

Friday March 4, 2022

**ESCO Comments from ODEQ with Point Source responses.....****General Comments**

1. While adhering to the general ICP Report format, DEQ found the document difficult to read and comprehend, both from the standpoint of remedial actions completed at the site and, more importantly, in describing remaining residual contaminant conditions and the risk they may (or may not) pose to public health and the environment. Data summarization is unwieldy at best, further making review difficult. Presentation is not helped by the inclusion of long tables within the text portion of the document and haphazard summarization of important information. The 6,027-page Report lacks page numbers, does not reference figures and tables when data are discussed, and key information is only available in appendices.

**Agreed as to the formatting of report. This report, with the discussion of three separate UST closures as well as the ECSI #6285 discussion which included seven distinct remedial actions was difficult to structure in the report format used (DEQ requested format). The report also discusses tax lots which were not part of the ESCO operation further confounding the reader (Appendix L reports). We do believe that we were clear in defining the areas remediated, clear in defining the concentrations of contaminants in soil prior to remedial efforts and clear in defining the post-remedial concentrations of contaminants in the remedial areas. If DEQ would prefer that all tables be in a report section dedicated to tables this is not a problem. Point Source believed that having the tables within eye-shot of the discussion of the sampling event was more valuable as an explanatory tool than going back and forth through the report in a search for supporting data.**

**Page #s kept disappearing in the DEQ report format. We tried to the extent that we started from scratch several times trying to retain page numbers. We will fix this.**

**We are happy to hear any suggestions from DEQ to make the report flow better. Possibly we could move some report sections around to facilitate risk assessment being presented after remedial actions. One suggestion would be to move the Section 12 discussion of remedial actions to Section 2.0 Site Background so that the rest of the report addresses conditions after demolition/remediation.**

2. Presenting data from areas with soil removal requires separate evaluation with a clear distinction of confirmation sampling evaluations compared to DEQ Risk-Based Concentrations (RBCs). Soil removal should be evaluated for risk as justification for their removal, but this should be presented in a manner that does not interfere with the evaluation of current site conditions. The use of Clean Fill criteria is not used for risk screening.

**Soil confirmation results from all soil removal areas are depicted in Tables 3A through 3G. In each of these tables the results of confirmation sampling are compared to the applicable occupational receptor RBC. Justification for soil removal was offered in Section 11.0 of this report. Where feasible, 1535-A1 (Property Owner) requested that soils with target compound concentrations above occupational RBCs be removed.**

**Clean Fill is not used as a screening tool in any of the Confirmation Soil Sample Tables-not quite sure where this comment comes from. Where Clean Fill screening levels are noted in the report, they are not**

used in place of applicable RBCs only as a tool to let the reader that where exceeded, special handling of soil leaving the site is required. This information is helpful to the Property Owner as well as other future users of the report who may have interest in development of the Site.

3. Both current and potential reasonably likely future exposure scenarios need to be evaluated. It is not appropriate to omit an evaluation of occupational exposure because that scenario is not currently occurring. The risk evaluation needs to assess the potential risk from future exposure to determine whether conditions, at present, are protective of public health and the environment. Consideration should also be given to screening of residual contaminant data to DEQ RBCs for urban residential exposure or further support presented as to which this type of site use is not expected to occur in the future. See DEQ's Beneficial Land and Water Use Guidance for more information.

**We assume you are referring to Table 1 as this is the only table in this report where RBCs are used as screening tool that occupational exposure is not included. The point of Table 1 is to specifically evaluate the direct contact for construction/excavation workers during demolition and mass grading of the Site as is stated in the paragraph prior to Table 1. Please elaborate.**

**We can add screening for urban residential receptors.**

4. In its current, largely undeveloped state, screening of soil data should include DEQ ecological risk-based concentrations (RBCs).

**Point Source prepared an Ecological Risk Assessment of the Site discussed in Section 9.2 of the report (checklist in Appendix F) which determined that it is unlikely that there are significant exposure pathways allowing for an adverse impact on ecological receptors. Is the DEQ commenting that they do not agree with this finding? Are the RBCs in Table 1 of the current ecological screening guidance the correct screening levels?**

#### Specific Comments

Page 4. PCBs detected at the Main Plant property were reported to be below ODEQ's Clean Fill criteria. Please screen the PCBs data against DEQ RBCs (soil ingestion, dermal contact, and inhalation) and evaluate if additional nature and extent evaluation is needed.

**This statement was part of the discussion of the Baseline Environmental Site Assessment Report prepared prior to the remedial actions discussed later in this report and prior to the confirmation sampling for the remedial actions taken. PCBs sample results from ISM sampling were below all RBCs.**

Page 4. Polycyclic Aromatic Hydrocarbons (PAHs) were detected in shallow soil above Occupational RBCs. Please screen PAHs soil data to evaluate the nature and extent of remaining soils and provide maps that present exceedances of risk-based screening values for both human and ecological exposure.

**This statement was part of the discussion of the Baseline Environmental Site Assessment Report prepared prior to the remedial actions discussed later in this report and prior to the confirmation sampling for the remedial actions taken. PCBs sample results from ISM sampling were below occupational RBCs with the exception of lower level Building 43.**

Page 5. Volatile Organic Compounds (VOCs) were reported to be mainly non-detect. Provide the sampling method and detections limits compared to RBCs for all VOCs sampling.

**This statement was part of the discussion of the Baseline Environmental Site Assessment Report prepared prior to the remedial actions discussed later in this report and prior to the confirmation sampling for the remedial actions taken.**

Page 5. Metals are detections are compared to the background and clean fill criteria. Screen metals to RBCs with tabulated detections limits compared to RBCs.

**This statement was part of the discussion of the Baseline Environmental Site Assessment Report prepared prior to the remedial actions discussed later in this report and prior to the confirmation sampling for the remedial actions taken. With the exception of arsenic and lead in the Area A lower interval metals sample results from ISM sampling were below all RCBs.**

Page 5. Please confirm that DEQ approved the October 23, 2019, Contaminated Medial Management Plan.

**The CMMP was approved by Mr. Ray Hoy of DEQ in a November 1, 2019 phone conversation with Gil Cobb of Point Source.**

Page 6. An Easement and Equitable Servitude deed restriction will be required for the two petroleum impacted soil areas.

**OK.**

Page 6, 7, 8. Explain the asterisk designation in the table. Please provide table numbers. Arsenic is reported at 9.8 mg/kg. Specify if this is a mean, UCL, or some other value. Arsenic exceeds the regional upper percentile background concentration in soil. Discuss the arsenic exceedance. PCBs were compared to clean fill criteria. Screen PCBs and all other constituents using RBCs. RCRA 8 metals results were reported, and a comparison to clean fill was presented. Screen metals results to RBCs.

**As noted at the bottom of the table, \* indicated compound exceeds either background Levels of Metal in Soil/Clean Fill. This is the only table without a number. This was done purposely as the table is used in more than one place. We assume that the arsenic value of 9.76 on page 8 is what DEQ is referring to as an arsenic value of 9.8. This value is the mean value.**

Page 8. Lead, arsenic, and petroleum contamination remains at the site, and additional discussion of risk is required.

**OK.**

Page 23. The discussion of metals in the soil does not address arsenic (an inorganic often discussed with metals). Please discuss arsenic detections compared to RBCs.

**This is a discussion of the Baseline Environmental Site Assessment Report and is accurate. Arsenic is discussed in Section 5.2 on the following page.**

Page 26. Table 1-Maximum values are compared with RBCs for construction and excavation workers. The most protective relevant soil RBCs are for occupational workers. Include a comparison to occupational RBCs. Provide separate evaluations for concentrations in soil removals and existing soils.

**These results reflect maximum concentrations prior to remedial action and therefore are applicable to construction/excavation workers and not applicable for post-remedial screening. Also discussed under Item 3 above. The report format calls for the Exposure Pathway Summary (Section 6.0) prior to the discussion of Removal or Remedial Action (Section 12.0).**

Page 29. Section 7.5. The CSM model should be discussed prior to identifying appropriate screening values to select the relevant RBCs.

**Comment understood. Will factor this into revised report.**

Page 32, Section 9.1- All concentrations are listed below RBCs, so a risk assessment was not conducted. However, a comparison of concentrations to occupational RBCs is required because the site's development for occupation use is reasonably likely. The site should screen analytical results for both urban residential and occupational SLVs.

**Will add urban residential RBC screening.**

Page 37 and Figure 4C- The February 2020 removal of cPAHs is shown, but there is no apparent reason to justify the limited extent of removal. In addition, contaminated soil may remain beyond the excavation, given the samples around the removal area. Please discuss the nature and extent of cPAHs and determine if additional soil samples are needed.

**In following up to sampling conducted by Bridgewater, Point Source determined that the source of elevated PAHs were urban fill materials which contained a fair amount of burnt material (ash and charred wood. DEQ is correct in their assertion that further investigation and or remediation of this area will be required if this material is encountered during redevelopment. The ISM sampling in Area A indicates that BAPe concentrations are between the urban residential and occupational screening levels.**

Page 40- The statements that "The following notes apply to the tables in Section 12.2.", and "\*" represents soils that have been removed" are vital. The concept of removed data should be central to the organization of the data and proposed actions. The tables in this section should be more explicit about removed and remaining soils.

**Not quite sure how much more explicit we can be. All removed soils are noted as represented in this comment by the reviewer. Please feel free to suggest an alternate.**

Page 42, Table 2AA-Detection limits for chemicals below limits should be compared with RBCs to determine the appropriateness of the screening, both with all screening tables. High detection limits would make the screening results uncertain.

**We will check all detection limits and make note.**

Page 47- The comparison of soil concentrations with urban residential RBCs is not part of the CSM. The

tables show occupational RBCs. Please revisit the CSM and screen the data consistently.

**Noted.**

Page 55- The statements that "Due to access restrictions, petroleum impacted soil remains in two areas of the Site", and "This material will require removal and proper disposal during improvements to this portion of the Site" are key organizational concepts. They should be central to the organization of the Report. Please discuss a Contaminated Media Management Plan and EES deed restriction to allow this material to remain.

**Will add to the discussion of Institutional Controls (Section 12.4). Please note that we did recommend an updated CMMP in this same section of the report on page 60 as well as in the discussion of Residual Risk (Section 13.4) on page 61.**

Page 56, Table 4- Groundwater is evaluated as not a drinking water source, which is reflected in the CSM. Therefore, it is not relevant to mention that MCLs are not exceeded. If the drinking water exposure pathway is relevant, groundwater concentrations would be compared with MCLs and RBC<sub>tw</sub> values. If groundwater is a source to surface water, concentrations should also be compared with Eco RBCs.

**MCLs were noted for a sense of context. We will revise to note only that groundwater is a drinking water source.**

Page 59- The statement that "Institutional controls are not necessary for this Site at this time." is not factual since a deed restriction and a CMMP are institutional controls.

**We will revise to note this.**

Page 61, Section 13.1-The statement: "Based on Site zoning EG1-General Employment and IH-Heavy Industrial by the City of Portland, the appropriate Site cleanup screening level is Soil Ingestion, Dermal Contact and Inhalation for the Occupational Receptor" should be revised to state that this is the scenario with the lowest RBCs. Revise the SLVs relevant scenarios include construction and excavation workers. The statement "except for naturally occurring arsenic" might imply that the source of arsenic above background is natural. Because arsenic is present above regional background levels, the facility is likely to exceed arsenic SLVs.

**Will add construction worker screening in this section. It is likely that arsenic is naturally occurring, but we still exceed in any event and will note this.**

Figure 2.-A current base map should be used. The roads in 1977 are no longer accurate.

**Figure 2 is a topo map. Figure 1 and Figure 3 provide current base maps.**

Figure 4a, 4C-The extent of excavation is questionable. The three samples outside the excavation may indicate a larger contaminated area, not bounded in most directions.

**Figure 4A (Building 43) – All three samples that demonstrate elevated BAPE are within the excavation.**

**Figure 4C (Area A/EB-7) – Discussed above.**

Figure 5, CSM- Explain the reason for including a groundwater scenario to residential air. If this is a relevant scenario, it needs to be evaluated.

**This pathway was accepted in the CSM solely due to the presence of groundwater. The pathway is not complete, however, as none of the concentrations of COCs in groundwater exceed RBCs for residential exposure via vapor intrusion or volatilization to outdoor air. The CSM will be redone with Urban Residential use as a consideration at DEQs request. Groundwater ingestion will not be addressed as it appears that DEQ agrees that there is not a beneficial use for groundwater.**

Figure 6- Residential contact with surface soil is selected, even though that pathway is not included in the CSM on Figure 5.

**This was an error in Figure 6. Residential contact is not selected as the site is not accessible to residential receptor. The CSM will be redone with Urban Residential use as a consideration at DEQs request.**

Figure 9- Explain the overlap with the removed (yellow) and impacted (red) soil. Does this indicate that impacted soils remain after excavation?

**Yes. Due to existing infrastructure in this area, excavation was limited. Discussed in report in Section 13.4. We estimate approximately 810 cubic yards of material to remain at a depth of greater than 5 feet below ground surface.**

Figures- Please add a figure with the tax lots indicated and outlined as a reference to compare to the text, including the administration building. There are 7 different tax lots mentioned in the Executive Summary. It is unclear which one is which.

**OK.**

Figures- Please add a figure that outlines major site features, including building and areas numbers (e.g., where is building 43? Building 9? Area A? Roosevelt 3) and location of past USTs. Perhaps and updated Figure 10 (which is limited to ISM areas) before Figure 4A.

**OK.**

Figures- Report should include figures with the current status of surface soils per analyte group, including 2018 - 2020 data. For example, all the surface PCB/PAH results should be shown on figures along with areas where removal occurred and confirmation sample results. See general comment.

**OK.**

Tables- Report should include detailed tables of all analyte results in a Tables section, not only summary tables within a specific portion of the text.

**OK.**

Appendix L-Class-N-Kustom site –PCB excavation and disposal by Hahn & Associates are found in Appendix L for Tax lots 1N1E29DD00100 and 1N1E29DD01600 (situs address 2141 NW 25th Avenue) and

1N1E28CB00700 (2404 NW Nicolai Avenue). Since both are listed as part of the overall site, the information should be summarized in the main body of the text. Include a discussion of the nature and extent of contamination on the Class-N-Kustom site, if part of the Report. Please include information from Appendix L in the report.

**Class-N-Custom was never a part of the ESCO operation-not even as a non-manufacturing support building and therefore was treated in the manner that it was treated. This site should be treated separately from ESCO Plant #1/2 in our opinion.**

Foundry operating from 1913 to 2015 - Please detail the nature and extent of contamination at the former location of foundry operations.

**We can only address the contamination identified in the Bridgewater Baseline Environmental Site Assessment Report and subsequent work conducted by Bridgewater and Point Source during demolition of the plant. We were not provided any information by ESCO which identifies prior contamination of the Site. LUST files for USTs decommissioned prior to commencement of plant demolition are addressed in Section 2.4 of the report. 1535-A1 with assistance from Point Source was the originator of ECSI #6285-not ESCO.**

As a reminder, DEQ requested the following information in our December 6, 2019, letter responding to the Baseline Environmental Site Assessment (BESA). Most of these comments are still relevant and should be addressed in the Report, with references to tables, figures, and appendices as necessary. DEQ requested an updated memo or Report on the site's current status, including information on the different sampling events (e.g., during and after the BESA) and any removal or remediation actions. This resubmittal of the Report should include information on the following:

- PCB removal, including a comprehensive figure of all locations of removal and a figure of locations tested post removal with sample results.

**Provided in Appendix L of the report.**

- Results from sampling the quench pits, underground storage tank removal, asbestos removal, concrete removal, etc.

**The Batch Permit is provided in Appendix C of the report. We will provide same analytical results as provided to BES.**

- Figures of sample results by sample location.

**Provided in report Figures 4A-4J.**

- Lab reports of all other media, including groundwater data, radiation measurements, etc., similar to ESCO-ALL Properties Soil Sample Binder.

**Point Source will provide information that we have in similar format.**

- Digital copies of the data on the site, from Appendix G in the BESA (ESCO MP-dbase)

**Provided to ODEQ in various email correspondence.**

- DEQ notes the following about the BESA: PAHs: GW, soil updated with samples DC1-5; Figures 4-1 and 4-2 do not include sample locations DC-1 through DC-5, although Appendix G identifies concentrations greater than occupational exposure were found here.

**Point Source will provide what information is available to us to address this issue.**

- VOCs: GW maps did not include temporary monitoring wells EB- 5, 6, 11, 17.

**It would appear that these borings were only used in developing the Cross Sections in Figures 3.2 and 3.3 of the Baseline Environmental Site Assessment Report and not in determining groundwater elevation contours.**

- PCBs: GW and soil
- TPHs: GW and soil

**Not quite sure what these two bullet points designate.**

Figures and tables are inconsistent in their use of colors, for example:

- Blue represents concentrations above the clean fill criteria (Fig 4-1) and below the clean fill criteria (Fig 4-3).

**Point Source cannot change the Bridgewater work product.**

- Yellow represents concentrations above the occupational RBC (Fig. 4-1) and below it (Fig 4-5).

**Point Source cannot change the Bridgewater work product.**

- Please note if analytical lab data flagged with a U is above the screening limit (e.g., PCBs, TPHs in GW)

**We will try to confirm, however this data is part of the Bridgewater work product. At least we think this is what DEQ is referring to.**

- Please provide the management of existing asbestos-containing materials and disposal of asbestos-containing materials.

**With the exception of the roof on Building 4 which is still in use all other asbestos was removed under the ESCO/Bridgewater demolition under permit with the appropriate DEQ program. Point Source will try to provide documentation submitted to DEQ.**

- Please provide details on the nature and extent of chromite sands and disposal documentation.

**Chromite sands located during the 1535-A1 demolition phase of the plant were screened for radiation and then profiled for disposal at Hillsboro Landfill. We will provide documentation in the revised report.**