

Attachment A: Comment Response Matrix
Ecology Comments on *Draft Interim Action Work Plan, Maralco Site*, dated March 22, 2024

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
1.	General	See agency review draft document in track changes for suggested edits for clarity and corresponding comments.		
2.	General	The draft SRIWP is still under review by Ecology. It has not been finalized nor approved by Ecology and is not available for public review. Therefore, any detailed information contained in the SRIWP and referenced as such must also be included in this IAWP.		
3.	General	The PCUL tables are attached to the draft SRIWP which is still in Ecology review. The PCULs tables should also be attached to the IAWP since there are references to SLs which are based on the PCUL tables.		
4.	General	Refer to the Site as “Maralco Site” (not “Maralco Property”) on the on the title blocks for all tables and figures.		
5.	General	The IAWP is not consistent in using the terms “Site” and “Property”. “Site” should be used any time the Cleanup Site is referred to. “Property” should only be used when referring to the parcel specifically. Please add this distinction to the Introduction and confirm the use of these terms throughout the IAWP.		
6.	General	Need to be consistent when identifying the interim action. The previous IAWP (dated July 2023) identified Phase 1 as the dross removal (already completed) and Phase 2 as the residual removal. The draft IAWP also refers to “first” and “second” removal actions. Please be consistent with the July 2023 IAWP and refer to the soil and sediment removal (this IAWP) as the Phase 2 Interim Action.		
7.	General	Suggest having 6 areas of concern (Area 1 through Area 6) by splitting current Area 2 into new Area 2 and Area 3. Need to be consistent with how the interim action areas (Area 1 through Area 6) are defined. There is no consistency in the text, tables, or figures. Be specific when first defining those areas and be consistent throughout the document and across all tables and figures.		
8.	General	Check and correct all spelling errors and other typos in the document, tables, and figures.		
9.	General	Suggest splitting the Cultural Resources document into the Survey and the IDP. The IDP will need to be onsite and accessible; however, because the IDP contains information from the CR Survey that should be confidential, the IDP will need to be a stand-alone document and not attached to the IAWP. The IDP will not be subject to public review and will not be uploaded to DSARS.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
10.	Cover Pages	Add Agreed Order Number, Facility Site ID Number, and Cleanup Site ID Number to the Cover Pages.		
11.	Section 1	For consistency, call this the Phase 2 Interim Action. Suggested changes are shown in the document.		
12.	Section 2.1	Change title of Section to "Property Description and History." Include more information about the various property features (the building, parking area, UST, wetland, old house/structure at the north end of the property, etc.), to provide more context for the reader. Need to be more clear about the stormwater conveyance from the Property. Suggested changes in the text are shown in the document.		
13.	Section 2.3	Add information regarding how the stormwater will be re-routed after the filling of the on-Property drainage ditches during redevelopment. Suggest showing that on Figure 3.		
14.	Section 2.4	Change title of Section to "Previous Remedial Actions." Include subsections summarizing the historical activities, including the 2023 Phase I IA (dross removal).		
15.	Section 2.4	Describe the statistical analysis and the MTCA three-part rule. Ecology's 1992 Statistical Guidance document (Publication No. 92-54) only allows for adjustments to the exceedance factor and percent of samples exceeding if the cleanup level is based on adjustment to natural background. There isn't anything in the rule that states the UCL can be adjusted to 90UCL; therefore, 95UCL should be used. This affects the ProUCL statistics that are in the Interim Action Cleanup Report (Appendix A of the SRIWP), since 90UCL was run on the data set instead of 95UCL. Ecology re-ran the ProUCL using the 95UCL and found that the data set is in compliance; however, the statistics will need to be re-run correctly in the SRIWP.		
16.	Section 2.4	It is unclear whether samples CS-14, CS-19, CS-30C and CS-31C are soil or sediment samples. Results are shown as "ditch" samples (Table 2) which implies that they are sediment samples; however, the discussion in Section 2.4 implies they are soil samples. Please clarify.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
17.	Section 2.4	The purpose of the samples collected during the Phase I IA was to determine whether the dross has been removed by comparing to the direct contact remediation level. Dross removal under the VCP did not allow for any excavation. The removal of the dross stockpile has allowed access for RI activities (this area has not been fully investigated). The use of direct contact levels as remediation levels for the Phase II IA is not appropriate. The most stringent screening levels will be used; therefore, this area needs to be assessed (all contaminants against the most stringent screening level). This area needs to be included in "Area 1" so that contaminated soil above the screening levels is removed.		
18.	Section 2.4	When discussing grid sample results, it appears that tables from the Interim Action Cleanup Report are being referenced. It is more appropriate when discussing sample results to have those data in the document instead of referencing tables in another, unattached document. Please include Table 2 from the Interim Action Cleanup Report as an appendix to the IAWP.		
19.	Section 2.4	Separate last paragraph out and add as new subsection "Contaminated Areas Identified During Previous Investigations", or similar. This subsection should come before Section 2.4. The information described in this paragraph is not a part of the Phase 1 Interim Action.		
20.	Section 3.2 and Section 4	Need to be consistent with what the removal areas (Areas 1 -5) are. Section 3.2 does not match Section 4. For example: Is the on-Property ditch removal area identified as Area 2 or Area 3? Are the culvert removals a part of the work that will be done in Areas 3 and 4? Area 2 (the two areas represented by the "HB" samples) isn't even mentioned in Section 4. Please note that there will be 6 areas (Area 1 through 6), as the former Area 2 will be split into two separate areas (Area 2 and 3). Please clarify this through the whole document and be consistent. Update figures and tables, as necessary.		
21.	Section 3.3	Move this section up before Section 3.2. Explain what COIs are and be consistent. The acronyms and abbreviations list defines COI as Constituent of Interest but text within Section 3.1 discusses "contaminants of interest." Whichever you decide to use, spell it out in the header for this section.		
22.	Section 4	Make Area 2 into two separate areas (Area 2 and Area 3) so that there will be 6 areas of concern (Areas 1 through 6). Area 1 will include the former dross pile footprint. Ecology considers the material in the ditches as soil, so the only remediation levels that will be used will be for soil.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
23.	Section 4	Please specify the estimated depth of the excavations in Areas 1 through 6; this will be based on existing sample data shown on the Tables.		
24.	Section 4	The removal Areas 3 and 4 (new Areas 4 and 5) include the removal of the culverts; however, those areas are also soil removal areas. Please be clear that these areas are not just the removal of the culverts.		
25.	Section 4.1	Remediation levels should be based on the most stringent screening level for soil in the vadose zone and soil in the saturated zone. Ecology has established a PCULs table for metals based on the review of the IAWP. Please refer to that table when preparing your PCULs table.		
26.	Section 4.3	Please update the associated Appendix B (permit documents) and do not include the Cultural Resources report in Appendix B.		
27.	Section 4.4	This section is not necessary – it is restating what is already stated in Section 4.1. Any references to “cleanup levels” are premature without having completed the RI. Suggest deleting Section 4.4.		
28.	Section 4.7	There needs to be more clarity with the removal areas and there needs to be consistency within the document. Please provide a CMMP. More details need to be provided in Section 4.7 that discuss what methods and equipment will be used to remove, load, and haul the contaminated media during this action, and if any temporary stockpiling will be necessary. If so, then include details on how the stockpiles will be set up and managed. Include any other specific site preparations or protection measures that may be necessary for the removal activities.		
29.	Section 4.7	Make the last paragraphs in this section that explain sampling into a subsection (i.e., “Confirmation Sampling”).		
30.	Section 5.1	Same issue regarding the removal areas. The SAP needs more detail and should cover the sampling plan (how many samples, locations, etc.) in all of the removal areas. A lot of what is written in this section is redundant.		
31.	Section 6	Please include all references that are cited in the document in Section 6.		
32.	All Tables	Make sure all acronyms and abbreviations are defined in the notes. This includes data qualifiers (U, J, etc.)		
33.	All Tables	Where applicable, do not use “ND” to denote non-detections. Use the format “[MRL] U” (not detected at the specified MRL) for non-detections. Please show the MRL.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
34.	All Tables	Make sure all sample locations that are listed in the tables are also shown on the figure(s). They should all be shown somewhere. Also make sure that the tables include data for all sample locations shown on the figures.		
35.	New Table	Add a table with groundwater results. This could be inserted as one of the primary tables or included in an appendix.		
36.	Table 1	Change title to read "Areas 1, 2, and 3 - Soil Data Summary, Maralco Site – Kent, WA". Note that Area 2 will be separated into two areas (Area 2 and Area 3). Area 1 will include the former dross removal area.		
37.	Table 1	Show which samples belong in Area 1 and which belong in Area 2 and Area 3.		
38.	Table 1	Define "NU".		
39.	Table 1	Update screening levels based on the most stringent screening levels (revised PCULs table).		
40.	Table 2	Change title to read "Area 4 – On-Property Ditch Sediment Data Summary, Maralco Site – Kent, WA". Please confirm that all the samples listed on this table are sediment.		
41.	Table 2	Correct sediment/ditch samples B-2 and B-3 to read "B2" and "B3". Those are the correct sample IDs based on the original report. Sample B-2 and B-3 are soil samples from borings around the former UST area.		
42.	Tables 2, 3, 4	The analytes listed as "VOCs" are both VOCs and SVOCs. Please sort SVOCs and VOCs from each other and label accordingly. Remove "detected compounds only" because there are some compounds listed that have no detections or provide a footnote that states that not all analyzed VOCs and SVOCs are shown on this table.		
43.	Table 2	Under "Note 1" correct to read "See Table 4 for the metals data". There is a typo in both definitions for SCO and CSL on this table. The word "calming" should be "clamming" or "clam digging".		
44.	Table 2	Since Note 1 states that SW-8 is actually a sample from the off-Property ROW ditch, but PAH data are included in this table, showing "NA" for metals is not accurate. Please change "NA" to "See Note 1" or "See Table 4", where the data is actually summarized.		
45.	Table 3	Change title to read "Area 5 – On-Property Stormwater Pond Sediment Data Summary, Maralco Site – Kent, WA". Please confirm that all the samples are sediment samples.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
46.	Table 3	Analytes listed as "VOCs" are not all VOCs; some are SVOCs. Please sort the analytes so the VOCs are together and SVOCs are together and label appropriately.		
47.	Table 3	Delete Note 1 (does not apply to this table; SW-8 is not on the table). Provide definitions for SCO, CSL, NA, ft bgs, J and U flags, and values noted with ">". Change "cpah" to "cPAH". Correct the sampling date for HB-7.		
48.	Table 4	Change title to read "Area 6 – Off-Property Ditch Sediment Data Summary, Maralco Site – Kent, WA". Confirm that all the samples are sediment samples.		
49.	Table 4	Correct sediment/ditch samples B-1 and B-4 to read "B1" and "B4". Those are the correct sample IDs based on the original report.		
50.	Table 4	Make a note that sample B4 is located upstream near the NE corner of the Property and is shown on Figure 5. Typo in the notes for SCO and CSL - "calming" should be "clamming" or "clam digging".		
51.	Table 4	Samples B4, KCDD-5, and KCDD-N will need to be shown on a figure.		
52.	Table 5	Table should read: "Table 5 Soil Remediation Levels" (plural). This table should show RELs for soil in the vadose zone and soil in the saturated zone. Spell out COI in the table header. This table should refer to the PCULs (which should be attached as an appendix). See the PCULs provided by Ecology. The table should also reference the applicable WACs.		
53.	All Figures	Make sure labels, sample IDs, or other text is not covered up. The text needs to be readable.		
54.	All Figures	Make sure all the sample locations that are presented in Tables 1 – 4 are shown on the figure(s).		
55.	All Figures	Based on the Ecology comments in the IAWP, there will be 6 areas of concern (Areas 1 through 6). Please make the necessary changes to all figures to reflect these new defined areas. Be consistent with the IAWP and across all figures.		
56.	All Figures	Ecology comments include inserting additional figures. Make sure that the Figure numbers are adjusted accordingly after the addition of the new figures, this includes what is cited in the report.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
57.	New Figure	ADD a NEW figure after Figure 2 that shows how the stormwater is conveyed off the Property. It should be zoomed out to show the location of the King County Drainage District #1-B86 Ditch and Mill Creek.		
58.	New Figure	ADD a NEW figure after Figure 4 that shows the areas of concern (Areas of Concern for Soil). Show the green shaded areas of exceedance on that figure (instead of Figure 4) along with the corresponding data points used for delineating/identifying those areas. Figure 4 is very crowded; it is confusing to see areas of concern, the Phase 1 cleanup area, and all the historical sample locations together on one figure (Figure 4).		
59.	Figure 1	Change "Project Location" to "Maralco Property". Show the King Country Parcel Number and call out the dashed line as the Property Boundary or Parcel Boundary.		
60.	Figure 1	Update the date that is in the title block from December 2023 to February 2024 to be consistent with the other figures and the IAWP.		
61.	Figures 2, 3, 4, 5, 7, 8	Update the date that is in the title block from January 2024 to February 2024 to be consistent with the other figures and the IAWP.		
62.	Figures 2, 3, 4, 5, 6, 7, 8	Bold the Property boundary or highlight so it's clear where the boundary is. Be consistent between the figures.		
63.	Figure 2	Change title to read: "Property Features." Call out all of the other features that are shown, like the warehouse building, the historical residence, the parking area, the location of the UST, all of the wetland areas, etc.		
64.	Figure 2	Per Section 2.1 of the IAWP, MW-4 should be on this figure. Please add MW-4 and all the other monitoring wells to this figure.		
65.	Figures 2, 3, 5	The Wetland Flags and 'A25' designators don't add anything to the figure, so I suggest removing them as they are hard to read and interfere with other elements on the figures (i.e., Figure 5).		
66.	Figure 2	It would be helpful to see how the stormwater flows across the Property in the ditches. Add flow arrows to the ditches/stormwater lines and the two culverts that convey the stormwater off the Property.		
67.	Figures 2, 3, 4, 5, 7	In the Legend, define all the different colored lines, not just "Christopher Ditch", even though there are leaders to the different sections.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
68.	Figures 2, 3	Change "On-Property Ditch" to "Unnamed Ditch" to be consistent, especially since the term "On-Property Ditch" in the text of the IAWP refers to the Unnamed Ditch <u>and</u> Christopher Ditch (the on-Property ditches that are subject to the interim action). Be consistent with what is written in the IAWP and what is shown/labeled on the figures.		
69.	Figure 2	The color outlining the "Former Black Dross Pile" is covering the red line used to show the unnamed ditch ("On-Property Ditch"). Please make sure that the red line for the ditch is not covered up. Suggest having the lines next to each other instead of on top of each other.		
70.	Figures 2, 4, 5, 7	Since the stormwater pond is an area subject to the interim action (Area 5), please outline that area in bold black, so it's more noticeable.		
71.	Figures 2, 3, 5	Remove the blue square at the SE corner of the former dross area. It appears to be a carry-over from the Figure 4 grid.		
72.	Figure 4	Only show the grid areas for the dross removal (Phase 1 interim action). Remove the grid areas associated with the Phase 2 removal areas (those are appropriately shown on Figure 7 and do not belong on Figure 4). In the Legend: change "Approximate Extent of Cleanup Action Footprint" to "Approximate Extent of 2023 Phase 1 Interim Action Footprint".		
73.	Figure 4	Use consistent colors for Christopher Ditch, Former Christopher Ditch Alignment, and Unnamed Ditch across all the figures.		
74.	Figure 4	Do not cover up sample IDs (i.e., it's hard to read the IDs in the area of sample B2/A2).		
75.	Figure 4	The green shading near sample HB-5 needs to encompass sample HB-5 since that sample is being used to define that area of contamination (currently, the green shading is on the side of HB-5).		
76.	Figure 4	It would be helpful to show an outline/inset in ROW ditch area with a note that refers the reader to Figure 6). This way the reader can orient Figure 6 to Figure 4.		
77.	Figures 4, 5	Show all sample locations that are presented in the tables. Add locations: B3, SW-1, SW-2, SW-3, SW-6, and SS-2. Note that sample locations B3 and SW-2 are actually off the map on Figure 4. Change explanation of the green shaded areas (in the Legend) to read: "Estimated Extent of Soil Exceeding Screening Levels".		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
78.	Figure 4	Highlight those sample locations with exceedances identified in corresponding tables so it is clear which sample locations have exceedances. This figure is too busy to add results boxes like what is shown on Figure 6; however, locations with exceedance should be identified.		
79.	Figure 4	Make sure all sediment samples are shown with the same symbol (note that the symbol used for B1/A1 and B2/A2 is different than the others) OR add the symbol for B1/A1 & B2/A2 in the Legend and explain what it is. Need to add the HB sample locations (solid black dots) to the Legend to explain those samples.		
80.	Figure 5	The extent of groundwater contamination on the west side of the Property most likely extends to underneath the railroad tracks. There is no data to show that the dissolved arsenic in groundwater beneath the Property is separate from the dissolved arsenic off-Property at DPT-19. Please show the extent of dissolved arsenic as one plume. Show arsenic data and define "As" (or spell it out). In the Legend: the explanation for the TPH-Dx, FI-,Cl- is shown with mg/kg (implies soil data, not groundwater data). Include arsenic data with these other parameters. Also, define what "estimated extents" means (extent of detections, or extents that exceed respective screening/target levels). Should TPH-Dx be "TPH-D"?		
81.	Figure 5	Show the groundwater flow direction. Do not gray out the MW locations; they are hard to read. Please make the MWs more visible.		
82.	Figure 6, 8	Clearly show the Property boundary (suggest using bold).		
83.	Figures 6, 8	Be consistent with symbols. The symbol for B1/A1 should be the same as the others.		
84.	Figure 6, 8	Use consistent font size for the sample locations (i.e., "SED-07S1" and "SED-07S2", etc. should all be the same as "SED-01", "SED-03", etc.		
85.	Figure 6, 8	Is the dashed line around Area 5 the delineation of Wetland C? if so, please label it so it doesn't look like a utility.		
86.	Figure 6	All the data for B1 is incorrect (see Table 4; B-1 on that table should be listed as B1). Please correct the data on this figure to correspond to the data in Table 4. Why is the sample shown as B1/A1?		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
87.	Figure 6	"SL" in the notes is not used on the Figure. Since the shading represents exceedances of the screening levels, please add a note to where the screening levels can be found (i.e., PCULs tables, which will be attached to the IAWP).		
88.	Figure 7	Rename figure to "On-Property Contaminated Soil Removal Areas".		
89.	Figure 7	Area 1 will include the former dross removal area (area of metals exceeding the SLs). Please extend the green shaded area for Area 1 accordingly. You may want to show Area 1 as a separate figure, especially if it's going to have grid lines.		
90.	Figures 7	"Area 1" that is pointing to the two areas in the NE corner of the Property should be labeled Areas 2 and 3 as described in the text of the IAWP.		
91.	Figure 7	Show all samples that are driving the removal areas shown on the figure, not just the "CS" soil samples. Include the sediment samples shown on Figure 4 (i.e., HB-1, HB-2, HB-3, HB-5, DP-4, SW-7, HB-7, and SED-01). Add those symbols to the Legend.		
92.	Figure 7	Be consistent with ditch colors and what you are naming the ditches (see the Legend). "Existing Property Ditch Alignment" was called "On-Property Ditch" on Figure 2. Please call this "Unnamed Ditch".		
93.	Figure 7	Area 4 will be the new Area 5. Callout the culvert that runs from the on-Property ditch since that is part of Area 4. Also show and callout the off-Property removal area (Area 6) with reference to Figure 8 (example: "Off-Property Removal Area (Area 6). See Figure 8").		
94.	Figure 8	Change title to read: "Off-Property Contaminated Soil Removal Area (Area 6)".		
95.	Figures 9 and 10	Explain what the green shaded areas are in the notes. Are those the estimated soil removal areas across the ditches?		
96.	Figure 11	Change Figure 11 to Figure 10.		
97.	Appendix A	Appendix A is titled "Historical Documents", but it only contains "Enclosure A" from the Ecology Opinion Letter (2022). It is not appropriate to use Ecology's site summary description as an appendix. The site summary should be described in sufficient detail within the text of the of the IAWP, and only include copies of the historical site diagrams in Appendix A to support your text.		
98.	Appendix B	Remove the TRC Cultural Resources Survey report from Appendix B. The CR report/IDP is not a permit document and should be kept confidential (not subject to public comment/review). Since the IDP contains confidential information, it will need to be a stand-alone document (separate from the IAWP) but must be onsite and accessible. The IDP is not a public document.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
99.	Appendix B	Make sure Appendix B has the most current permit documents as there has been some revisions since the IAWP agency review draft was submitted (namely the SWPPP) and other permits have been received. To be complete, this appendix should include all the permits.		
100.	Appendix C HASP General	Please update the HASP to reflect current interim action work. Note that this HASP appears cover activities for a different project and not necessarily activities specific to the interim action as it contains activities such as drilling (“meeting with ISS drillers”). Remove any references to drilling to avoid confusion. Please review documents that are used as templates to make sure the revisions are specific to the project (in this case the IAWP). See yellow highlights in the pdf.		
101.	Appendix C HASP General	Note that “Site” and “Property” are two different things.		
102.	Appendix C HASP Section 1.1	Does the Covid-19 protocol still apply? Have they been modified? There are procedures such as “Workers, if working as a team, will take separate vehicles to the job site”, etc., that seem restrictive. Personnel are expected to follow the procedures in Section 1.1, so if things need to be modified, suggest making modifications.		
103.	Appendix C HASP Table 1-1	Under “Description of Field Activities”, please include remedial excavation as an activity. The work under the IAWP is for the removal/excavation of contaminated soil and does not include any “investigation” (drilling, etc.) other than confirmation sampling.		
104.	Appendix C HASP Table 1-1	Update “Dates of Field Activities” to 3Q24 through 4Q24.		
105.	Appendix C HASP Section 2.3	Update this section to reflect the IAWP. Change “Cleanup Action Plan (CAP)” to “Interim Action Work Plan”. Chemicals listed in the referenced Table 2-1 are not associated with the Maralco Site.		
106.	Appendix C HASP Section 2.3.3	Please review and update this whole section. It does not reflect the Maralco IAWP. If the chemicals are not present on the Site (as the Section title entails), do not include it (i.e., the sections on TPH, benzene, CVOCS, and PAHs are not applicable to this Site). Add SVOC COIs if found to be COIs (see comment in the text of the IAWP).		
107.	Appendix C HASP Section 2.3.3	Delete groundwater. The IAWP only deals with residual dross and soil removal. This section only seems to refer to dross – please include soil. Note that the dross stockpiles are already removed. Any dross encountered will only be residual.		
108.	Appendix C HASP Section 2.3.3	Is ammonia gas really a threat given that the dross piles no longer exist on the Property?		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
109.	Appendix C HASP Table 2-1	Revise this table to reflect the Maralco Site (i.e., TCE is not applicable).		
110.	Appendix C HASP Section 2.4	Note that biohazards could also include bio-waste like used needles or other waste left on the Property from trespassers or vagrants.		
111.	Appendix C HASP Table 3-4	Update this table to reflect the Maralco Site (i.e., IAWP does not include drilling and the reference to ordinary high-water mark is not applicable).		
112.	Appendix C HASP Table 7-1	Review the table and update. Kent is not in the coverage area for Seattle City Light, according to their coverage map. Electricity and natural gas are provided by Puget Sound Energy according to their coverage map. Update the water company/provider and any other contact that is not applicable to the Maralco Site. Provide a contact for the "CRETE Consulting Personal Medical Consultant" (at a minimum a phone number).		
113.	Appendix C HASP (Appendix F)	Update the Job Hazard Analysis Work Type to "Interim Cleanup Action (Soil and Sediment Removal)" and update so it is specific to the work in the IAWP (not the RIWP).		
114.	Appendix D QAPP Title Page	Title of the QAPP should match title of the IAWP – "Interim Action Work Plan, Second Removal Action (Phase 2)".		
115.	Appendix D QAPP General	Please review the QAPP thoroughly for any carry over language that is not associated with the Maralco Site or the IAWP. There are a lot of references to soil boring/geoprobe and groundwater sampling which is not a part of the IAWP. Also check references to analyses – there are references to VOC analysis which is not a part of the IAWP. Please follow the QAPP requirements as documented in Ecology's Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies (Publication No. 04-03-030) . Please see the QAPP Checklist in Appendix C of the above referenced document as a guidance.		
116.	Appendix D QAPP General	The QAPP should have SOPs and samples of field forms and COCs attached as an appendix. Please provide this information.		
117.	Appendix D QAPP General	The QAPP should include a signature page with approvals from key project team members (Table 1) and a distribution list. Anyone listed on Table 1 that needs to adhere to the QAPP should be on the distribution list for the QAPP.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
118.	Appendix D QAPP Sec. 1.1	<p>The QAPP is referring to the wrong Site (should be Maralco Site, not Bunge Foods).</p> <p>The draft SRIWP is currently in agency review, so it's not available to the public. It is not appropriate to refer to another inaccessible document for project background. Since the SRIWP is not finalized, it should not be included in Section 11 (References).</p> <p>Be consistent with your definition of COI ("contaminants" or "constituents"?). Be consistent across all documents. "ISLs" is only shown in the QAPP. Please use the terminology that is used in the IAWP.</p>		
119.	Appendix D QAPP Sec. 1.2	<p>Correct EPA methods, or delete "(EPA 1638, 2001, 2006)". Under "Laboratory Analysis" the last sentence in the 1st paragraph is incomplete.</p> <p>Data verification and data validation are two different things. Data validation must be conducted by a third party (someone not on the project team).</p> <p>Provide more detail for the reader: "Soil and sediment samples will be collected in accordance with the procedures outlined in Section 4 and analyzed for the compounds listed in Table 2."</p> <p>The first sentence under "Laboratory Analyses" needs to have the Section specified (currently no Section number is given).</p> <p>Use Ecology standard "EIM", not "EIMS".</p> <p>The sentence under "Data Validation and Management" is not relevant to this QAPP. Revise to be applicable to the interim action proposed in this IAWP. Suggested revision: "The data collected during the Phase 2 interim action will be evaluated for compliance with the proposed cleanup standards. The results will be documented in the Phase 2 Interim Action Completion Report."</p>		
120.	Appendix D QAPP Section 1.3.1	<p>This section is too vague. Either specify what type of specialized testing may be needed and which laboratories would be assigned for those tests, or state that if this becomes necessary, Ecology will be notified for appropriate approval.</p>		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
121.	Appendix D QAPP Section 1.3.2	<p>What is the actual field work schedule? The IAWP (Section 4.2) only states when (time of year) the work is expected to be implemented. It does not go into any detail of the sequence of field work or anticipated work days/work hours for the field activities. That information should be added to Section 4.2 of the IAWP.</p> <p>Data should be uploaded to the EIM as soon as it is received and validated by a third party.</p>		
122.	Appendix D QAPP Section 2	Please add cited references to the References section, specifically EPA 2001, and 2002.		
123.	Appendix D QAPP Section 2.1	Spell check: "media" should be "medium".		
124.	Appendix D QAPP Section 2.2	<p>MRLs are only shown on Table 3; delete reference to Table 2. Use consistent acronym (MRL or RL).</p> <p>What are the laboratory's acceptance criteria and control limits for accuracy?</p> <p>The last paragraph should be discussed on its own under "Sensitivity". MRLs or PQLs are related to data sensitivity and should be discussed separately in its own section.</p>		
125.	Appendix D QAPP Section 3	<p>Why are Representativeness, Comparability, and Completeness not discussed under the previous section? These are identified as data quality objectives. It's confusing to discuss these under a different section called Sampling Process Design. The information that should be discussed under Sampling Process Design would be things like sampling locations and frequency, sample media, sampling parameters, specific field measurements, lab analyses, sampling rationale, etc. (see 7.0 of QAPP).</p> <p>The last sentence seems more applicable to the RI. Revise to be applicable to the IA data collection for evaluating compliance with the IA-defined cleanup standards.</p>		
126.	Appendix D QAPP Section 3.1	Would be good to also state that calibration and reference standards will be traceable to certified standards and that standard data reporting formats will be used. Data should also be reviewed to verify that precision and accuracy criteria were achieved and, if not, that the data were appropriately qualified.		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
127.	Appendix D QAPP Section 3.3	Why not include Section 3.4 (Laboratory QC Procedures) and Section 3.5 (Additional Field QC) in the QC discussion under Section 6?		
128.	Appendix D QAPP Section 3.5	<p>Change the first sentence from “groundwater and soil investigations” to “Phase 2 interim action”.</p> <p>Trip blanks are only necessary if analyzing for volatiles. VOCs are not included as COIs for the interim action. IF VOCs are included, the proper quantify would be one trip blank per shipping container (cooler), not one per day.</p> <p>Note that field duplicates will be labeled so they are “blind” duplicates.</p> <p>Remove the reference to trip blanks from the last paragraph since it does not apply to the IA.</p>		
129.	Appendix D QAPP Section 4.1	<p>Add statement in the first paragraph: “Stainless steel bowls and reusable handheld tools will be decontaminated prior to each use and between samples (see Section 4.3).”</p> <p>Delete the last paragraph; it is a duplicate of the last 3 sentences in the paragraph above it.</p>		
130.	Appendix D QAPP Section 4.3	<p>First sentence: change to read “... stainless-steel equipment and other reusable handheld tools...”</p> <p>Second sentence: change to read “...stainless-steel bowls and spoons and other handheld sample collection tools...”</p> <p>Regarding bulleted decontamination steps: Where will the rinse water be placed? Will the equipment be rinsed over a bucket then that water placed into a 55-gallon drum? How will the rinse water be managed?</p>		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
131.	Appendix D QAPP Section 4.4	<p>This section is too vague. Provide more specifics. Will the designated removal area name be used in the sample ID (e.g., "Area 1", "Area 3" or "A1", "A3")? Will each of the grid cells in a removal area be numbered in some way? Will those grid cell numbers be included in the sample ID (e.g., "Cell5" or "C5")? Give a couple examples of what a sample ID will look like from a given cell in a given removal area. How will subsequent or additional samples from a given cell be identified?</p> <p>Make sure that nomenclature can be differentiated from the sample names that have been previously used (i.e., avoid using identical sample IDs that have been used before).</p> <p>Do not use "SB" for grab soil samples as it can be confused with a soil boring sample.</p> <p>Explain how the QC samples (field duplicates, field blanks, equipment rinsate blanks, etc.) will be named. Field duplicates should be "blind" duplicates. Section 6.2 explains the QC samples, but it would be helpful to have the nomenclature for all samples, including QC samples, in one spot.</p>		
132.	Appendix D QAPP Section 4.5	Sample containers are only shown on Table 2; delete reference to Table 3.		
133.	Appendix D QAPP Section 4.6	The second to last sentence in the first paragraph is incorrect. The Site is not an "actively used property." If you are referring to active construction, then be specific about the work.		
134.	Appendix D QAPP Section 5	<p>What do measurement procedures include? Nothing is written here describing any procedures.</p> <p>There is no description of the number of samples nor sample nomenclature in the IAWP. Nomenclature is discussed in Section 4.4 of this QAPP. Additional detail needs to be provided on both the number of samples and the nomenclature in their respective sections of either this QAPP or the IAWP.</p>		
135.	Appendix D QAPP Section 6.1	<p>Define "MDL".</p> <p>Fourth bullet: delete the word "either" from the fourth sentence and fix grammar.</p> <p>Sixth bullet: the role of "Data Validator" needs to be defined in Table 1. There currently is no designated "Data Validator" or "Data Manager" listed in Table 1, and it can't be any of the project-specific personnel.</p>		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
136.	Appendix D QAPP Section 6.2	<p>Third paragraph, first sentence: Should this be "so" or "such" instead of "do"?</p> <p>How will "blind" samples be named? Will they be named such that they are not confused with the other IA samples? Will a different Area or Cell identifier be used in the duplicate's ID? Please provide details on this in the nomenclature discussion under Section 4.4 above.</p> <p>Last paragraph: rinsate and equipment blanks are discussed for groundwater samples (which are not a part of the IA; however, rinsate and equipment blanks are not discussed for soil and sediment sampling. Please revise to reflect the sampling that is planned for the IA.</p>		
137.	Appendix D QAPP Section 6.4	<p>Is "Field QC Manager" the same as the "Field Manager" listed in Table 1, or a different person? If the latter, please identify this role in Table 1. Otherwise use consistent terms with what is shown in Table 1.</p> <p>Similar question as above regarding "Laboratory QA Manager" and "Laboratory Project Manager" listed in Table 1? Please add this role to Table 1, otherwise revise this to be consistent with Table 1.</p>		
138.	Appendix D QAPP Section 9	<p>"MDL" is already defined in Section 6.1.</p> <p>Metals data will be validated using the EPA National Functional Guidelines for Inorganics. Please use the most updated EPA guidance documents that are dated November 2020.</p> <p>Provide details regarding Data Validation in Table 1.</p>		
139.	Appendix D QAPP Section 10	Table 4 that is referenced in this section is missing from the QAPP.		
140.	Appendix D QAPP Section 11	<p>The draft SRIWP has not been finalized (not reviewed or approved by Ecology yet), so it should not be used as a reference.</p> <p>Please make sure that all references cited in the QAPP are included in Section 11 (and those that are not included should be deleted).</p> <p>Please use the most recent EPA guidance documents for data review (November 2020).</p>		

Comment Number	Section	Ecology Comment	PLP Response	Ecology Response
141.	Appendix D QAPP Table 1	<p>Who is the designated Data Manager responsible for data validation? That person must be an independent person (third party), otherwise not involved with the project.</p> <p>Ecology Project Manager also has final approval of the IAWP (please add that to the second bullet).</p> <p>Under Consultant Team Project Manager, change the first bullet to read: Primary point of contact on behalf of (or “for”) 7730 202nd Street, LLC (Bridge).</p> <p>Please add Kyle Siekawitch to the list. His Responsibility can be shown as “Represents the PLP (Bridge), the property owner.”</p> <p>Under Quality Assurance Officer: the responsibilities listed in bullets 5,6, and 7 should be the Data Manager (third party data validator), not the QA Officer.</p>		
142.	Appendix D QAPP Table 2	<p>All of the analytes should be listed separately with their associated MRL and SLs and should be listed as data quality objective (Table 3).</p> <p>Check metals method – EPA 6020?</p> <p>CVAA is EPA 6020/7471; for consistency, show the method number.</p> <p>Check the analytical method for SVOCs.</p> <p>CPAHs do not apply.</p> <p>The holding time for metals is 6 months (according to Fremont Analytical’s website); please make the correction.</p>		
143.	Appendix D QAPP Table 3	<p>Move the Preservation/Storage column to Table 2.</p> <p>List each parameter separately on this table and include their respective MDL, SL (of IAWP REL), lab precision RPD, field precision RPD, accuracy and completeness objectives.</p> <p>Check with the lab to verify the percent recoveries, etc. They may be different for each analyte.</p> <p>Remover “groundwater” from the notes (groundwater is not included in the IA).</p>		