DEPARTMENT OF ECOLOGY
State of Washington

Superlon Plastics Co. Inc. Site Ditch Interim Action Work Plan Responsiveness Summary

Ecology's response to public comments

Facility Site ID: 2776343

Cleanup Site ID: 2096

July 2021

Document and Contact Information

This document is available on the Department of Ecology's Site webpage at:
https://fortress.wa.gov/ecy/gsp/sitepage.aspx?csid=2096

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List of Abbreviations

BMP	Best Management Practice
CHB	Citizens for a Healthy Bay
CSWGP	Construction Stormwater General Permit
EPA	U.S. Environmental Protection Agency
EU	Excavation Unit
IA	Interim Action
IAWP	Interim Action Work Plan
LRI	Name of Landfill in Pierce County
mg/kg	Milligrams per kilogram (parts per million)
OHW	Ordinary High Water
PLP	Potentially Liable Person
RAU	Remedial Action Unit
SAP/QAPP	Sampling and Quality Assurance Project Plan
SCO	Sediment Cleanup Objective (Freshwater Sediment Cleanup Objective)
SEPA	State Environmental Policy Act
SMS	Washington State Sediment Management Standards
SWPPP	Stormwater Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
XRF	X-Ray Fluorescence

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Summary

The Washington Department of Ecology (Ecology) held a public comment period from February 11 to March 14, 2021, inviting comment on the Ditch Interim Action Work Plan (IAWP)[1] and State Environmental Policy Act (SEPA) Determination of Non-Significance[2] for the Superlon Plastics Co. Inc. site.[3]

The IAWP called for removing contaminated sediment from the drainage ditch and contaminated soil from the side of the ditch next to the site. The sediment and soil are contaminated with arsenic and lead. The cleanup action is required under a legal agreement, Agreed Order DE 5940, between Ecology and the potentially liable person (PLPs). The PLPs are the Chemours Company FC LLC, White Birch Group LLC, Superlon Plastics Inc, and E.I. Du Pont de Nemours & Co.

The SEPA determination of Non-significance described Ecology's determination that the activities outlined in the IAWP were not likely to harm the environment.

We conducted a multifaceted approach to notify the public about the comment period. We mailed a fact sheet[4] to addresses within about ¼ mile of the site. We sent an email notice to people and organizations who requested to be notified about cleanup sites on the Tacoma tideflats. Public notice about the comment period was included in Ecology's Site Register and events calendar. The site webpage was updated with information about the comment period, where to submit comments, and how to download electronic documents. Notice was placed in Ecology's SEPA register and sent to SEPA contacts for the tideflats area. A legal ad for the comment period was posted in the Tacoma News Tribune.

We received comments from two commenters, Citizens for a Healthy Bay (CHB) and the U.S. Environmental Protection Agency (EPA). Tables summarize the comments and our responses. Table 1 includes the comments submitted by CHB and our response to their comments. Table 2 shows the comments submitted by EPA and our response to their comments.

The final section of the report is the comment letter from CHB. The EPA submitted their comments as an edited IAWP, which we thought was too long to include in this report. All EPA's substantive comments are included in Table 2.

Ecology appreciated the thoughtful information in the comments. All comments were considered. Although Ecology will not revise the IAWP, some changes to the work approach have been implemented based on these comments, as can be seen in our responses to

[1] https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=97887
[2] https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=97892
[3] https://apps.ecology.wa.gov/gsp/sitepage.aspx?csid=2096
[4] https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=97964

comments. The Ecology site manager will take these concerns into consideration for oversight of the project.

Site Information

The Superlon property is 3.1 acres (parcel 0321351042) located south of the intersection of Taylor Way and Lincoln Ave. The property is located in an industrial area of the Tacoma tideflats.

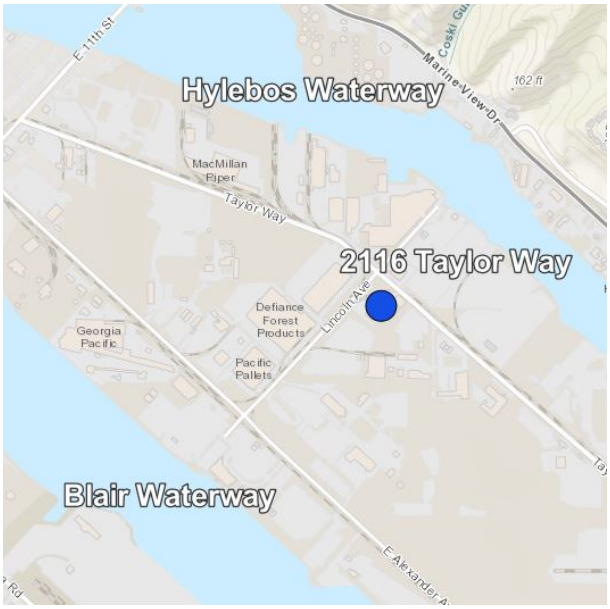

Figure 1. The Superlon site is located on the Tacoma tideflats between the Hylebos and Blair waterways. The site is at the corner of Taylor Way and Lincoln Ave.

Since the 1920s, this site has been an industrial facility. The property was first a lead-arsenate pesticide plant and then a lumber company and wood treatment facility. Past industrial activities included pesticide manufacturing, wood treatment, chemical and fuel storage, and landfilling activities. Since 1972, Superlon Plastics Co. Inc. has owned the property where they produce extruded plastic pipe.

Several contaminants above state cleanup levels have been found in soil, groundwater, and standing water. The contaminants are hazardous to human health and the environment. The primary contaminants of concern at the site are arsenic and lead. Other contaminants identified during the remedial investigation in limited locations/amounts include mercury, petroleum hydrocarbons (gasoline and diesel), semi-volatile organic compounds (pentachlorophenol), and volatile organic compounds (tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethylene, and vinyl chloride).

In 2009, Ecology entered into a legal agreement, Agreed Order DE 5940, with the potentially liable persons (PLPs) who are cleaning up the site. So far, site investigations have focused on the contamination within the property and have found contaminated soil and groundwater throughout the property.

Due to highly elevated arsenic and lead concentrations in soil at the site, we have used Interim Actions (partial cleanups) to more quickly address the most severe contamination.

Previous Interim Actions on the property have included:

- Building demolition and debris removal.
- Treatment and removal of ponded water from the basement of a former building.
- Removal of landfilled wastes buried on the property.
- Creation of a stormwater evaporation pond to prevent contaminated surface water from leaving the property.

Begun in 2018, the most significant interim action is currently underway. The action is removal of arsenic- and lead-contaminated soil from throughout the property and treatment of perched groundwater. Perched groundwater is groundwater trapped above an impermeable soil layer.

2021 Ditch Interim Action Work Plan (IAWP)

The 2021 ditch IAWP will expand the soil excavation area into the ditch and the side of the ditch on neighboring property. The area excavated from the side of the ditch will extend onto the Superlon property.

The plan is to remove arsenic and lead contamination that exceeds state industrial cleanup standards from the bottom and alongside the northeast side of the drainage ditch.

The drainage ditch is located on property owned by the Port of Tacoma (parcel 0321355004) at 3408 Lincoln Ave. The ditch is part of a managed system of stormwater collection ditches in the Tacoma tideflats. The section of ditch next to the Superlon property will be excavated to remove the arsenic and lead contamination. The area that will be excavated is about 400 feet long and a maximum of about 65 feet wide (see Figure 2).

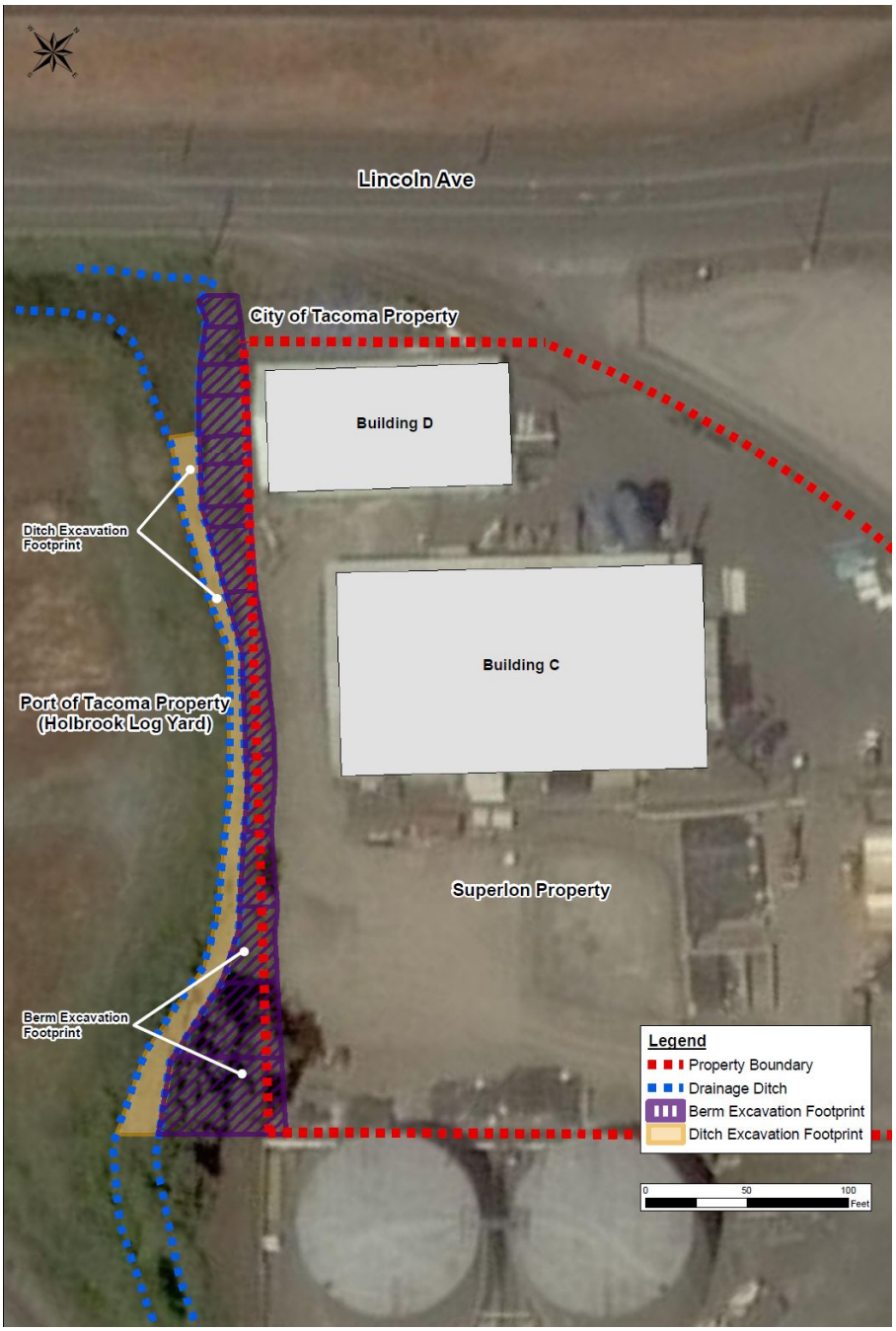

Figure 2. The planned excavation area for removal of arsenic- and lead-contamination from the drainage ditch and berm soil at and near the Superlon site.

About one foot of sediment will be removed from the bottom of the ditch. The estimated volume of sediment to be excavated is about 141 cubic yards. The soil in the bank alongside the ditch is called berm soil. An excavator will remove the berm soil to a minimum depth that is level with the bottom excavation of the ditch. The estimated volume of berm soil to be excavated is about 3,423 cubic yards.

An excavator located on the Superlon property will reach across the ditch to dig up the contaminated sediment and soil. No excavation equipment will operate in the ditch.

The berm soil will be removed in multiple stages using trench boxes as needed to prevent the slope from collapsing or eroding during cleanup. Trench boxes are not needed to remove the one foot of sediment from the bottom of the ditch.

The vegetation will be removed first. Then the sediment and berm soil will be dug up and removed. Once a segment of the ditch excavation is complete, the hole will be backfilled with stabilizing material and/or clean soil. A layer of clay or geotextile will be placed under the clean soil to reduce the potential for water to seep from the site into the ditch. The slope of the berm will be backfilled to match the slope prior to excavation. To promote plant growth following excavation, a seed mixture will be placed on the banks of the ditch.

The contaminated sediment and soil will be stockpiled on the site. The soil will be tested to determine the level of arsenic and lead contamination. The contaminated soil will be treated if necessary, and then disposed of at an appropriate landfill. This is the same Ecology-approved method used for testing and disposal of contaminated soil excavated at the site.

Response to Comments

Table 1. Comments by Citizens for a Healthy Bay (CHB; left column) and Ecology's responses (right column).

CHB Comment	Ecology's response
1. Where is the excavated material being disposed, and what thresholds are being used to make that determination?	The IAWP for the Superlon Ditch will expand on the interim actions (partial cleanup actions) that began in 2018 within the property boundaries of the Superlon site (See fact sheet at: https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=97964). Excavated soil from the ditch will be managed as described in the Remedial Design Report (available at: https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=81116). The Toxicity Characteristic Leaching Procedure (TCLP) test is used to determine if soil is hazardous. Soil will be pre-screened at an on-site laboratory using an x-ray fluorescence (XRF) analytical (XRF) tool. Some soil that have higher concentrations of arsenic and lead will be treated with a stabilizing agent before being tested with the TCLP test. TCLP test results are compared to the TCLP criteria in the Washington State Dangerous Waste Regulations (173-303-090(8)(c)) to determine where soil is sent for disposal. Soil that is not hazardous, based on results of the TCLP test, will be sent to the LRI landfill in Puyallup, Washington. Soil that is hazardous, based on TCLP test, will be send to the ChemWaste Management Landfill in Arlington, Oregon.
2. What are the excavation and sample units being used?	Section 5.2 and Figure 3 of the IAWP describe the Remedial Action Units (RAUs) for the sediment and berm soil. These units summarize how the work will be completed in a sequential manner. Testing for compliance will be based on the RAUs. For berm soil, some RAUs may be further divided into excavation units (EUs) using 6 ft x 12 ft trench boxes. The trench boxes prevent soil slumping and allow excavation of a vertical side where the berm excavation cuts into a previously-excavated section of upland soil. The soil at the bottom of the excavation within each trench box will also be tested.

CHB Comment	Ecology's response
3. No information is provided on the type of backfill to be used. Will there be any specified requirements other than sampling to ensure it is not contaminated?	Section 5.2.7.1 of the IAWP describes the berm excavation will be backfilled with common pit-run gravel. However, after the public review draft IAWP was submitted, the consultant project team determined that using pond-grade clay as the base layer of backfill would be more effective. The backfill will be covered by a layer of sand and topsoil for replanting. The revegetation plan included in the U.S. Army Corps of Engineers for Nationwide Permit #38 specifies that clean soil will be used to rebuild the berm and that sediments in the ditch will be replaced with silt and clay-rich fine textured soil or a silt-rich loam. (See Revegetation Plan Memo available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=102121.)
4. What is the container that the excavated material will be transported in?	The excavator will deposit soil in a front-end loader that will transport the soil to the waste management stockpiles within the site. Commercial haul trucks will transport material to the appropriate landfill.
5. Is any of the excavated material being dewatered? If so, how will the contaminated water be sampled and disposed of?	We anticipate the ditch sediments will be dry enough for transportation and disposal because the ditch work area will be isolated with temporary cofferdams and the work will done during the dry season. Previous experience from excavations located next to the upland edge of the berm showed the soil was dry.
6. Will the excavation reach the parent material? Has the parent material been contaminated?	It is possible that the excavations will reach the clay/silt former tide flat (parent material) which is several feet beneath the current-day grade of the area. If this material is contaminated it will be excavated, then replaced with pond-grade clay.
7. Will a barrier be placed in the ditch when the bottom is reached?	No barrier will be placed in the bottom of the ditch.
8. What is the mitigation plan for wetlands that will be destroyed from excavation?	The work will be conducted under a U.S. Army Corps of Engineers 404 Nationwide Permit #38. As no wetlands will be lost, the permit does not require mitigation. A revegetation plan was submitted to the U.S. Army Corps of Engineers for Nationwide Permit #38. (See Revegetation Plan Memo available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=102121.) The area will be planted with seed and fertilized. The ditch will be monitored monthly during the first year following initial seeding. If the seeds haven't sprouted after three months, the ditch will be re-seeded. If the area does not have at least 70% vegetative cover, additional seed will be applied.

CHB Comment	Ecology's response
9. All excavation should be gridded and then sampled.	A five point composite sample will be collected from the bottom of each excavation. The samples will be analyzed using the on-site XRF lab, and additional excavation will occur if the samples do not meet the cleanup levels. For the berm soil, trench boxes may be used for the excavation in some RAUs and the sampling will occur at the bottom of each 6 ft x 12 ft box. For the ditch samples, the composite sampling will be conducted within each RAU. The composite protocol is available in Attachment 1 to the Sampling and Analytical Plan and Quality Assurance Project Plan, Revision 6 (SAP/QAPP). The SAP/QAPP is available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=100195.
10. Given that drainage from the site will end up in Commencement Bay, marine and freshwater water quality standards need to be compared and whichever is more protective should be utilized.	As described in Section 6 of the IAWP, work will occur during the driest time of the year, and the work area will be isolated with a cofferdam. Any water that accumulates will be pumped from the ditch and managed on the site. No water will discharge from the site, therefore no water quality standards are required. As related to the sediment standards, the cleanup objectives being applied to the ditch sediments are the freshwater sediment standards, which are more stringent than the marine sediment standards.
11. While using XRF to sample excavated materials, it is extremely important the material is dry, otherwise the results will be erroneous. Calibration is crucial for correct results.	Soil is dried to contain less than 20% moisture before XRF analysis at the on-site laboratory. The tool is calibrated in accordance with manufacturer's instructions. Analysis and calibration protocols are discussed in Attachments 2 and 3 of the SAP/QAPP.
12. Composite sampling conducted by an actual technician – rather than samples grabbed from an excavator bucket – are a best practice and should be utilized.	Environmental technicians with appropriate training and experience will collect the samples and follow the protocols described in the SAP/QAPP. Berm soil samples will be collected from the excavator bucket due to safety concerns about the depth of the excavations. The standard operating procedure for composite soil sampling is included in Attachment 1 of the SAP/QAPP.

Table 2. Comments by U.S. Environmental Protection Agency (EPA; left column) and Ecology's responses (right column).

EPA Comment	Ecology's response
1. Section 2 – Background: Is there contaminated groundwater or stormwater anticipated given conditions on site? If so, should be mentioned here for context, esp [especially] as relates to the impermeable layer included in this work plan.	Contaminated stormwater will not discharge from the site. Work is scheduled during the lowest flow condition (i.e., July – August). A cofferdam will be constructed at the upstream and downstream ends of the ditch work area to prevent any movement of water if it rains. Section 6 of the IAWP explains stormwater management practices. Also refer to response number 9 in this table. Contaminated shallow groundwater originating from the Superlon Property is not expected to be encountered during this work because it was not encountered during upland excavations next to the berm/ditch. However, the pond-grade clay or water retention geotextile will be installed between the upland and the ditch backfill to prevent any seepage if it should occur in the future.

EPA Comment	Ecology's response
2. Section 2 – Background: (a) Seems like the term "freshwater sediment" (and more importantly cleanup levels of As/Pb [arsenic/lead] included in Tables 2 and 3) should be used for surface conditions in a water of the US - e.g. in the ditch bottom and up the sides of the ditch to OHW? (b) What levels are being used for the leave surface material between 1 ft and 2 ft in Tables 2 and 3? (c) How are fw sed [freshwater sediment] criteria implemented in state -- re. definition of seds v. soil in a ditch situation like this?	(a) While the ordinary high water (OHW) mark has not been surveyed within the ditch, excavations to remove the berm soil will be to a minimum of 6 feet below the top of bank (refer to Table 4 of the IAWP), which is approximately even with the bottom of the ditch. Therefore, the ditch sides up to OHW will be removed and replaced with clean material. (b) See response to number 10 in this table. (c) The State of Washington Sediment Management Standards (SMS - 173-204 Washington Administrative Code) defines surface sediment as "settled particulate matter located at or below the ordinary high water mark, where the water is present for a minimum of six consecutive weeks, to which biota (including benthic infauna) or humans may potentially be exposed, including that exposed by human activity (e.g., dredging)." Ecology considers the point of compliance for meeting sediment management standards to be within the biologically active zone. Also see response to number 10 in this table.
3. Section 3 – Objective and Summary of the Proposed Interim Action: Are there concerns about sediments/berm soil quality in the west side of the ditch?	The purpose of the IAWP is to address arsenic and lead in ditch sediment and in soil on the east side of the ditch, directly adjacent to the Superlon Property and associated with the site. Surface soil on the west side of the ditch was scraped away during cleanup of the 2015 asphalt tar spill into the ditch by Gardner-Fields Corporation, located upstream of the Superlon site. Ecology does not anticipate the west side of the ditch is a source of arsenic or lead contamination. The surface soil on the west side of the bank was removed in 2015 and there is no known source of lead and arsenic contamination in deeper soil on the west side of the ditch.

EPA Comment	Ecology's response
4. Section 3 – Objective and Summary of the Proposed Interim Action: Given placement of a water resistant layer in the work plan, isn't another objective protection of the ditch from contaminated site stormwater and groundwater?	Protection of the ditch from contaminated stormwater and groundwater is not a primary objective of the work. However, backfilling the northeast sidewall of the excavation with clay, or placing a water retention geotextile, will decrease the potential for perched water (shallow groundwater) to seep toward the ditch. Placement of the clay or geotextile water resistant layer is a precaution. Excavation in the upland area along the edge of the berm did not contain perched water.
5. Section 3 – Objective and Summary of the Proposed Interim Action: Per Table 4, Arsenic is 110 mg/kg in the upper .5 foot at SD-15. Is there a potential that sediments at the south end of the ditch will move north and recontaminate surface sediments?	Ecology anticipates the potential for sediment transport is low because the ditch acts more as a holding/infiltration basin for water from adjacent properties than a moving water body. The upstream portion of the ditch is associated with the neighboring Gardner-Fields facility, which is also a cleanup site. However, cleanup actions have not started at that site. Ultimately, it is Ecology's goal to have the full extent of the ditch investigated and remediated as necessary, but that is not part of this interim action.
6. Section 4 – Required Permits and Approval: Is there already an easement for the Ditch? What is the agreement for accomplishing the work, and then protecting it in the long-term?	An access agreement has been negotiated with the Port of Tacoma to do the cleanup on the portion of the ditch and berm that is located on the Port's land. For long-term protection of the ditch, future ditch maintenance (if needed) is governed under the Port of Tacoma U.S. Army Corps of Engineers Programmatic Ditch Maintenance Nationwide Permit and associated Ecology Water Quality Certification Order No. 15819 (May 18, 2018). The permit requires coordination with and approval by Ecology for cleaning or modifications to the ditch.

EPA Comment	Ecology's response
7. Section 4 – Required Permits and Approval: Will there be an agreement with institutional controls to protect clay/geomembrane layer, and any other post-construction features as necessary to protect the remedy?	The berm soil excavation and installation of clay/geotextile is a continuation of the ongoing interim action soil remediation at the Superlon site. Ecology approved of the interim actions at the site before completing a full remedial investigation and feasibility study, to speed up removal of highly contaminated soil. In the next several years, a remedial investigation, feasibility study, and cleanup action plan will be developed for the whole Superlon site. The site will be subject to institutional controls and an environmental covenant. These actions are designed to protect all elements of the remedy and to prevent future releases from any areas with soil or groundwater remaining above the MTCA cleanup standards after cleanup. Until then, Ecology will continue to oversee interim actions at the site and will ensure the remedy is protected.
8. Section 5.2.1 – Current Conditions: The berm excavation footprint will require removal of riparian trees at the south end of the property. The applicant should provide a planting/vegetation restoration plan for Corps approval.	The project consultant provided a revegetation plan to the U.S. Army Corps of Engineers, and adherence to the plan is a condition of the Nationwide Permit #38 for the cleanup project. (See Revegetation Plan Memo available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=102121.) The permit does not require replacement of trees. Ecology talked with the City of Tacoma arborist about the removal of the trees and the arborist informed us that the City of Tacoma does not require replacing the trees.

EPA Comment	Ecology's response
9. Section 5.2.2 – Excavation Process: While this level of detail may not be appropriate here, ultimately a clear implementation plan should include RAU and EU sequence, access to ditch and excavation locations, transit routes within the site to stockpiles, etc. This will provide assurance that contamination from the site itself will not be tracked to the ditch and vice versa, and ensure contamination is not tracked off site.	The contractor will excavate the ditch under Ecology oversight in a methodical manner that makes sense for the small property. The excavation will be sequenced to prevent recontamination of areas that have already been excavated. The best management practices (BMPs) in place for the existing interim actions at the site will be maintained for the ditch project, such as use of block bins to contain stockpiles, covering stockpiles, careful loading of equipment, and use of rock at the site entrance to prevent trackout. The BMPs will be modified as needed to accommodate the excavation and movement of the soil removed from the ditch. Sequencing may be adjusted based on field decisions to ensure the most effective approach depending on conditions. Public roads will not be used for haul routes from the excavation area to the waste handling area. The most practical transit routes to the soil management area within the site will be identified, given building locations and other activities at the site. Measures will be in place to prevent contaminated soil from falling on the ground during loading and transport. Stormwater from the site is controlled under the Construction Stormwater National Pollutant Discharge Elimination System General Permit (CSWGP). The CSWGP requires a Stormwater Pollution Prevention Plan (SWPPP) to ensure that contamination does not enter the waters of the state (ESM Consulting Engineers, LLC 2017). The SWPPP is updated regularly to maintain protections as site configuration changes to accommodate new excavation areas. The Ecology site manager and Ecology stormwater inspector will inspect the site during the construction.

EPA Comment	Ecology's response
10. Section 5.2.3 – Excavation Goals, Table 2: Using Tables 2 and 3 -- sediment between 1 and 2 feet is not addressed here. Suggest changing Table 2 point of compliance to 0-2 ft. Given past data, this should be readily achievable on site, esp. [especially] bottom of ditch.	There was an oversight in the tables. IAWP Table 3 should have stated "> 1 to 15 ft," rather than "2 to 15 ft." Data from previous ditch sampling (IAWP Table 1) indicate that removal of one foot of sediment will substantially eliminate arsenic or lead containing sediment above the cleanup objectives. Samples from the base of the ditch excavation will be tested at the on-site XRF laboratory during excavations. The contractor will make an effort to remove additional sediment to meet the sediment cleanup objective concentration of 14 milligrams per kilogram (mg/kg) arsenic and 360 mg/kg lead in the top two feet if practicable. If some residual lower level contamination is left in place, it will be effectively isolated by the fine-grained materials used to backfill the ditch.
11. Section 5.2.3 – Excavation Goals (Soils Underlying Sediment): (a) First sentence is incomplete. (b) Material with the potential to be exposed in the ditch and below OHW should meet the fw sediment criteria. (c) Any material brought in to replace sediment should also be tested and should meet 14 mg/kg and 360 mg/kg Pb.	(a) This was an oversight when the consultants edited the document. The criteria are listed in Table 3 of the IAWP. (b) After excavating and backfilling the bottom of the ditch, there will be minimal chances for contaminated material to be exposed. Soil removal of at least 6 feet below the top of the eastern berm will effectively remove the side slope to OHW. The berm will be replaced with clean materials. (c) Ecology will review the quality of the backfill material to verify it meets cleanup levels for sediment replacement.

EPA Comment	Ecology's response
12. Section 5.2.3 – Excavation Goals (Soils Underlying Sediment): (a) Comparing Tables 2 and 3 indicates that levels to be left under sediment in ditch do not meet sediment criteria? (b) Why is this allowed in a dynamic environment like a ditch, that carries water, and will ultimately have rooted plants (e.g. cattails) and associated animals, etc.? (c) Table 3: Also, seems inconsistent that Pb clean up criteria onsite (750 mg/kg) are lower than those stated for offsite and in the ditch (1000 mg/kg).	(a) See response to number 10 in this table. (b) The ditch has a flat gradient and is not an erosive environment that would result in buried sediments being exposed. The vegetation that has naturally grown in the bottom of the ditch after the cleanup from the 2014 asphalt spill indicates that the ditch bottom will naturally revegetate quickly, which will further stabilize the sediments. (c) The on-site criteria are site-specific remediation levels, which Ecology approved for the on-property interim actions. The off-property cleanup values are based on MTCA default cleanup standards for industrial properties. As noted above, at a minimum nearly the entire berm to 6 ft below the top of the bank will be removed (see Table 4, IAWP). All soil next to the ditch will be replaced with clean backfill materials. Current data indicates that lead is not present above the Sediment Cleanup Objective of 360 mg/kg in the ditch bottom or deeper ditch sediments.
13. Section 5.2.4 – Excavation of Sediment: Edit to "SD-15." Is it anticipated that this area will be addressed some other time, or that the levels present do not warrant disturbance?	The SD-15 sample is not included in the IAWP because the Chemours company that is doing the Superlon site cleanup only agreed to clean up the portion of the ditch that is adjacent to the Superlon property. Other sources are potentially the cause of the upstream contamination. After the interim actions to remove the most highly contaminated soil on the property and ditch are complete, additional site investigations will determine the full extent of contamination at the site. Ecology will develop the cleanup action plan for the full extent of the site, and the plan will be available for public comment. As Ecology staff availability allows, the adjacent site will also be addressed in the future.

EPA Comment	Ecology's response
14. Section 5.2.4.2 – Confirmation Sampling of Soil below the Sediment: Backfill materials below the OHM in the ditch should meet state freshwater cleanup objectives per Table 2.	See response to number 11 (b) in this table.
15. Section 5.2.5 – Excavation of Berm Soils: (a) See note on Figure 2. Unclear how the depth of the initial excavation at any given location will be determined since only the deepest possible excavation depth is provided in the figure. (b) Also wondering how varying depths of excavation will work with the placement of a clay/geomembrane layer, EU by EU, in practice? There will have to be gradual sloping between EUs and RAUs...?	(a) The depths provided on Figure 2 are based on analytical data from the sidewalls of the previous excavation limits at the top of the berm (shown in Table 4, IAWP). The initial excavation will be to these depths, where it is expected that cleanup levels will be met, and confirmation samples will be tested. If the cleanup levels are not met, the excavation will be deepened until samples analyzed at the on-site XRF lab show clean up goals are met. (b) The clay or geotextile will be placed on the northeast (next to the site) vertical sidewall of the berm excavations as each EU is backfilled. Therefore, the depth of excavation of individual EUs will not make a difference in placing the clay/geomembrane.
16. Section 5.2.5.1 – Berm Soil Excavation Methods: Will there be any need to work from City of Tacoma property on northern end (Figs 2 and 3)?	If permission to work within City of Tacoma Right of Way can be obtained, work will occur at the northern end in RAU B1 and RAU B2. If it is not possible to get permission from the city, no work in that area will be done during this project.
17. Section 5.2.5.1 – Berm Soil Excavation Methods: ...the limit of the "excavation…"	The comment refers to a typographical error in the IAWP. The mistake is noted but no revisions to the IAWP are planned as the construction season is currently underway.
18. Section 5.2.5.2 – Confirmation Sampling: Suggest QAPP/SAP be provided as an appendix	The SAP/QAPP is available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=100195.

EPA Comment	Ecology's response
19. Section 5.2.6 – Stockpiling and Disposal: Perhaps this level of detail is not appropriate for this phase, but in a future document there should be BMPs for moving materials to the stockpile (routes), and BMPs for the stockpile area itself including dealing with wind and water. Is there a bermed area? How long will material be kept on site? A plan with details should be provided by the contractor including a figure of the stockpile area and routes specific to this IA. If there are already plans with BMPs in place for the site, they should be cited and references provided in document.	All material transport and stockpiling will be done in the same Ecology approved manner as the on-property interim remedial actions underway since 2018. The ditch/berm work may require some reconfiguration of the stockpile and soil treatment areas, and Ecology will work closely with the contractor to ensure that stormwater BMPs continue to be in place. After testing, waste materials are loaded and removed from the site approximately every 14 days or less. The site is also regulated under the CSWGP, is subject to stormwater inspections, and BMPs are detailed in the SWPPP. The SWPPP is updated as needed to accommodate new work at the site.
20. Section 5.2.6 – Stockpiling and Disposal: Provide citation [to the Remedial Design Report].	It was an oversight on the part of the consultant to leave the citation out of the references in the IAWP. The correct citation is: PERC/PIONEER. 2017b. Pacific Environmental and Redevelopment Corporation and PIONEER Technologies Corporation. Remedial Design Report for the Superlon Plastics Site, Tacoma, Washington. July 2017. This document is available at https://apps.ecology.wa.gov/gsp/docviewer.ashx?did=81116.
21. Section 5.2.7.1 – Ditch and Berm Restoration: Citation for these regs.	The statement in this section of the IAWP about the Port of Tacoma regulations refers to conditions that the Port may have required under the access agreement. However, the agreement does not include any long term requirements for ditch/berm restoration. The ditch project is subject to a U.S. Army Corps of Engineers, Clean Water Act Section 404 Nationwide Permit #38 for cleanup sites. The project is also subject to the CSWGP managed by Ecology.

EPA Comment	Ecology's response
22. Section 5.2.7.1 – Ditch and Berm Restoration: (a) Materials below OHW should meet freshwater sediment standards (SCO)? (b) Also, pit run gravel may not be appropriate material for reestablishing riparian vegetation along the ditch. Appropriate substrate should be provided per the planting plan.	(a) See response to number 2 and 11 in this table. (b) Topsoil will be placed on the surface of the berm for planting the seed mix. After seeding, the area will be monitored to ensure that revegetation is successful. A wood-fiber erosion-control blanket will be placed along the ditch side slope to facilitate seed germination.
23. Section 5.2.7.1 – Ditch and Berm Restoration: Any placement of hard erosion control materials such as rip rap should be clarified and determined during the permitting process. Appropriate planting plan should preclude need for this. A solution may be to make the slope slightly less steep to allow for a more stable grade on the side of the ditch.	The revegetation plan submitted to the U.S. Army Corps of Engineers for Nationwide Permit #38 specifies that clean soil will be used to rebuild the berm. The permit does not otherwise specify the materials for the berm. The berm will be reconstructed in a manner that ensures the side slopes will be stable. For the most part, backfilling to the current grade will result in stable slopes. However, there are small sections where the berm has steeper side slopes and minor erosion has occurred. In those areas, small amounts of rock may be needed to stabilize the slope if it cannot be reconstructed at a shallower angle due to property/building constraints.
24. Section 5.2.7.1 – Ditch and Berm Restoration: This should be very clear, freshwater sediment SCOs per Table 2.	Table 2 in Section 5.2.3 in the IAWP clearly states that the cleanup goals for the ditch sediment is the freshwater sediment cleanup objective.

EPA Comment	Ecology's response
25. Section 5.2.7.1 – Ditch and Berm Restoration: Provide a planting plan. Cite spec for stormwater ditch mix and assure a substrate is present that will permit plant regrowth. Clarify that this mix is approved for use in this type of area, and is free of non-native species.	The revegetation plan is a condition of the U.S. Army Corps of Engineers Nationwide permit #38. Ecology will work with the site contractor to ensure an appropriate seed blend is used. The seed mix will be an erosion control mix, used to stabilize slopes and promote growth of erosion control grasses, similar to what is used by Washington State Department of Transportation for roadside slopes. The seed mix will be locally sourced by a commercial vender and will not contain weeds or invasive species. Use of the appropriate soil substrate is addressed in response to number 22 in this table.
26. Section 6 – Stormwater Controls: Cite and provide reference for existing stormwater plan on site. Make sure it includes BMPs for the new area being covered under this IA. Ensure the BMPs do not have long-term adverse impacts to ditch environs... e.g. rip rap.	Stormwater on the Superlon Property is controlled and managed in accordance with the requirements of the CSWGP. In accordance with the permit, the SWPPP is continually updated to accommodate changing conditions at the site. Also refer to response number 9 in this table.
27. Section 6 – Stormwater Controls: Straw bales can be a seed source. Use sand bags.	The cofferdams will be constructed from sandbags and plastic sheeting.
28. Section 6 – Stormwater Controls: What exactly does "stabilized" mean here?	Prior to removing stormwater controls, open excavations will be backfilled and a wood-fiber erosion-control blanket will be placed on the reconstructed berm side slopes.
29. Section 9 – Documentation and Reporting: "During" shots should include any obvious horizons encountered in the excavations.	Ecology agrees. Photographic records will document anything encountered during the excavation. However, for safety reasons, the depth of the excavations may preclude close-up photographs of deeper soil horizons.
30. Section 11 – References: Does state require a Covid addendum?	The state does not require a Covid-19 addendum. However, site-specific health and safety protocols have been updated to reflect potential hazards associated with COVID-19.

EPA Comment	Ecology's response
31. Figure 2: What does this mean? How will initial excavation depth be determined for a given RAU or individual EUs, esp in the field?	The initial excavation depth for a RAU is identified on Figure 2 in the IAWP. The initial excavation depth was based on data collected from the sidewalls of excavation at the top of the berm on the property (see Table 4, IAWP). Samples from the bottom of the excavations within each trench box will be analyzed at the on-site lab to confirm when remedial goals are met (see Section 5.2.5.2).

Comment by Citizens for a Healthy Bay

March 15, 2021

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Joyce Mercuri, Site Manager
Department of Ecology
PO Box 47775
Olympia, WA 98504-7775
Submitted electronically

Re: Superlon Plastics Co Inc Ditch Interim Action Work Plan and SEPA Determination

Dear Ms. Mercuri,

Thank you for the opportunity to comment on the Ditch Interim Action (IA) WorkPlan and SEPA Determination for Superlon Plastics Co Inc.

Citizens for a Healthy Bay (CHB) is a 30-year-old organization whose mission is to represent and engage people in the cleanup, restoration, and protection of Commencement Bay, its surrounding waters and natural habitat. We are a 501(c)3 nonprofit providing practical, solutions-based environmental leadership in south Puget Sound. We work side-by-side with residents, businesses, and government to prevent and mitigate pollution and to make our community healthier and more vibrant.

Staff and expert members of the Policy and Technical Advisory Committee withCHB have reviewed the proposed IA work plan and related materials. Our comments are outlined below.

Background

The Washington State Department of Ecology (Ecology) is leading the cleanup process for soil, groundwater and standing water contamination at the SuperlonPlastics site. The site was formerly a lead-arsenate pesticide plant, followed by a lumber company and wood treatment facility. Superlon Plastics bought the site in 1972 to manufacture plastic piping. Ecology discovered soil and groundwater contamination at the site in 1990. Since then, several contaminants about state cleanup levels in soil, groundwater and standing water have been found. These contaminants include metals, gasoline and diesel range hydrocarbons, semi-volatile organic compounds and volatile organic compounds.

General Comments

Overall, the work plan needs to include much more detail on the methods used in confirmational sampling,excavation, and disposal. Without these details that we outline below, we cannot assess this plan for its compliance with state law, nor the earlier Agreed Order:

- Where is the excavated material being disposed, and what thresholds are being used to make that determination?
- What are the excavation and sample units being used?
- No information is provided on the type of backfill to be used. Will there be any specifiedrequirements other than sampling to ensure it is not contaminated?
- What is the container that the excavated material will be transported in?
- Is any of the excavated material being dewatered? If so, how will the contaminated water be sampled and disposed of?
- Will the excavation reach the parent material? Has the parent material been contaminated?
- Will a barrier be placed in the ditch when the bottom is reached?
- What is the mitigation plan for wetlands that will be destroyed from excavation?

Recommendations

In addition to clarifying the methods of the workplan, we recommend the following strategies for this IA:

- All excavation should be gridded and then sampled;
- Given that drainage from the site will end up in Commencement Bay, marine and freshwater water quality standards need to be compared and whichever is more protective should be utilized;
- While using XRF to sample excavated materials, it is extremely important the material is dry, otherwise the results will be erroneous. Calibration is crucial for correct results;
- Composite sampling conducted by an actual technician – rather than samples grabbed from anexcavator bucket – are a best practice and should be utilized.

Thank you for the opportunity to comment on the proposed IA workplan for Superlon Plastics. Please contact Erin Dilworth at edilworth@healthybay.org or 253-383-2429 (ext. 3) should you have any questions about ourcomments.

Sincerely,

Erin Dilworth
Policy & Technical Program
ManagerCitizens for a
Healthy Bay