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**From:** Young, Hunter <Young.Hunter@epa.gov>

**Sent:** Friday, August 14, 2020 11:25 AM

**To:** Jen Mott <jmott@anchorage.com>

**Cc:** Patricia Dost <pdost@pearllegalgroup.com>; Jason Cornetta <jcornetta@anchorage.com>; Peterson, Lance <petersonle@cdmsmith.com>; Ryan Barth <rbarth@anchorage.com>; Bob Wyatt <rjw@nwnatural.com>; Katie Daugherty <Katie.J.DAUGHERTY@state.or.us>; Wardah Azhar <azharw@cdmsmith.com>

**Subject:** RE: B1 Navigation Channel PDIWP Conditional Approval

**EXTERNAL EMAIL**

Hello Bob and Ryan,

Thank you for your work in revising the Navigation Channel PDIWP. The document addresses EPA's expectations provided in our August 4, 2020 conditional approval message. We're excited you'll be out in the field shortly to start collecting data.

Thanks,

Hunter Young

U.S. Environmental Protection Agency

Region 10 - Oregon Operations Office

[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)

(503)-326-5020

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**From:** Jen Mott <jmott@anchorage.com>

**Sent:** Monday, August 10, 2020 4:57 PM

**To:** Young, Hunter <Young.Hunter@epa.gov>

**Cc:** pdost@pearllegalgroup.com; Jason Cornetta <jcornetta@anchorage.com>; Peterson, Lance <petersonle@cdmsmith.com>; rbarth@anchorage.com; rjw@nwnatural.com; Katie Daugherty <Katie.J.DAUGHERTY@state.or.us>; Wardah Azhar <azharw@cdmsmith.com>

**Subject:** RE: B1 Navigation Channel PDIWP Conditional Approval

Hunter,

The following email is provided on behalf of Ryan.

Below please find the download instructions for EPA review of the *Revised Final Pre-Design Investigation Work Plan* (PDIWP) for the B1 Navigation Channel Project Area. The PDIWP was developed pursuant to Administrative Settlement Agreement and Order on Consent for Removal Action (AOC; CERCLA Docket No. 10-2009-0255) and Remedial Design Statement of Work, Portland Harbor Superfund Site, B1 Navigation Channel Project Area (SOW; EPA 2020a) executed between NW Natural and the U.S. Environmental Protection Agency (EPA). An initial version of the PDIWP was submitted to EPA on May 15, 2020, and EPA provided comments on June 17, 2020. NW Natural submitted a revised PDIWP on July 14, 2020, that incorporated the necessary revisions to address EPA's comments. EPA responded on August 4, 2020 and stated that the revisions are generally responsive to EPA's requested changes and the PDIWP is conditionally approved pending NW Natural's acknowledgment of seven additional comments. This additional revised version of the PDIWP provides NW Natural's acknowledgement of these additional comments and incorporates the necessary revisions to address each comment based on the comment responses provided in Appendix F.

As always, do not hesitate to call Bob or me if you would like to discuss anything. Regards.

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Jen Mott  
Project Coordinator  
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**From:** Young, Hunter <[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)>

**Sent:** Tuesday, August 4, 2020 12:11 PM

**To:** Ryan Barth <[rbarth@anchorqea.com](mailto:rbarth@anchorqea.com)>; Bob Wyatt <[rjw@nwnatural.com](mailto:rjw@nwnatural.com)>

**Cc:** Patricia Dost <[pdost@pearlegalgroup.com](mailto:pdost@pearlegalgroup.com)>; Jason Cornetta <[jcornetta@anchorqea.com](mailto:jcornetta@anchorqea.com)>; Peterson, Lance <[peterstone@cdmsmith.com](mailto:peterstone@cdmsmith.com)>; Katie Daugherty <[Katie.J.DAUGHERTY@state.or.us](mailto:Katie.J.DAUGHERTY@state.or.us)>; Wardah Azhar <[azharw@cdmsmith.com](mailto:azharw@cdmsmith.com)>; Jen Mott <[jmott@anchorqea.com](mailto:jmott@anchorqea.com)>

**Subject:** B1 Navigation Channel PDIWP Conditional Approval

**EXTERNAL EMAIL**

Hi Bob and Ryan,

EPA has reviewed the revised Navigation Channel PDI Work Plan (PDIWP) and finds the revisions to be generally responsive to EPA's requested changes. The PDIWP is conditionally approved pending NW Natural's acknowledgment of the comments below:

1. In response to PDIWP General Comment 1, NW Natural indicated that 2 cores and 9 surface grabs will be co-located with Newfields sample locations that have RAL and PTW threshold exceedances. The response and associated changes to proposed sampling locations are acceptable; however, EPA recommends the text in PDIWP Section 5.2 that follow the first 2 bullets be revised as follows: "Based on this evaluation of bathymetric changes, the mudline elevations during the time frame between the collection of the NewFields data (2014/2015) and the most recent bathymetric data (2018) have not changed significantly; therefore, the PDI sampling will cover the depth intervals sampled by NewFields but be consistent with the 1-foot core intervals in the PDIWP. The remaining core intervals (shallower and deeper) will be archived."
2. In response to PDIWP General Comment 2, NW Natural has provided a data replacement approach in Appendix E. NW Natural also provided a supplemental evaluation table for the proposed reoccupation of 4 historical surface samples. EPA is approving this approach for use in the Navigation Channel Project Area with the caveat that replacement of the four samples will be dependent on the results of the PDI sampling and evaluation based on the approach laid out in Appendix E. Additionally, the following changes need to be made to the table and Appendix E text:
  - a. The rationale provided in the data replacement evaluation table states that:

"Historical surface sediment sample will not be used for SMA delineation because of the significant change in the recent approximately co-located Pre-RD Group surface sediment concentration coupled with the elevation changes over time not identifying burial of the historical sample interval." EPA acknowledges that all 4 locations are in areas of net neutral bathymetric change; however, periodic erosion and deposition is observed so the Appendix E text needs to acknowledge that an evaluation of whether each "replaced" sample is buried under cleaner sediment in areas of periodic deposition or is considered to be scoured away from the system for erosional areas will be included in the upcoming Basis of Design Report.
  - b. Appendix E evaluates evidence of natural recovery as a line of evidence based on the guidance provided in EPA's *Remedial Design Guidelines and Considerations* (RDGC) and states that: "the magnitude of the concentration decreases at each location provides evidence of natural recovery, without statistical evaluation". Revise this language to state that the decreases in concentrations are indicative of natural recovery and not substantiated evidence of natural recovery because long term monitoring data (during the Five Year Review Process) is required to confirm that natural recovery is occurring.
  - c. Add the evaluation table, and any necessary text edits to describe the table, in Appendix E.
3. In response to PDIWP General Comment 3, NW Natural states that the proposed first phase surface sediment data will be used to refine the ROD-defined SMAs and the second phase PDI will then propose the collection of subsurface sediment cores where required to support RD. As stated in RD Principle #1 in the RDGC, "a SMA is where active remediation, rather than natural recovery, will be performed as selected in the ROD. As further described in the ROD, a SMA will be delineated by surface and subsurface contamination above remedial action levels (RALs) and principal threat waste (PTW). Whether subsurface RAL exceedances are included as part of the SMA is dependent on the depth of RAL exceedances and whether buried RAL exceedances are anticipated, based on site conditions, to be exposed in the future (see #2 below for additional details)". The 2 new cores (co-located with Newfields cores) are a good start at providing subsurface information but additional subsurface data will likely be needed to refine the ROD SMAs. Refinements to the ROD SMAs will not be approved until an evaluation of the need for additional subsurface data is performed during planning for the second phase so the details of additional subsurface cores (number of cores, proposed location, etc.) can be deferred to the second phase PDI work plan.

4. In response to PDIWP Specific Comment 12, a sentence was added to Section 4.2.4 to clarify that there are no known areas of groundwater discharge within the Project Area. Additional discussion of groundwater concerns in the vicinity needs to be provided to support this statement, including a description of the source control measures at Gasco and the extent of groundwater impacts of the Rhone Poulenc plume in relation to the Navigation Channel area.
5. In response to QAPP General Comment 5, the requested revision was made, however; Section 2.3, Project/Task Description and Schedule now indicates that the laboratories are expected to deliver data within 30 days of sample receipt and level 4 data packages within two weeks of data receipt. Section 2.6.2, Analytical and Chemistry Records indicate that a detailed data package will be prepared with 45 days of sample receipt. Clarify these differences in the QAPP.
6. In response to QAPP Specific Comment 3, the field completeness text was added to the QAPP, however; the formula for calculating field completeness was not included. Add the formula to the QAPP.
7. In response to QAPP Specific Comment 8, the response should be footnoted on the QAPP Table C-5 especially regarding the pentachlorophenol being the lowest achievable detection limits by the lab.

Please let me know if there are any questions or if you would like to set up a meeting to discuss.

Thanks,

Hunter Young  
U.S. Environmental Protection Agency  
Region 10 - Oregon Operations Office  
[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)  
(503)-326-5020

---

**From:** Jen Mott <[jmott@anchorqea.com](mailto:jmott@anchorqea.com)>  
**Sent:** Tuesday, July 14, 2020 9:00 PM  
**To:** Young, Hunter <[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)>  
**Cc:** [pdost@pearllegalgroup.com](mailto:pdost@pearllegalgroup.com); Jason Cornetta <[jcornetta@anchorqea.com](mailto:jcornetta@anchorqea.com)>; Peterson, Lance <[petersonle@cdmsmith.com](mailto:petersonle@cdmsmith.com)>; [rbarth@anchorqea.com](mailto:rbarth@anchorqea.com); [rjw@nwnatural.com](mailto:rjw@nwnatural.com); Katie Daugherty <[Katie.J.DAUGHERTY@state.or.us](mailto:Katie.J.DAUGHERTY@state.or.us)>; Wardah Azhar <[azharw@cdmsmith.com](mailto:azharw@cdmsmith.com)>  
**Subject:** RE: B1 Navigation Channel Project Area Pre-Design Investigation Work Plan

Hunter,

The following email is provided on behalf of Ryan.

Below please find the download instructions for EPA review of the *Revised Pre-Design Investigation Work Plan (PDIWP)* for the B1 Navigation Channel Project Area. The PDIWP was developed pursuant to Administrative Settlement Agreement and Order on Consent for Removal Action (AOC; CERCLA Docket No. 10-2009-0255) and Remedial Design Statement of Work, Portland Harbor Superfund Site, B1 Navigation Channel Project Area (SOW; EPA 2020a) executed between NW Natural and the U.S. Environmental Protection Agency (EPA). An initial version of the PDIWP was submitted to the EPA on May 15, 2020, and EPA provided comments on June 17, 2020. This revised version of the PDIWP incorporates the necessary revisions to address EPA's comments and provides a response to each of EPA's comments in Appendix F. NW Natural would like to expedite completion of the proposed first phase of data gaps sampling, so please let us know if/how the NW Natural team can support your review and approval.

As always, do not hesitate to call Bob or me if you would like to discuss anything. Regards.

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- Copy/Paste the following line into the "Open" box for XP/8.1/10 or the "Search" box for Windows 7 and hit "enter"
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- Click on the following link:
- Input the username and password that are listed in the above section
- Use the tools available directly to the site to download or upload

Jen Mott  
Project Coordinator

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**From:** Young, Hunter <[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)>  
**Sent:** Wednesday, June 17, 2020 4:29 PM  
**To:** Jen Mott <[jmott@anchorqea.com](mailto:jmott@anchorqea.com)>; Bob Wyatt <[rjw@nwnatural.com](mailto:rjw@nwnatural.com)>; Ryan Barth <[rbarth@anchorqea.com](mailto:rbarth@anchorqea.com)>  
**Cc:** Patricia Dost <[pdost@pearllegalgroup.com](mailto:pdost@pearllegalgroup.com)>; Jason Cornetta <[jcornetta@anchorqea.com](mailto:jcornetta@anchorqea.com)>; Peterson, Lance <[peterstone@cdmsmith.com](mailto:peterstone@cdmsmith.com)>; Katie Daugherty <[Katie.J.DAUGHERTY@state.or.us](mailto:Katie.J.DAUGHERTY@state.or.us)>; Wardah Azhar <[azharw@cdmsmith.com](mailto:azharw@cdmsmith.com)>  
**Subject:** RE: B1 Navigation Channel Project Area Pre-Design Investigation Work Plan

**EXTERNAL EMAIL**

Hello Jen, Bob and Ryan,

Please see attached for EPA's comments to the Nav Channel Pre-Design Investigation Work Plan, accompanying letter, and the T4 Draft Data Replacement Guide. Please let me know if there are any questions or if you would like to set up a meeting to discuss.

Thanks,

Hunter Young  
U S Environmental Protection Agency  
Region 10 - Oregon Operations Office  
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(503)-326-5020

---

**From:** Jen Mott <[jmott@anchorqea.com](mailto:jmott@anchorqea.com)>  
**Sent:** Friday, May 15, 2020 6:49 AM  
**To:** Young, Hunter <[Young.Hunter@epa.gov](mailto:Young.Hunter@epa.gov)>  
**Cc:** [rjw@nwnatural.com](mailto:rjw@nwnatural.com); [pdost@pearllegalgroup.com](mailto:pdost@pearllegalgroup.com); [rbarth@anchorqea.com](mailto:rbarth@anchorqea.com); Jason Cornetta <[jcornetta@anchorqea.com](mailto:jcornetta@anchorqea.com)>; Peterson, Lance <[peterstone@cdmsmith.com](mailto:peterstone@cdmsmith.com)>  
**Subject:** B1 Navigation Channel Project Area Pre-Design Investigation Work Plan

Hunter,

The following email is provided on behalf of Ryan.

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As always, do not hesitate to call Bob or me if you would like to discuss anything. Regards.

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