding       0.00       CY       1.0       1.0       0.0       2.36       0.00         0260       Seeding       0.00       Grading       0.00       2.36       0.00       0.00       2.36       0.00         0275	0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00
Dot 20         Encoding         0.00         LF         10         10         N/A         4.60         0.00           0230         Loading         0.00         LCV         N/A         N/A         N/A         0.00           0240         Transport Haul Earth         0.00         LCV         N/A         N/A         N/A         0.00         2.45         Backfill         0.00         Ea         N/A         N/A         3.06         0.00           0250         Grading         0.00         SV         50.00         1.0         0.0         2.30         0.00           0250s         Soil Amendments         0.00         CY         10.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0         1.0         0.0         2.750         0.00           0250         Stone         0.00         Cr         1.0         1.0         0.0         2.750         0.00           0260         Confirmation & Wast Sampling/Analysis         0.00         CY         1.0         1.0         0.0         1.5         0.00           0275         Stone         Demonition<	215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00
0230         Loading         0.00         LCV         N/A         N/A         N/A         6         1.73         0.00           0240         Transport Haul Earth         0.00         Ea         N/A         N/A         N/A         3.06         0.00           0248         Backfill         0.00         Ea         N/A         N/A         N/A         3.06         0.00           0259         Compaction         0.00         SY         200.0         1.0         0.0         2.30         0.00           0250         Sold Amendments         0.00         CY         200.0         1.0         0.0         1.150.00         0.00           0252         Seeding         0.00         CY         1.0         1.0         0.0         1.150.00         0.00           0252         Dewatering Exavation (Per Day)         0.00         Toras         1.0         1.0         0.0         2.950         0.00           0260         Confirmation K-Waste Sampling/Analysis         0.00         Sr         1.0         1.0         0.0         2.86         0.00           0275         Liner         0.00         SF         1.0         1.0         0.0         7.84.718         0.00	0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00
0240         Lansport Hau Lenth         0.00         LCV         NA         NA         NA         SA         5.43         0.00           0245         Backfill         0.00         LCV         solo         1.0         0.0         3.45         0.00           0250         Compaction         0.00         SV         solo         1.0         0.0         3.45         0.00           02500         Sol Amendments         0.00         CY         100.0         1.0         0.0         0.17         0.00           02502         Seeding         0.00         CY         10.0         0.0         0.17         0.00           02522         Seeding         0.00         CY         10.0         1.0         0.0         1.190.00         0.00           02620         Confirmation & Waste Sampling/Analysis         0.00         Ea         1.0         1.0         0.0         2.29.0         0.00           0275         Stone         0.00         SY         1.0         1.0         0.0         2.26         0.00           0275.5         Pipe Demolition         0.00         CY         50.0         1.0         0.0         1.74         0.00           0275	0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00
0.245         Backfill         0.00         Ea         N/A         N/A         N/A         N/A         Sol         0.00           0250         Compaction         0.00         L/C V         200.0         1.0         0.0         2.345         0.00           02500         Sol Amendments         0.00         C V         200.0         1.0         0.0         2.30         0.00           0250c         Topsol         0.00         C V         250.0         1.0         0.0         0.01         1.0         0.0         0.01         1.0         0.0         1.178.75         0.00           0252c         Seeding         0.00         C V         250.0         1.0         1.0         0.0         1.180.00         0.00           0253         Dewatering Excavation (Per Day)         0.00         D V         1.0         1.0         1.0         0.0         2.287.50         0.00           0270         Stone         0.00         Corn         1.0         1.0         0.0         2.287.50         0.00           0275.5         Liner         0.00         C Y         50.0         1.0         0.0         1.56         0.00           0275.5         Pipe Demolition </td <td>0240</td> <td>Transport Haul Earth</td> <td>0.00</td> <td>LCY</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>5.43</td> <td>0.00</td>	0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00
0250         Compaction         0.00         EV         500         1.0         0.0         3.45         0.00           0250x         Soll Amendments         0.00         CY         100.0         1.0         0.0         0.17         0.00           0250x         Soll Amendments         0.00         CY         100.0         1.0         0.0         0.17         0.00           0250x         Topsoil         0.00         AC         N/A         N/A         N/A         1.150.00         0.00           0250x         Dewatering Excavation (Per Day)         0.00         Ea         1.0         1.0         0.0         28.50         0.00           0250x         Confirmation & Waste Sampling/Analysis         0.00         Ea         1.0         1.0         0.0         28.50         0.00           0275         Geotextile Fabric         0.00         SY         1.0         1.0         0.0         1.56         0.00           0275         Liner         0.00         SY         1.0         1.0         0.0         1.54         0.00           0275         Eliop Demolition         0.00         CY         500.0         1.0         0.0         1.74         0.00	0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00
0250a         Crading         0.00         SY         200         1.0         0.0         2.30         0.00           0250c         Topsoil         0.00         CY         200.0         1.0         0.0         1.01         0.00           0250c         Topsoil         0.00         CY         250.0         1.0         0.0         1.051         0.00           0252         Seeding         0.00         CY         250.0         1.0         0.0         1.150.00         0.00           0252         Dewatering Excavation (Per Day)         0.00         Ea         1.0         1.0         0.0         287.50         0.00           0270         Stone         0.00         Tons         1.0         1.0         0.0         28.6         0.00           0275         Liner         0.00         SF         1.0         1.0         0.0         1.4         0.00           0275.6         Pipe Demolition         0.00         GF         500.0         1.0         0.0         1.74         0.00           0280.1         Facility Closure Plan         0.00         CY         500.0         1.0         0.0         1.74         0.00           0280.1         <	0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00
0280b         Solin Antificitutients         0.00         CY         1000         1.0         0.0         1.17         0.00           0252         Seeding         0.00         AC         N/A         N/A         N/A         1.175.75         0.00           0252         Seeding         0.00         AC         N/A         N/A         N/A         1.175.75         0.00           0255         Dewatering Excavation (Per Day)         0.00         Topsoil         1.0         1.0         0.0         287.50         0.00           0255         Confirmation & Waste Sampling/Analysis         0.00         Topsoil         1.0         1.0         0.0         287.50         0.00           0275         Geotextile Fabric         0.00         Topsoil         1.0         1.0         0.0         1.58         0.00           0275.6         Pipe Demolition         0.00         CY         500.0         1.0         0.0         7.67.18         0.00           0200         MAI Demonstration Studies         0         1.0         0.0         7.7.78         0.00           0200         Main Dam         0.00         CY         500.0         1.0         0.0         1.74         0.00 <t< td=""><td>0250a</td><td>Grading</td><td>0.00</td><td>SY</td><td>200.0</td><td>1.0</td><td>0.0</td><td>2.30</td><td>0.00</td></t<>	0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00
ubbol         Number         Numer         Numer         Numer <td>0250b</td> <td>Soli Amenaments</td> <td>0.00</td> <td>CY</td> <td>100.0</td> <td>1.0</td> <td>0.0</td> <td>0.17</td> <td>0.00</td>	0250b	Soli Amenaments	0.00	CY	100.0	1.0	0.0	0.17	0.00
ubs2         Seeding         0.00         AC         N/A         N/A         N/A         1,178,15         0.00           0255         Dewatering Excavation (Per Day)         0.00         Dev         1.0         1.0         0.0         287.50         0.00           0250         Confirmation & Waste Sampling/Ahalysis         0.00         Tons         1.0         1.0         0.0         287.50         0.00           0275         Geotextile Fabric         0.00         Store         1.0         1.0         0.0         1.56         0.00           0275         Geotextile Fabric         0.00         Store         1.0         1.0         0.0         1.84         0.00           0276         MNA Demonstration Studies         0         1.0         1.0         0.0         1.74         0.00           0280         1)         Facility Closure Plan         0.00         CY         500.0         1.0         0.0         1.74         0.00           0280         1)         Facility Closure Plan         0.00         CY         500.0         1.0         0.0         1.74         0.00           0280         Main Dam         0.00         CY         500.0         1.0         0.0	0250c	l opsoli	0.00	CY	250.0	1.0	0.0	10.61	0.00
025         Deviation generation (Per Day)         0.00         DY         1.0         1.0         0.00         1,190,00         0.00           0200         Store         0.00         Tons         1.0         1.0         0.00         229.00         0.00           0270         Store         0.00         Sty         1.0         1.0         0.0         229.00         0.00           0275         Liner         0.00         SF         1.0         1.0         0.0         2.86         0.00           0276         Pipe Demolition         0.00         Liner         0.00         Total         0.0         1.64         0.00         76,478.18         0.00           0276         MNA Demonstration Studies         0.00         CY         500.0         1.0         0.0         76,478.18         0.00           0280         1         Analysis per well (Analytes from 2019 report table 3.         0.00         CY         500.0         1.0         0.0         1.44         0.00           0280         1         Analysis per well (Analytes from 2019 report table 3.         0.00         Ea         1.0         1.0         0.0         181.44         0.00           0280         Main Dam         0.00	0252	Seeding Dewetering Execution (Per Dev)	0.00	AC	N/A	N/A	N/A	1,178.75	0.00
Code         Columnation of waster scaling ingly variatysis         Code         Ea         Lo         L0         L0         Columnation of the status         Code           0270         Stone         Columnation of waster scaling ingly variatysis         0.00         Stone         0.00         1.0         0.00         1.6         0.00           0275         Geotextile Fabric         0.00         Stone         1.0         1.0         0.0         2.86         0.00           0275.6         Pipe Demolition         0.00         LF         1.0         1.0         0.0         19.44         0.00           276         MNA Demonstration Studies         0         1.0         1.0         0.0         76.478.18         0.00           280         1)         0.00         CY         500.0         1.0         0.0         38.72         0.00           0280         Nai         Na         0.00         Ea         1.0         1.0         NA         1.0         0.00         83.75         0.00           0290         Main Dam         0.00         CY         500.0         1.0         NA         NA         1.05         0.0         63.75         0.00           0300         Monitoring We	0255	Confirmation & Weste Sampling (Applysic	0.00	DY E-	1.0	1.0	0.0	1,150.00	0.00
02/0         Solve         0.00         100         1.0         1.0         0.00         29.90         0.00           0275         Liner         0.00         SF         1.0         1.0         0.0         2.86         0.00           0275.5         Liner         0.00         SF         1.0         1.0         0.0         2.86         0.00           0275.6         MNA Demonstration Studies         0         1.0         1.0         0.0         1.44         0.00           0280         1)         0.00         CY         500.0         1.0         0.0         1.74         0.00           0280         1)         0.00         CY         500.0         1.0         0.0         1.74         0.00           0280         Main Dam         0.00         CY         500.0         1.0         0.0         191.44         0.00           0290         Main Dam         0.00         CY         500.0         1.0         0.0         191.44         0.00           0290         Monitoring Weil Abandomment in place         0.00         Ea         1.0         1.0         NA         NA         NA         NA         0.00         662.344.17         0.00	0200	Stopo	0.00	Ea	1.0	1.0	0.0	287.50	0.00
02/3         Decleting Faultic         0.00         SF         1.0         1.0         1.00	0270	Geotextile Estric	0.00	ev	1.0	1.0	0.0	29.90	0.00
0213.3         Line         0.00         LF         1.0         1.0         0.0         19.4         0.00           276         MNA Demonstration Studies         0         1.0         1.0         0.0         76.478.18         0.00           276         MNA Demonstration Studies         0         1.0         1.0         0.0         76.478.18         0.00           280         1)         0.00         CY         50.0         1.0         0.0         1.74         0.00           0280.1         Facility Closure Plan         0.00         CY         500.0         1.0         0.0         38.72         0.00           0290         Main Dam         0.00         CY         500.0         1.0         0.0         19.184         0.00           0290         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         2.07.0         0.00           0300         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         1.05.553.75         0.00           0310         Relocate 230kV Transmission Line         0.00         CF         N/A         N/A         N/A         1.05.553.75         0.00	0275	Liper	0.00	51	1.0	1.0	0.0	1.00	0.00
2230       MNA Demonstration Studies       0       1.0       1.0       0.0       76.47:18       0.00         276       MNA Demonstration Studies       0       1.0       1.0       0.0       76.47:18       0.00         2780       1       0.00       CY       500.0       1.0       0.0       1.74       0.00         2880       1       0.00       CY       500.0       1.0       0.0       38.72       0.00         2980       Main Dam       0.00       CY       500.0       1.0       0.0       191.84       0.00         0290       Main Dam       0.00       CY       500.0       1.0       1.0       0.0       83.775.18       0.00         0300       Monitoring Weil Abandonment in place       0.00       Ea       1.0       1.0       N/A       20.70       0.00         0310       Relocate 230kV Transmission Line       0.00       Ea       N/A       N/A       N/A       1.655.55.75       0.00         0320       Stornwater Basin       0.00       AC       5.0       1.0       0.0       74.17.50       0.00         0330       Site Restoration Trees and Shrubs       0.00       AC       5.0       1.0	0275.5	Pine Demolition	0.00	15	1.0	1.0	0.0	2.00	0.00
1/3         Inv Point Mark Base         0         1.3         1.3         0.3         1.0         0.30         1.00         0.00           0280         1         0.00         CY         50.0         1.0         0.0         1.74         0.00           0280         1         Facility Closure Plan         0.00         Gal         1000.0         1.0         0.0         38.72         0.00           0280         Main Dam         0.00         CY         50.0         1.0         0.0         38.72         0.00           0290         Main Dam         0.00         CY         50.0         1.0         0.0         191.84         0.00           0290         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         20.70         0.00           0310         Relocate 230kV Transmission Line         0.00         Ea         N/A         N/A         N/A         1.055.553.75         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         662.344.17         0.00           0330         Site Restoration Trees and Shrubs         0.00         LS         1.0         N/A<	276	MNA Demonstration Studies	0.00	0	1.0	1.0	0.0	76 478 18	0.00
1         0.00         CY         50.0         1.0         0.0         38.72         0.00           0280.1         Facility Closure Plan         0.00         Gal         1000.0         1.0         0.0         38.72         0.00           0280.1         FRB Feasibility Studies Boron Beneath STEP         0.00         CY         500.0         1.0         0.0         191.84         0.00           0280         Main Dam         0.00         Ea         1.0         1.0         0.0         83.75.18         0.00           0300         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         20.70         0.00           0300         Monitoring Well Abandonment in place         0.00         Ea         N/A         N/A         N/A         1.05.535.75         0.00           0301         Relocate 230kV Transmission Line         0.00         AC         5.0         1.0         0.0         662.344.17         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         74.17.50         0.00           0330         Remove Liner         Ea         N/A         N/A         N/A         0.7	210	Analysis per well (Analytes from 2019 report table 3.		0	1.0	1.0	0.0	70,470.10	0.00
dbb         Facility Closure Plan         0.00         Gal         1000.0         1.0         0.00         1.1.4         0.00           PRB Feasibility Studies Boron Beneath STEP         Prest Feasibility Studies Boron Beneath STEP         0.00         CY         500.0         1.0         0.0         191.84         0.00           0280.0         Post Pumping Modeled Until 2150         0.00         Ea         1.0         1.0         0.0         83.775.18         0.00           0300         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         N/A         1.055.535.75         0.00           0310         Relocate 230kV Transmission Line         0.00         Ea         N/A         N/A         N/A         N/A         1.055.535.75         0.00           0320         Stornwater Basin         0.00         CF         N/A         N/A         N/A         1.0         0.0         63.44.17         0.00           0330         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         7417.50         0.00           0340         Remove Liner         Ea         N/A         N/A         N/A         N/A         0.0         1.0	0280	1)	0.00	CY	500.0	10	0.0	1 74	0.00
Deck.         PRB Feasibility Studies Boron Beneath STEP         Doc         Data         Docs         Data         Data <thdata< th=""> <thdata< th="">         Data<td>0280 1</td><td>Eacility Closure Plan</td><td>0.00</td><td>Gal</td><td>1000.0</td><td>1.0</td><td>0.0</td><td>38.72</td><td>0.00</td></thdata<></thdata<>	0280 1	Eacility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00
Open of the construction of the constructio	0200.1	PRB Feasibility Studies Boron Beneath STEP	0.00	ou.	1000.0	1.0	0.0	00.12	0.00
Cases         Post Pumping Modeled Until 2150         Doo         Ea         1.0         1.0         Doo         83,775.18         Doo           0300         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         20.70         0.00           0300         Relocate 230kV Transmission Line         0.00         Ea         N/A         N/A         N/A         1.05.555.75         0.00           0320         Stormwater Basin         0.00         CF         N/A         N/A         N/A         1.05.555.75         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         672.344.17         0.00           0330a         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         672.344.17         0.00           0340         Remove Liner         Ea         N/A         N/A         N/A         0.0         18.867.50         0.00           0360         Demobilization         0.00         LS         N/A         N/A         N/A         22.425.00         0.00           0410         Final Report         0.00         LS         N/A <td< td=""><td>0290</td><td>Main Dam</td><td>0.00</td><td>CY</td><td>500.0</td><td>10</td><td>0.0</td><td>191.84</td><td>0.00</td></td<>	0290	Main Dam	0.00	CY	500.0	10	0.0	191.84	0.00
0300         Monitoring Well Abandonment in place         0.00         Ea         1.0         1.0         N/A         20.70         0.00           0310         Relocate 230kV Transmission Line         0.00         Ea         N/A         N/A         N/A         1.05,555.75         0.00           0320         Stormwater Basin         0.00         CF         N/A         N/A         N/A         0.01         662,344.17         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         662,344.17         0.00           0330         Remove Liner         Ea         N/A         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         0.0         18,887.50         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         0.094.87         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         0.00           Sub-Total         Contingency         10%         1.001.946.13         1.001.946.13         1.001.9	0290a	Post Pumping Modeled Until 2150	0.00	Fa	1.0	10	0.0	83 775 18	0.00
0310         Relocate 230kV Transmission Line         0.00         Ea         N/A         N/A         N/A         N/A         1,655,55.75         0.00           0320         Stormwater Basin         0.00         CF         N/A         N/A         N/A         N/A         0.17         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         662,344.17         0.00           0330a         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         7,417.50         0.00           0360         Demobilization         0.00         LS         1.0         N/A         N/A         0.0         7,417.50         0.00           0360         Demobilization         0.00         LS         1.0         N/A         N/A         0.0         18,687.50         0.00           0360         Demobilization         0.00         LS         N/A         N/A         N/A         0.0         18,687.50         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         1/A         1/A         1/A         1/A         1/A	0300	Monitoring Well Abandonment in place	0.00	Fa	1.0	10	N/A	20.70	0.00
0320         Stormwater Basin         0.00         CF         N/A         N/A         N/A         0.17         0.00           0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         662,344.17         0.00           0330         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         7417.50         0.00           0340         Remove Liner         Ea         N/A         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         0.0         18.687.50         0.00           0400         Final Report         0.00         LS         N/A         N/A         N/A         70.948.77         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         22,425.00         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         245.00         0.00           5ub-Total         1.01         Sub-Total         1.001.946.13         1.001.946.13         1.001.946.13         1.00	0310	Relocate 230kV Transmission Line	0.00	Fa	N/A	N/A	N/A	1 655 535 75	0.00
0330         Post Closure Care New Landfill         0.00         AC         5.0         1.0         0.0         662,344,17         0.00           0330a         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         7,417.50         0.00           0340         Remove Liner         Ea         N/A         N/A         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         0.0         18,687,50         0.00           0400         Final Report         0.00         LS         N/A         N/A         N/A         0.04         0.068,87         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         0.0         0.0	0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00
0330a         Site Restoration Trees and Shrubs         0.00         AC         5.0         1.0         0.0         7.417.50         0.00           0340         Remove Liner         Ea         N/A         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         0.0         18.875.00         0.00           0400         Final Report         0.00         LS         N/A         N/A         N/A         70.094.87         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         22,425.00         0.00           0410         Sub-Total         Contingency         10%          910,860.12         910,860.12           Sub-Total         Infrastructure Improvements         2%          20,038.92         20,038.92           Project Management         4%          40,077.85         20,038.92         20,038.92           Construction Management         7%          20,038.92         20,	0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662.344.17	0.00
0340         Remove Liner         Ea         N/A         N/A         N/A         0.72         0.00           0360         Demobilization         0.00         LS         1.0         N/A         0.0         18,687.50         0.00           0400         Final Report         0.00         LS         N/A         N/A         N/A         70.094.87         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         22,425.00         0.00           0410         Sub-Total         Infrastructure Improvements         910,860.12         910,860.12         910,860.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.12         910,960.13	0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00
0860 0400         Demobilization         0.00         LS         1.0         NA         0.0         18,87,50         0.00           0400         Final Report         0.00         LS         NA         NA         NA         70,094,87         0.00           0410         Land Use Controls/Deed Restriction         0.00         LS         NA         NA         NA         22,425.00         0.00           Sub-Total         Contingency         10%         V         910,680.12         910,680.12         910,680.12           Sub-Total         Sub-Total         1.001,946.33         1.001,946.33         1.001,946.33         20,038.92         20,038.92           Project Management         4%         44,077.85         20,038.92         20,038.92         20,038.92           Construction Management         7%         V         20,038.92         20,038.92         20,038.92           Total Capital Design/ Pre-Construction         2%         V         20,038.92         20,038.92           Total Capital Cost         7%         V         70,138.23         70,138.23         70,138.23	0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00
0400 0410         Final Report Land Use Controls/Deed Restriction         0.00 0.00         LS LS         N/A         N/A         N/A         70.094.87 N/A         0.00 0.00           Sub-Total         910,860.12         910,86	0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00
0410         Land Use Controls/Deed Restriction         0.00         LS         N/A         N/A         N/A         22,425.00         0.00           Sub-Total         910,860.12         910,800.12         910,860.12         910,860.12 <td>0400</td> <td>Final Report</td> <td>0.00</td> <td>LS</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>70,094.87</td> <td>0.00</td>	0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00
Sub-Total910,860.12Contingency10%91,086.01Sub-Total1.001,946.33Infrastructure Improvements2%20,038.92Project Management4%40,077.85Remedial Design/ Pre-Construction2%20,038.92Construction Management7%70,136.23Total Capital Cost1,152,238.05	0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00
Contingency         10%         91,080.12           Sub-Total         91,080.12           Infrastructure Improvements         2%         1001,946.13           Infrastructure Improvements         2%         20,038.92           Project Management         4%         40,077.85           Remedial Design/Pre-Construction         2%         20,038.92           Construction Management         7%         70,136.23           Total Capital Cost         1,152,238.05		Sub Total							010 960 12
Contailed10%91,066,01Sub-Total1,001,946.13Infrastructure Improvements2%Project Management4%Amedial Design/ Pre-Constructrion2%Construction Management7%Total Capital Cost1,152,238.05		Contingency	409/						910,000.12
Infrastructure Improvements2%20,038.92Project Management4%40,077.85Remedial Design/ Pre-Constructrion2%20,038.92Construction Management7%70,156.23Total Capital Cost1,152,238.05		Sub Total	10%						91,086.01
Initial oction improvements         2%         20038 9/2           Project Management         4%         400/77.85           Remedial Design/ Pre-Constructrion         2%         20,038.92           Construction Management         7%         70,156.23           Total Capital Cost         1,152,238.05         1,152,238.05			29/						1,001,940.13
Remedial Design/Pre-Construction     2%     20,038.92       Construction Management     7%     70,136.23       Total Capital Cost     1,152,238.05		Project Management	∠ 70 /1%						40.077.85
Construction Management     7%     70,136.23       Total Capital Cost     1,152,238.05		Remedial Design/ Pre-Constructrion	4 70 2%						20.038.92
Total Capital Cost     10, 150, 23       Total Capital Cost     1, 152, 238, 05		Construction Management	2 70						20,030.92
1,152,238.05		Tatal Oracital Oract	1 70						10,130.20
		i otal Capital Cost							1,152,238.05

	Task 17										
			Not Use	d							
CAPITAL COST:											
				Team Production		Duration					
Bid Item No.	Description	QTY	<u>Unit</u>	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	<u>Total</u>			
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00			
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00			
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00			
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00			
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00			
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00			
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00			
0180	Survey	0.00	DY 5-	1.0	1.0	1.0	3,220.00	0.00			
0180a	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00			
0200	Clear and Grub	0.00	Ea	1.0	1.0	0.0	40,230.00	0.00			
0200a	Excavation Bulk	0.00	CV	1.0	1.0	0.0	6.90	0.00			
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00			
0220	Erosion and Sediment Control	0.00	LE	1.0	1.0	N/A	4.60	0.00			
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00			
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00			
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00			
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00			
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00			
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00			
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00			
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00			
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00			
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00			
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00			
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00			
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00			
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00			
276	MINA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00			
	Analysis per well (Analytes from 2019 report table 3-										
0280	i) Facility Closure Plan	0.00	CY	500.0	1.0	0.0	1.74	0.00			
0280.1	DDB Econibility Studios Porce Reports STED	0.00	Gai	1000.0	1.0	0.0	36.72	0.00			
0200	Main Dam	0.00	CV.	500.0	10	0.0	101.94	0.00			
0290	Post Pumping Modeled Lintil 2150	0.00	Ea	1.0	1.0	0.0	83 775 18	0.00			
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00			
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1 655 535 75	0.00			
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00			
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00			
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00			
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00			
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00			
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00			
	Sub-Total							0.00			
	Contingency	10%						0.00			
	Sub-Total							0.00			
	Infrastructure Improvements	2%						0.00			
	Project Management	4%						0.00			
	Remedial Design/ Pre-Constructrion	2%						0.00			
	Construction Management	7%						0.00			
	Total Capital Cost						г	0.00			

	Task 18										
	MNA	Capture Demons	e System tration S	Upgrades tudies 2021-20	23						
CAPITAL COST:											
				Toom							
Bid Item No.	Description	QTY	<u>Unit</u>	Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	Unit Cost	Total			
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85.496.18	0.00			
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00			
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00			
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00			
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00			
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00			
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00			
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00			
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00			
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00			
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00			
0210	Excavation Dulk	0.00	CY	1.0	1.0	N/A	6.90	0.00			
215	Erosion and Sediment Control	0.00		1.0	1.0	N/A	9.20	0.00			
0220	Loading	0.00	LCV	1.U	1.0 N/A	6	4.00	0.00			
0240	Transport Haul Earth	0.00	LCV	N/A	N/A	N/A	5.43	0.00			
0240	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00			
0250	Compaction	0.00	LCY	500.0	10	0.0	3.45	0.00			
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00			
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00			
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00			
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178,75	0.00			
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00			
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00			
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00			
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00			
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00			
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00			
275.80	MNA Demonstration Studies	1.00	0	1.0	1.0	0.2	76,478.18	76,478.18			
	Analysis per well (Analytes from 2019 report table 3-										
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00			
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00			
	PRB Feasilbility Studies Boron Beneath STEP										
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00			
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00			
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00			
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00			
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00			
0330	Post Closure Care New Landilli	0.00	AC	5.0	1.0	0.0	662,344.17	0.00			
03308	Bemove Liner	0.00	AC	5.0	1.0	0.0	7,417.50	0.00			
0340	Demobilization	0.00	Ea	N/A	N/A	N/A	19 697 60	0.00			
0300	Final Report	0.00	1.5	1.U	N/A	0.0	70 004 87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22 425 00	0.00			
0410		0.00	20	19/5	17/4	IN/A	22,420.00	0.00			
	Sub-Total							76,478.18			
	Contingency	10%						7,647.82			
	Sub-Total							84,126.00			
	Infrastructure Improvements	2%						1,682.52			
	Project Management	4%						3,365.04			
	Remedial Design/ Pre-Constructrion	2%						1,682.52			
	Construction Management	7%						5,888.82			
	Total Capital Cost							96,744.90			

	Task 19									
		Capture	e System	Upgrades						
	Institutio	onal Con	trols Poi	nt of Use Treat	ment					
CAPITAL COST:										
				Team						
Bid Item No.	Description	QTY	<u>Unit</u>	Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.25	LS	N/A	N/A	N/A	81,273.38	20,318.35		
0120	Site Management	0.00	WK	1.00	1	14	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00		
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00		
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
01808	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	1.0	2,675.00	0.00		
0200	Clear and Grub	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0210	Excavation Bulk	0.00	CV	1.0	1.0	0.0 N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LE	10	10	N/A	4 60	0.00		
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00		
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00		
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00		
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00		
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00		
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00		
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner Bine Demolition	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	MNA Demonstration Studios	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	Analysis per well (Analytes from 2010 report table 2		0	1.0	1.0	0.0	76,478.18	0.00		
0000	Analysis per weil (Analytes from 2019 report table 5-	04.00		4.0	10	4.0	007.50	00.000.00		
0280 1	Facility Closure Plan	24.00	Gal	100.0	1.0	4.6	38.72	20,820.38		
0200.1	PRB Feasibility Studies Boron Beneath STEP	0.00	Gai	1000.0	1.0	0.0	30.72	0.00		
0290	Main Dam	0.00	CY	500.0	10	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83.775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1.655.535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							41,138.73		
	Contingency	10%						4,113.87		
	Sub-Total							45,252.60		
	Infrastructure Improvements	2%						905.05		
	Project Management	4%						1,810.10		
	Remedial Design/ Pre-Constructrion	2%						905.05		
	Construction Management	7%						3,167.68		
	Total Capital Cost							52.040.49		

Weston Solutions, Inc. Contract No.: 421034, TO5 Project No.: 15409.105.001.0030

	Task 20										
		In	Situ Flu	shina							
	Instal	l 7 new Ve	ertical In	jection Wells 2	021						
CAPITAL COST:											
				Team							
Bid Item No.	Description	QTY	Unit	Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total			
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	0.00	0.00			
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	0.00	0.00			
0120	Site Management	1.50	WK	1.00	1	9	21,158.55	31,737.83			
0130	Mobilization	1.00	LS	N/A	N/A	N/A	2,684.51	2,684.51			
0140	Install Pumps	7.00	Ea	1.0	1.0	1.0	10,321.25	72,248.75			
0150	Install piping	3,500.00	LF	N/A	N/A	N/A	50.60	177,100.00			
0160	Survey	7.00	Ea	N/A	N/A	N/A	9,013.13	63,091.88			
0180	Install Well	2.00	Ea	1.0	1.0	1.0	2 875 00	20 125 00			
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40 250 00	0.00			
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00			
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00			
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00			
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00			
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00			
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00			
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00			
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00			
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00			
0250b	Soli Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00			
02500	Seeding	14.00	40	250.0	1.0	0.0	1 179 75	16 602 60			
0252	Dewatering Excavation (Per Day)	14.00	AC	N/A	N/A	N/A	1,176.75	10,502.50			
0255	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287.50	0.00			
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00			
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00			
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00			
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00			
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00			
	Analysis per well (Analytes from 2019 report table 3-										
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00			
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00			
	PRB Feasilbility Studies Boron Beneath STEP										
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00			
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00			
0300	Relocate 230kV Transmission Line	0.00	Ea	1.0	1.0	N/A	20.70	0.00			
0310	Stormwater Basin	0.00	CE	N/A N/A	N/A N/A	N/A	1,000,030.70	0.00			
0330	Post Closure Care New Landfill	0.00	AC	50	10	0.0	662 344 17	0.00			
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7.417.50	0.00			
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00			
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00			
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00			
	Sub-Total							389,930.46			
	Contingency	10%						38,993.05			
	Sub-Total							428,923.51			
	Infrastructure Improvements	2%						8 578 47			
	Project Management	4%						17.156.94			
	Remedial Design/ Pre-Constructrion	2%						8,578.47			
	Construction Management	7%						30,024.65			
	Total Capital Cost							493.262.04			

	Task 21									
	(36)	In New Vert	Situ Flu: ical Inie	shing ction Wells 203	30					
	(00)		.oujo							
CAPITAL COST:										
				Team						
Bid Item No.	Description	QTY	<u>Unit</u>	Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100	Pre-Design Investigation	0.30	LS	N/A	N/A	N/A	0.00	0.00		
0110	Work Plans(WP/APP/SSHP & GSV)	0.50	LS	N/A	N/A	N/A	0.00	0.00		
0120	Site Management	2.00	WK	1.00	1	9	21,158.55	42,317.11		
0130	Mobilization	1.00	LS	N/A	N/A	N/A	2,684.51	2,684.51		
0140	Install Pumps	36.00	Ea	1.0	1.0	1.0	10,321.25	371,565.00		
0150	Install piping	18,000.00	LF	N/A	N/A	N/A	50.60	910,800.00		
0160	Install power	36.00	Ea	N/A	N/A	N/A	9,013.13	324,472.50		
0180	Survey	6.00	DY	1.0	1.0	1.0	3,220.00	19,320.00		
0180a	Install Well	36.00	Ea	1.0	1.0	1.0	2,875.00	103,500.00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Dulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench Erosion and Sediment Control	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Loading	0.00		1.0	1.0	N/A	4.00	0.00		
0230	Transport Haul Earth	0.00	LOY	N/A	N/A	NIA	1.73 E 42	0.00		
0240	Backfill	0.00	Eo	N/A	N/A	N/A	3.43	0.00		
0245	Compaction	0.00		500.0	1.0	N/A	3.00	0.00		
02502	Grading	0.00	SV	200.0	1.0	0.0	2 30	0.00		
0250b	Soil Amendments	0.00	cv	100.0	1.0	0.0	0.17	0.00		
02500	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1 178 75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	10	10	0.0	1 150 00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00		
	Analysis per well (Analytes from 2019 report table 3-									
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath STEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							1,774,659.12		
	Contingency	10%						177,465.91		
	Sub-Total							1,952,125.03		
	Infrastructure Improvements	2%						39,042.50		
	Project Management	4%						78,085.00		
	Remedial Design/ Pre-Constructrion	2%						39,042.50		
	Construction Management	7%						136,648.75		
	Total Capital Cost							2.244.943.78		

Weston Solutions, Inc. Contract No.: 421034, TO5 Project No.: 15409.105.001.0030

	Task 22									
		In	Situ Flu	shina						
	Small Scale In	Situ Flus	ing Syst	em 2021 Full S	cale in 2030					
CAPITAL COST:										
				Team						
Bid Item No.	Description	QTY	Unit	Production (Units/Day)	# Teams	Duration (Weeks)	Unit Cost	Total		
0100	Pre Design Investigation	0.00	1.0	N/A	N/A	N/A	95 406 19	0.00		
0100	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A N/A	N/A	N/A N/A	81.273.38	0.00		
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00		
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00		
0140	Install Pumps	15.00	Ea	1.0	1.0	1.0	10,321.25	154,818.75		
0150	Install piping	7,500.00	LF	N/A	N/A	N/A	50.60	379,500.00		
0160	Install power	15.00	Ea	N/A	N/A	N/A	9,013.13	135,196.88		
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00		
0180a	Install Well	15.00	Ea	1.0	1.0	1.0	2,875.00	43,125.00		
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00		
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00		
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00		
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00		
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00		
0230	Transport Haul Forth	0.00	LOY	N/A	IN/A	0	1.73	0.00		
0240	Backfill	0.00	LUT	N/A	IN/A	N/A	5.43	0.00		
0245	Compaction	0.00	Ea	N/A 500.0	N/A	N/A	3.00	0.00		
02509	Grading	0.00	SV	200.0	1.0	0.0	2.40	0.00		
0250a	Soil Amendments	0.00	01 CV	200.0	1.0	0.0	2.30	0.00		
02500	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00		
0252	Seeding	0.00	AC	N/A	N/A	N/A	1 178 75	0.00		
0255	Dewatering Excavation (Per Day)	0.00	DY	10	10	0.0	1 150 00	0.00		
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00		
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00		
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00		
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00		
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00		
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00		
	Analysis per well (Analytes from 2019 report table 3-									
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00		
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00		
	PRB Feasilbility Studies Boron Beneath STEP									
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00		
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00		
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00		
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00		
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00		
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00		
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00		
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00		
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00		
0400	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	70,094.87	0.00		
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00		
	Sub-Total							712,640.63		
	Contingency	10%						71,264.06		
	Sub-Total							783,904.69		
	Infrastructure Improvements	2%						15,678.09		
	Project Management	4%						31,356.19		
	Remedial Design/ Pre-Constructrion	2%						15,678.09		
	Construction Management	7%						54,873.33		
	Total Capital Cost							901.490.39		

#### Task 23

## Injection Capture Sytem Shutdown Injection System Stops Pumping 2050

С

APITAL COST:								
				Teem				
				Production		Duration		
Bid Item No.	Description	QTY	<u>Unit</u>	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00
0120	Site Management	7.60	WK	1.00	1	60	21,158.55	160,805.01
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00
215	Excavation Trench Erosion and Sediment Control	0.00	CY	1.0	1.0	N/A	9.20	0.00
0220	Loading	0.00	LF	1.0	1.0	N/A	4.00	0.00
0230	Transport Haul Earth	0.00	LOY	N/A	N/A	NVA	1.73 E 42	0.00
0240	Backfill	72 020 00	LOY	N/A	N/A	N/A	3.43	0.00
0243	Compaction	73,920.00	LCY	500.0	10	20.6	3.00	255 024 00
02509	Grading	2 346 67	SV	200.0	1.0	23.0	2 30	5 307 33
0250h	Soil Amendments	2,040.07	cv	100.0	1.0	2.5	0.17	0.00
02500	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00
0252	Seeding	0.00	AC.	N/A	N/A	N/A	1 178 75	0.00
0255	Dewatering Excavation (Per Day)	0.00	DY	10	10	0.0	1 150 00	0.00
0260	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287.50	0.00
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00
	Analysis per well (Analytes from 2019 report table 3							
0280	1)	48,048.00	CY	500.0	1.0	19.2	1.74	83,364.82
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00
	PRB Feasilbility Studies Boron Beneath STEP							
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00
0300	Monitoring Well Abandonment in place	4,560.00	lf	1.0	1.0	N/A	20.70	94,392.00
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00
	Sub-Total							825,104.44
	Contingency	10%						82,510.44
	Sub-Total							907,614.89
	Infrastructure Improvements	2%						18 152 30
	Project Management	4%						36 304 60
	Remedial Design/ Pre-Constructrion	2%						18 152 30
	Construction Management	7%						63.533.04
	Total Capital Cost							1,043,757.12
								<i>,</i> -

#### Task 24

## Injection Capture Sytem Shutdown Post Pumping Modeled Until 2150

C.

APITAL COST:								
				Teem				
				Production		Duration		
Bid Item No.	Description	QTY	Unit	(Units/Day)	<u># Teams</u>	(Weeks)	Unit Cost	Total
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00
0120	Site Management	0.00	WK	1.00	1	10	21,158.55	0.00
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00
215	Exceverion and Sediment Control	0.00	5	1.0	1.0	N/A	9.20	0.00
0220	Loading	0.00		1.0	1.0	N/A	4.00	0.00
0230	Transport Haul Earth	0.00	LOT	N/A	N/A	0	1.73 E 42	0.00
0240	Backfill	0.00	Eo	N/A	N/A	N/A	3.43	0.00
0243	Compaction	0.00		500.0	10	0.0	3.00	0.00
02502	Grading	0.00	SV	200.0	1.0	0.0	2 30	0.00
0250b	Soil Amendments	0.00	cv	100.0	1.0	0.0	0.17	0.00
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00
0252	Seeding	0.00	AC.	N/A	N/A	N/A	1 178 75	0.00
0255	Dewatering Excavation (Per Dav)	0.00	DY	10	10	0.0	1 150 00	0.00
0260	Confirmation & Waste Sampling/Analysis	0.00	Fa	1.0	1.0	0.0	287.50	0.00
0270	Stone	0.00	Tons	10	10	0.0	29.90	0.00
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00
	Analysis per well (Analytes from 2019 report table 3-							
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00
	PRB Feasilbility Studies Boron Beneath STEP							
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00
0290a	Post Pumping Modeled Until 2150	1.00	LS	1.0	1.0	1.0	83,775.18	83,775.18
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00
	Sub-Total							83,775.18
	Contingency	10%						8.377.52
	Sub-Total	-						92,152.70
	Infrastructure Improvements	2%						1 843 05
	Project Management	4%						3 686 11
	Remedial Design/ Pre-Constructrion	2%						1.843.05
	Construction Management	7%						6.450.69
	Total Capital Cost							105.975.60
	··· ··· ···							100,010.00

	Task 25										
	Inj PRB Feasilbil	ection Ca ity Studie	apture Sy es Boron	tem Shutdown Beneath STEP	9 Main Dam						
CAPITAL COST:											
Bid Item No.	Description	QTY	<u>Unit</u>	Team Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	Unit Cost	Total			
0100	Pre-Design Investigation	0.30	LS	N/A	N/A	N/A	85,496.18	25,648.85			
0110	Work Plans(WP/APP/SSHP & GSV)	0.50	LS	N/A	N/A	N/A	81,273.38	40,636.69			
0120	Site Management	0.00	WK	1.00	1	10	21,158.55	0.00			
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00			
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00			
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00			
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00			
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00			
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00			
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00			
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00			
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00			
215	Excavation Trench Erosion and Sediment Control	0.00	UY	1.0	1.0	N/A	9.20	0.00			
0220	Loading	0.00	LF	1.0	1.0	N/A	4.00	0.00			
0230	Transport Haul Earth	0.00	LCY	N/A	N/A	NIA	1.73 E 42	0.00			
0240	Backfill	0.00	Eci	N/A	N/A	N/A	3.43	0.00			
0245	Compaction	0.00	LCY	500.0	10	0.0	3.45	0.00			
0250a	Grading	0.00	SY	200.0	1.0	0.0	2 30	0.00			
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00			
02500	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00			
0252	Seeding	0.00	AC	N/A	N/A	N/A	1 178 75	0.00			
0255	Dewatering Excavation (Per Dav)	0.00	DY	10	10	0.0	1 150 00	0.00			
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00			
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00			
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00			
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00			
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00			
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00			
	Analysis per well (Analytes from 2019 report table 3-										
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00			
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00			
	PRB Feasilbility Studies Boron Beneath STEP										
0290	Main Dam	1.00	Ea	1.0	1.0	1.0	95,917.62	95,917.62			
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00			
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00			
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00			
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00			
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00			
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00			
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00			
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00			
0400	Land Lise Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	70,094.87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00			
	Sub-Total							162,203.16			
	Contingency	10%						16,220.32			
	Sub-Total							178,423.48			
	Infrastructure Improvements	2%						3,568.47			
	Project Management	4%						7,136.94			
	Remedial Design/ Pre-Constructrion	2%						3,568.47			
	Construction Management	7%						12,489.64			
	Total Capital Cost							205,187.00			

	Task 26										
		Ma	Mana								
	Paste Proc	ess Forc	ed Evapo	pernent pration Shutdo	wn 2020						
CAPITAL COST:											
				Team		D					
Bid Item No.	Description	QTY	Unit	(Units/Day)	# Teams	(Weeks)	Unit Cost	Total			
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00			
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00			
0120	Site Management	0.00	WK	1.00	1	9	21,158.55	0.00			
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00			
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00			
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00			
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00			
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00			
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00			
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00			
0200a	Clear and Grup	0.00	Ea	1.0	1.0	0.0	345.00	0.00			
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00			
215	Excavation Trench Erosion and Sadiment Control	0.00	CY	1.0	1.0	N/A	9.20	0.00			
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00			
0230	Loading Transmit Louis Fasth	0.00	LCY	N/A	N/A	6	1.73	0.00			
0240	Paakfill	0.00	LCY	N/A	N/A	N/A	5.43	0.00			
0245	Composition	0.00	Ea	N/A	N/A	N/A	3.06	0.00			
0250	Crading	0.00	LUT	500.0	1.0	0.0	3.45	0.00			
0250a	Grading Soil Amondmonto	0.00	SY	200.0	1.0	0.0	2.30	0.00			
0250b	Toppoil	0.00	CY	100.0	1.0	0.0	0.17	0.00			
02500	Social	0.00	10	250.0	1.0	0.0	10.01	0.00			
0252	Seeding Dewatering Execution (Per Dev)	0.00	AC	N/A	N/A	N/A	1,178.75	0.00			
0255	Confirmation & Woota Sampling (Apolycia	0.00	DY 5-	1.0	1.0	0.0	1,150.00	0.00			
0200	Stone	0.00	Topo	1.0	1.0	0.0	287.50	0.00			
0270	Geotevtile Fabric	0.00	SV	1.0	1.0	0.0	29.90	0.00			
0275 5	Liner	0.00	01	1.0	1.0	0.0	2.96	0.00			
0275.5	Pine Demolition	0.00	15	1.0	1.0	0.0	10.44	0.00			
276	MNA Demonstration Studies	0.00	0	1.0	1.0	0.0	76 478 18	0.00			
270	Analysis per well (Analytes from 2010 report table 3		0	1.0	1.0	0.0	70,470.10	0.00			
0280	1)	0.00	CV.	500.0	10	0.0	1 74	0.00			
0280 1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00			
0200.1	PBB Eessilbility Studies Boron Beneath STEP	0.00	Gai	1000.0	1.0	0.0	30.72	0.00			
0200	Main Dam	0.00	CV	500.0	1.0	0.0	101.94	0.00			
0290a	Post Pumping Modeled Until 2150	0.00	Fa	1.0	1.0	0.0	83 775 18	0.00			
0300	Monitoring Well Abandonment in place	0.00	Fa	1.0	1.0	N/A	20.70	0.00			
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1 655 535 75	0.00			
0320	Stormwater Basin	0.00	CE	N/A	N/A	N/A	0 17	0.00			
0330	Post Closure Care New Landfill	0.00	AC.	50	10	0.0	662 344 17	0.00			
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7 417 50	0.00			
0340	Remove Liner		Fa	N/A	N/A	N/A	0.72	0.00			
0360	Demobilization	0.00	1.5	10	N/A	0.0	18 687 50	0.00			
0400	Final Report	0.00	15	N/A	N/A	N/A	70 094 87	0.00			
0410	Land Use Controls/Deed Restriction	0.00	15	N/A	N/A	N/A	22 425 00	0.00			
	Sub-Total							0.00			
	Contingency	10%						0.00			
	Sub-Total							0.00			
	Infrastructure Improvements	2%						0.00			
	Project Management	4%						0.00			
	Remedial Design/ Pre-Constructrion	2%						0.00			
	Construction Management	7%						0.00			
	Total Capital Cost							0.00			

Task 27									
Water Management									
Manage Clearwater from Paste Plant STEP B Cell Untill 2022									
CARITAL COST									
CAPITAL COST.									
				Team Draduation		Duration			
Bid Item No.	Description	QTY	Unit	(Units/Day)	# Teams	(Weeks)	Unit Cost	Total	
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85.496.18	0.00	
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00	
0120	Site Management	5.00	WK	1.00	1	2409	21,158.55	105,792.77	
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00	
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00	
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00	
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00	
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00	
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00	
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00	
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00	
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00	
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	9.20	0.00	
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00	
0230	Loading Transport Lloud Conth	0.00	LCY	N/A	N/A	6	1.73	0.00	
0240	Paakfill	0.00	LCY	N/A	N/A	N/A	5.43	0.00	
0245	Backilli	0.00	Ea	N/A	N/A	N/A	3.06	0.00	
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00	
0250a	Grading Soil Amondmonto	0.00	SY	200.0	1.0	0.0	2.30	0.00	
02506	Toppoil	0.00	CY	100.0	1.0	0.0	0.17	0.00	
02500	Sooding	0.00	40	250.0	1.0	0.0	10.01	0.00	
0252	Dewatering Excavation (Per Dav)	0.00	AC	N/A	N/A	N/A	1,176.75	0.00	
0255	Confirmation & Waste Sampling/Analysis	0.00	En	1.0	1.0	0.0	1,150.00	0.00	
0200	Stone	0.00	Topo	1.0	1.0	0.0	287.50	0.00	
0270	Geotextile Eabric	0.00	SV	1.0	1.0	0.0	29.90	0.00	
0275 E	Liner	0.00	01 0E	1.0	1.0	0.0	2.96	0.00	
0275.6	Pine Demolition	12 000 00	LE	1.0	1.0	2400.0	10.44	233 220 00	
276	MNA Demonstration Studies	12,000.00	0	1.0	1.0	0.0	76 478 18	0.00	
210	Analysis per well (Analytes from 2019 report table 3-		0	1.0	1.0	0.0	10,410.10	0.00	
0280	1)	0.00	CY	500.0	1.0	0.0	1 74	0.00	
0280 1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00	
	PRB Feasibility Studies Boron Beneath STEP								
0290	Main Dam	0.00	CY	500.0	10	0.0	191 84	0.00	
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83.775.18	0.00	
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00	
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1.655.535.75	0.00	
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00	
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00	
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00	
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00	
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00	
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00	
0410	Land Use Controls/Deed Restriction	1.00	LS	N/A	N/A	N/A	22,425.00	22,425.00	
	Sub-Total							361,437.77	
	Contingency	10%						36,143.78	
	SUD-10TAI							397,581.55	
	Infrastructure Improvements	2%						7,951.63	
	Project Management	4%						15,903.26	
	Remedial Design/ Pre-Constructrion	2%						7,951.63	
	Construction Management	7%						27,830.71	
	Total Capital Cost							457 218 78	

Task 28								
Water Management								
Landfill Stormwater Pond Construct 2027								
CAPITAL COST:								
				Team				
Bid Item No.	Description	QTY	<u>Unit</u>	Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	Unit Cost	Total
0100	Pre-Design Investigation	0.00	LS	N/A	N/A	N/A	85,496.18	0.00
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00
0120	Site Management	12.00	WK	1.00	1	9	21,158.55	253,902.65
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00
0180a	Hydra/Coologia Investigation	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00
0200	Clear and Crub	0.00	Ea E-	1.0	1.0	0.0	40,250.00	0.00
0200a	Excavation Bulk	0.00	Ea	1.0	1.0	0.0	345.00	0.00
215	Excavation Trench	0.00	CY	1.0	1.0	N/A	0.90	0.00
0220	Erosion and Sediment Control	0.00	LE	1.0	1.0	N/A	4.60	0.00
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00
0250a	Grading	0.00	SY	200.0	1.0	0.0	2.30	0.00
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00
0275.5	Liner Dina Damalitian	0.00	SF	1.0	1.0	0.0	2.86	0.00
0275.6	MNA Demonstration Studios	0.00	LF	1.0	1.0	0.0	19.44	0.00
276	Analysis answell (Analytan from 2010 analytable 2		0	1.0	1.0	0.0	/6,4/8.18	0.00
0000	Analysis per well (Analytes from 2019 report table 3-	0.00	01/	500.0	4.0		4.74	0.00
0280 1	Eacility Closure Plan	0.00	Cal	1000.0	1.0	0.0	1.74	0.00
0200.1	PRB Feasibility Studies Boron Beneath STEP	0.00	Gai	1000.0	1.0	0.0	30.72	0.00
0290	Main Dam	0.00	CY	500.0	10	0.0	191.84	0.00
0290a	Post Pumping Modeled Until 2150	0.00	Fa	1.0	1.0	0.0	83 775 18	0.00
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1.655.535.75	0.00
0320	Stormwater Basin	1,568,160.00	CF	N/A	N/A	N/A	0.17	270,507.60
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00
	Sub-Total							524,410.25
	Contingency	10%						52,441.02
	Sub-Total							576,851.27
	Infrastructure Improvements	2%						11,537.03
	Project Management	4%						23,074.05
	Remedial Design/ Pre-Constructrion	2%						11,537.03
	Construction Management	7%						40,379.59
	Total Capital Cost							663.378.96

Task 29									
Water Management									
Additional Stormwater Drainage Features Around Former SOEP and STEP									
CAPITAL COST:									
				Teem					
				Production		Duration			
Bid Item No.	Description	QTY	Unit	(Units/Day)	# Teams	(Weeks)	Unit Cost	Total	
0400	Bro Decign Investigation	0.00	10	NVA.			05 400 40	0.00	
0100	Work Plans(WP/APP/SSHP & GSV)	0.00	1.5	N/A	N/A	N/A	81 273 38	0.00	
0120	Site Management	0.00	WK	1.00	1	12	21 158 55	0.00	
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26.845.08	0.00	
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00	
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00	
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00	
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00	
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00	
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00	
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00	
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00	
215	Excavation Trench	5,000.00	CY	1.0	1.0	N/A	9.20	46,000.00	
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00	
0230	Loading	0.00	LCY	N/A	N/A	6	1.73	0.00	
0240	Transport Haul Earth	0.00	LCY	N/A	N/A	N/A	5.43	0.00	
0245	Backfill	0.00	Ea	N/A	N/A	N/A	3.06	0.00	
0250	Compaction	0.00	LCY	500.0	1.0	0.0	3.45	0.00	
0250a	Grading	2,500.00	SY	200.0	1.0	2.5	2.30	5,750.00	
0250b	Soil Amendments	0.00	CY	100.0	1.0	0.0	0.17	0.00	
0250c	Topsoil	0.00	CY	250.0	1.0	0.0	10.61	0.00	
0252	Seeding	0.00	AC	N/A	N/A	N/A	1,178.75	0.00	
0255	Dewatering Excavation (Per Day)	0.00	DY	1.0	1.0	0.0	1,150.00	0.00	
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00	
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00	
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00	
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00	
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00	
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00	
	Analysis per well (Analytes from 2019 report table 3								
0280	1)	0.00	CY	500.0	1.0	0.0	1.74	0.00	
0280.1	Facility Closure Plan	0.00	Gal	1000.0	1.0	0.0	38.72	0.00	
	PRB Feasilbility Studies Boron Beneath STEP								
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00	
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00	
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00	
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00	
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00	
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00	
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00	
0340	Remove Liner		Ea	N/A	N/A	N/A	0.72	0.00	
0360	Demobilization	0.00	LS	1.0	N/A	0.0	18,687.50	0.00	
0400	Final Report	0.00	LS	N/A	N/A	N/A	70,094.87	0.00	
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A	22,425.00	0.00	
	Sub-Total							51,750.00	
	Contingency	10%						5,175.00	
	Sub-Total							56,925.00	
	Infrastructure Improvements	2%						1,138.50	
	Project Management	4%						2,277.00	
	Remedial Design/ Pre-Constructrion	2%						1,138.50	
	Construction Management	7%						3,984.75	
	Total Capital Cost							65 463 75	

Task 30									
Water Management Continue Groundwater Monitoring at SOEP/STEP and New Landfill until 2053									
APITAL COST:									
Bid Item No.	Description	QTY	<u>Unit</u>	Team Production (Units/Day)	<u># Teams</u>	Duration (Weeks)	<u>Unit Cost</u>	Total	
0100	Pre-Design Investigation	0.00	IS	N/A	N/A	N/A	85 496 18	0.00	
0110	Work Plans(WP/APP/SSHP & GSV)	0.00	LS	N/A	N/A	N/A	81,273.38	0.00	
0120	Site Management	0.00	WK	1.00	1	19	21,158.55	0.00	
0130	Mobilization	0.00	LS	N/A	N/A	N/A	26,845.08	0.00	
0140	Install Pumps	0.00	Ea	1.0	1.0	1.0	10,321.25	0.00	
0150	Install piping	0.00	LF	N/A	N/A	N/A	50.60	0.00	
0160	Install power	0.00	Ea	N/A	N/A	N/A	9,013.13	0.00	
0180	Survey	0.00	DY	1.0	1.0	1.0	3,220.00	0.00	
0180a	Install Well	0.00	Ea	1.0	1.0	1.0	2,875.00	0.00	
0200	Hydro/Geologic Investigation	0.00	Ea	1.0	1.0	0.0	40,250.00	0.00	
0200a	Clear and Grub	0.00	Ea	1.0	1.0	0.0	345.00	0.00	
0210	Excavation Bulk	0.00	CY	1.0	1.0	N/A	6.90	0.00	
215	Excavation French	0.00	CY	1.0	1.0	N/A	9.20	0.00	
0220	Erosion and Sediment Control	0.00	LF	1.0	1.0	N/A	4.60	0.00	
0230	Loading	0.00	LCY	N/A	N/A	6	1./3	0.00	
0240	Paakfill	0.00	LCY	N/A	N/A	N/A	5.43	0.00	
0245	Compaction	0.00	Ea	N/A	N/A	N/A	3.06	0.00	
0250	Grading	0.00	EUT eV	200.0	1.0	0.0	3.45	0.00	
0250a	Soil Amendments	0.00	CV OV	200.0	1.0	0.0	2.30	0.00	
02500	Tonsoil	0.00	CV	250.0	1.0	0.0	10.61	0.00	
0252	Seeding	0.00	AC	230.0 N/A	N/A	0.0 N/A	1 178 75	0.00	
0255	Dewatering Excavation (Per Day)	0.00	DY	10	1.0	0.0	1 150 00	0.00	
0260	Confirmation & Waste Sampling/Analysis	0.00	Ea	1.0	1.0	0.0	287.50	0.00	
0270	Stone	0.00	Tons	1.0	1.0	0.0	29.90	0.00	
0275	Geotextile Fabric	0.00	SY	1.0	1.0	0.0	1.56	0.00	
0275.5	Liner	0.00	SF	1.0	1.0	0.0	2.86	0.00	
0275.6	Pipe Demolition	0.00	LF	1.0	1.0	0.0	19.44	0.00	
276	MNA Demonstration Studies		0	1.0	1.0	0.0	76,478.18	0.00	
	Analysis per well (Analytes from 2019 report table 3-								
0280	1)	24,255.00	Well	500.0	1.0	9.7	867.52	21,041,600.58	
0280.1	Facility Closure Plan PRB Feasilbility Studies Boron Beneath STEP	0.00	Gal	1000.0	1.0	0.0	38.72	0.00	
0290	Main Dam	0.00	CY	500.0	1.0	0.0	191.84	0.00	
0290a	Post Pumping Modeled Until 2150	0.00	Ea	1.0	1.0	0.0	83,775.18	0.00	
0300	Monitoring Well Abandonment in place	0.00	Ea	1.0	1.0	N/A	20.70	0.00	
0310	Relocate 230kV Transmission Line	0.00	Ea	N/A	N/A	N/A	1,655,535.75	0.00	
0320	Stormwater Basin	0.00	CF	N/A	N/A	N/A	0.17	0.00	
0330	Post Closure Care New Landfill	0.00	AC	5.0	1.0	0.0	662,344.17	0.00	
0330a	Site Restoration Trees and Shrubs	0.00	AC	5.0	1.0	0.0	7,417.50	0.00	
0340	Demobilization	0.00	Ea	N/A	N/A	N/A	0.72	0.00	
0360	Einal Report	0.00	1.0	1.0	N/A	0.0	70.004.97	0.00	
0410	Land Use Controls/Deed Restriction	0.00	LS	N/A	N/A	N/A N/A	22,425.00	0.00	
	Sub-Total							21,041,600.58	
	Contingency	10%						2,104,160.06	
	Sub-Total							23,145,760.64	
	Infrastructure Improvements	2%						462,915.21	
	Project Management	4%						925,830.43	
	Remedial Design/ Pre-Constructrion	2%						462,915.21	
	Construction Management	7%						1,620,203.24	
	Total Capital Cost							26,617,624.73	

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