Questions and Answers: Portland Harbor Superfund Site Pre-Remedial Design Agreement



September 2018

Introduction

On December 19, 2017, EPA signed an Administrative Settlement Agreement and Order on Consent (ASAOC or AOC) with the "Pre-Remedial Design AOC Group" (Pre-RD Group) for a pre-remedial design study with baseline sampling at the Portland Harbor Superfund Site. The Pre-RD Group is made up of four of the Potentially Responsible Parties (PRPs) for the site: Arkema Inc., Evraz Inc. NA, Schnitzer Steel Industries Inc., and The Marine Group LLC. This document provides responses to questions from the EPA Community Information Session on January 10, 2018 and the Portland Harbor Community Advisory Group (CAG) session on April 11, 2018. Detailed information is provided in the Pre-RD Agreement and the attached Work Plan; the responses below are not intended to replace that detailed information. The Pre-RD Agreement is available on the EPA website at: https://semspub.epa.gov/src/document/10/100077191

Definitions

Pre-RD Agreement – Refers to the Pre-Remedial Design (RD) Investigation and Baseline Sampling Administrative Settlement Agreement and Order on Consent.

Pre-RD Project – Refers to work required under the Pre-Remedial Design Agreement.

Pre-RD AOC Group – The group of four companies that signed the Pre-RD Administrative Settlement Agreement and Order on Consent (ASAOC or AOC) with the EPA. These companies are Arkema Inc., Evraz Inc. NA, Schnitzer Steel Industries Inc., and The Marine Group LLC.

PRP – Potentially Responsible Parties, referring to parties that may be required to share the cost to clean up Portland Harbor under the EPA's Record of Decision or final cleanup plan.

ROD – Record of Decision or the final cleanup plan for the Portland Harbor Superfund Site.

How to Contact Us

1. Who do I contact if I have questions about the Pre-RD Project?

Laura Knudsen is the EPA point of contact for questions from the community and can be reached at knudsen.laura@epa.gov or 206-553-1838. The Pre-RD AOC Group has appointed a Community Involvement Coordinator to support Laura and EPA on Pre-RD Project communications, as required in the Pre-RD agreement. The Pre-RD AOC Group has contracted with the local communications firm Barney & Worth to serve in this role. Communications and questions on the project will continue to be directed through Laura, maintaining EPA's role in overseeing community involvement.

2. How can the public engage with the data and reports that are going to come out of the Pre-RD Project?

EPA plans to share Pre-RD Project progress with the public via fact sheets, community information sessions and other means, as appropriate. The Pre-RD AOC Group has contracted with the local firm Barney & Worth to support the EPA in those communications, per requirements of the Pre-RD Agreement. The Pre-RD Agreement does not include formal public review of deliverables. However,

data and reports that come out of the Pre-RD Project will be made publicly available and can be accessed on EPA's Portland Harbor website (www.epa.gov/superfund/portland-harbor).

3. The agreement requires the Pre-RD Group to submit an approved list of Supervising Contractors to EPA for approval. Is it possible for the public to have a voice in the selection of these Supervising Contractors?

No. The Pre-RD Agreement requires EPA to review and approve a list of supervising contractors based on technical qualifications outlined in the Pre-RD Agreement. The Pre-RD Agreement does not include public comment as part of the approval process.

How the Agreement Works and How it Was Developed

1. Why did EPA negotiate this agreement with a small subset of the Potentially Responsible Parties (PRPs)? Is there a reason other PRPs such as the State and the City were not involved?

In June 2017, EPA met with PRPs who had indicated an interest in performing a pre-remedial design study with baseline sampling, including the parties ultimately known as the Pre-RD AOC Group as well as the State and City. Based on the baseline sampling proposal put forth by the Pre-RD AOC Group, all parties agreed it made sense for EPA to enter into negotiations with the Pre-RD AOC Group for this work.

2. How does the Pre-RD Agreement compare to the standards of other similar sediment sampling plans? Is it about the same or less stringent?

Data collected under the Pre-RD Agreement will provide a portion of the data needs identified in the ROD. EPA is overseeing all of the Pre-RD Agreement work in collaboration with EPA's contractor (CDM-Smith) to ensure high quality data collection. The sampling methods are consistent with the sampling methods used during the Portland Harbor remedial investigation and feasibility study (RI/FS). Additional sampling will be needed to complete remedial design and this is consistent with sediment sampling plans used to support remedial design at other Superfund sites.

3. Will more baseline sampling need to occur (outside of the Pre-RD Agreement) to move forward with site-wide remedial design and a final remedy?

Yes. The Pre-RD Project involves a portion of data needs identified in the ROD. EPA will be working with additional PRPs and/or partners to conduct sampling in other areas of the waterway to help inform the cleanup design. As we move toward cleanup, more baseline and long-term monitoring data will also be gathered under future agreements and orders.

4. Is it typical to have a statement of work and work plan already approved with the Administrative Order on Consent (AOC)?

This agreement differs somewhat from EPA's standard model AOC for remedial design; the work plan is typically a deliverable under the AOC rather than being integrated into the AOC itself. Including the work plan in the Pre-RD Agreement allowed the Pre-RD AOC Group to understand the specific activities, schedule, and costs they were committing to under the ASAOC. This approach encouraged PRPs to step forward to pay for this phase of sampling and was acceptable to EPA given the limited scope of the Pre-RD Project. This limited agreement is not intended as a model for future remedial design agreements. Model EPA agreement documents are available at this link: https://cfpub.epa.gov/compliance/models

5. What enforcement authority does EPA have under this agreement?

EPA can impose financial penalties on the Pre-RD AOC Group for noncompliance and take over work ('work takeover') from the Pre-RD AOC Group if EPA is not satisfied with how work is being performed. This agreement is only for the Pre-RD Project; it does not affect EPA's enforcement authority for the cleanup.

6. The term "liability" is used a lot in the Pre-RD Agreement. What does "liability" mean in this agreement for members of the Pre-RD Group?

By signing the Pre-RD Agreement, the Pre-RD AOC Group agreed to comply with and be bound by the terms of the agreement. However, the Pre-RD AOC Group did not admit liability for the cleanup under CERCLA or any other federal, state or local law, regulation or ordinance.

7. Can the Pre-RD Agreement be modified?

The Pre-RD Agreement can be modified in writing by mutual agreement of all Parties. The intent of both EPA and the Pre-RD AOC Group is to implement the current agreement without modification.

8. Can the PRPs use this data to change the Record of Decision (ROD)?

EPA's intent and focus is to gather data under the Pre-RD AOC to implement the ROD, not to change the ROD. However, parties are always able to submit data and analysis to EPA for consideration. EPA agreed to consider such information submitted by the Pre-RD AOC Group pursuant to the Pre-RD Agreement. However, in signing the Pre-RD Agreement, EPA makes no advance representation as to EPA's acceptance of such interpretations.

9. The City of Portland (and others) is suing Monsanto – can the Portland Harbor Superfund Site cleanup move forward while the case is being resolved?

EPA has no information indicating the lawsuit would have any effect on the timing of the Portland Harbor cleanup. EPA is not a party to the lawsuit.

10. Does the Pre-RD Project include a public health study?

No public health study is included in the Pre-RD Project.

Project Costs

1. Who is covering the cost for the Pre-RD Project?

Four PRPs signed the Pre-RD Agreement - Arkema Inc., Evraz Inc. NA, Schnitzer Steel Industries Inc., and The Marine Group LLC. EPA understands that other PRPs have agreed to help fund the work covered by this agreement, but EPA is not a party to any third-party funding arrangements.

2. How much is the Pre-RD Investigation and Baseline Sampling going to cost and is there a cap on those costs?

According to the Pre-RD AOC Group, the total estimated cost for the Pre-RD Investigation and Baseline Sampling is \$14M, including approximately \$12M for sampling and technical work being performed by the Pre-RD AOC Group's technical team. Under the Pre-RD Agreement, the Pre-RD AOC Group is also responsible for up to \$2M for response costs incurred by EPA, including costs to provide oversight. If EPA costs exceed the \$2M amount, EPA has the option to pursue reimbursement from the larger PRP group outside of the Pre-RD Agreement. Costs for sampling and technical work are not capped; technical work must be completed consistent with the Pre-RD Agreement.

The Pre-RD AOC Group is required to provide "financial assurance" for the estimated cost of the work (\$12M). Examples of financial assurance are a letter of credit, bond, or evidence of the financial stability of the company.

3. If the EPA takes over the Pre-RD Project under the agreement's "work takeover" provision, is the Pre-RD Group required to pay for EPA's work?

If EPA takes over work from the Pre-RD AOC Group, the Pre-RD AOC Group is not required to pay those costs under the Pre-RD Agreement. However, EPA could pursue reimbursement from the larger PRP group outside of the Pre-RD Agreement.

4. How will the costs that PRPs pay for this agreement affect their overall financial responsibility for the cleanup?

The Pre-RD Agreement is limited to the sampling work covered by the agreement and does not address overall financial responsibility of Potentially Responsible Parties (PRPs) for the cleanup. EPA is not involved in the cost allocation process for Superfund sites.

Sampling

1. Who will do the sampling?

The Pre-RD AOC Group selected AECOM to implement the Work Plan identified in the Pre-RD Agreement. The selection of AECOM was approved by EPA based on the firm's capacity and qualifications to perform the work required under the Pre-RD Agreement. EPA is overseeing all work under the Pre-RD Agreement.

2. What types of data gathering are included in the Pre-RD Agreement?

The following types of data are being collected at sites within Portland Harbor: bathymetric survey, surface sediment sampling, small mouth bass fish tissue sampling, surface water sampling, subsurface sediment coring, and fish acoustic tracking. In addition, the following samples are being collected in the Downtown Reach (River Mile 11.8 to 16.6) and the Upriver Reach (River Mile 15.3 to 28.4) which are both upstream of Portland Harbor: sediment, surface water, small mouth bass fish tissue sampling, pore water sampling, and sediment trap.

Data being collected in the Pre-RD Project are summarized in Table 1 of the Work Plan. The Work Plan is an attachment to the Pre-RD Agreement and publicly available on EPA's Portland Harbor website.

- 3. Under the Pre-RD Agreement, small mouth bass is the only species being sampled, whereas other earlier sampling programs and EPA's 2017 draft plan included other species such as salmon, lamprey, and osprey eggs. Why does the Pre-RD Project only focus on small mouth bass? Aren't smallmouth bass short lived and don't have as much time to collect the contamination that a carp or sturgeon would?
 - Under this specific baseline sampling agreement, only smallmouth bass will be sampled.
 - EPA does feel that, if only one species could be sampled under this baseline sampling agreement, smallmouth bass is a good species because there is more available data from prior studies (so EPA may better compare current data to past data). Smallmouth bass is one of the species in the Portland Harbor Superfund Site with the highest levels of contaminants and they are not endangered nor a native species, so sampling them does not cause harm to the overall river ecology. Also, they are resident fish with relatively small home ranges, so they better represent

conditions within the Portland Harbor area, as compared to other species such as sturgeon that traverse many different areas.

- Additionally, smallmouth bass has been found to be a good species to predict likely effects on
 other species (this is also called a 'surrogate species'). As a result, determinations about how
 smallmouth bass are affected (contaminant concentrations going up or down) can be used to infer
 how other resident fish species are being affected in the area.
- EPA remains interested in sampling the other species that were listed in the June 2017 draft sampling plan, so EPA will continue to work with PRPs and/or partners to conduct sampling in other areas of the waterway to help inform the cleanup design under future agreements and orders.
- Additionally, more monitoring data will be gathered throughout the remedial design and cleanup phases under future agreements and orders.

4. Will other species be sampled in the future?

To accurately reflect the level of contamination in fish tissue, we should sample species that spend most of their lives at the site. Highly migratory animals do not spend as much time in contaminated areas and are not as useful for measuring changes in chemical concentrations associated with implementation of the cleanup. Benthic invertebrates (e.g., clams, crayfish and other creatures that live within the sediment in the river) can be a useful group of species to sample. EPA will seek out opportunities to incorporate more species into sampling.

5. How is the Pre-RD Group planning to analyze the fish samples?

Samples will be analyzed as individual whole-body specimens, and fillet concentrations will be estimated using the smallmouth bass whole body to fillet ratios presented in the final Feasibility Study (EPA 2016b).

6. Is protecting endangered species a consideration in selecting organisms to sample?

The protection of human health and ecological health, including endangered species, are the primary concerns of EPA in deciding what species to sample. EPA does consider the impact sampling activities will have on the species targeted for sampling, regardless of their status under the Endangered Species Act. However, the protection of endangered species is handled under the Endangered Species Act that is managed by other federal agencies.

7. Why did EPA agree to having significantly less sediment core samples than what was proposed in their June 2017 draft sampling plan?

While more sediment core samples are needed to develop the entire design plan for the cleanup (full remedial design), sediment core samples in the Pre-RD Project are valuable as a 'first phase' of this post-ROD sampling effort. EPA will work with PRPs to conduct sampling sufficient for full remedial design under future agreements and orders.

8. What are the main things that EPA wasn't able to negotiate with this AOC?

EPA wanted more species in addition to small mouth bass to be sampled during this baseline effort. EPA also wants more sediment core samples taken to develop the entire design plan for the cleanup (full remedial design). EPA and its partners have agreed that more baseline data than is specified in this agreement is needed at this site. EPA, Tribes, Oregon DEQ, and others plan to discuss when and how to sample additional species.

9. What is the difference between randomized sampling and non-randomized sampling and how is this being used in the Pre-RD Project?

- Randomized samples are collected to help evaluate overall conditions across Portland Harbor and are an important component of the data needed to evaluate the effectiveness of the cleanup. "Randomized" has a very specific meaning in statistics; it means that any specific location in the site has an equal chance of being sampled as any other location. Randomized data are required to answer certain types of questions, such as, "Are levels of contaminants in the surface sediments increasing or decreasing across the overall site?" Randomization ensures that estimates are unbiased so that data from multiple times or events can be compared accurately. Specifically, the rate of monitored natural recovery (MNR) may be estimated once additional future sampling events are conducted; the more events that are statistically robust, the better the MNR rate calculation will be. The Pre-RD Project includes randomized sampling of surface sediments both within Portland Harbor and areas upstream (Upriver and Downtown areas).
- Non-randomized (targeted) samples are collected to answer questions related to the active remediation areas. In the Pre-RD Project, targeted sampling focuses on sediment coring (deep sediment samples) and a portion of the surface sediment samples. These are focused on better defining the boundaries of the sediment management areas (SMAs) to support the cost allocation process and for designing the remedy. EPA is not involved in the allocation process but will approve the final designs.

10. For randomized sampling: Some samples being collected in the Pre-RD Project are described as randomized sampling. Does randomized sampling mean the Pre-RD Group can sample wherever they want and avoid contaminated areas?

There is a very rigorous process used to identify randomized sites; the process used and the resulting sample sites were reviewed and approved by EPA. The process does not allow selection of sample sites that intentionally avoid contaminated areas. Randomized samples are collected to evaluate overall conditions across Portland Harbor and are an important component of the data needed to evaluate the effectiveness of the cleanup.

11. How can I know that samples are being collected properly and the data from the Pre-RD Project are accurate? Can members of the public watch sampling activities?

The Pre-RD AOC Group and EPA agreed to a Quality Assurance program for the Pre-RD Project so that all parties are assured data collected are accurate and representative. Quality assurance procedures are described in the Quality Assurance Project Plan, the Data Quality Management Plan, and Field Sampling Plans for each type of sample being collected. Those plans describe in detail the procedures used to collect, store, and transport samples; analyze samples for contaminants; and manage and share resulting data with EPA.

Supported by their own, independent contractor (CDM-Smith), EPA is directly overseeing all work under the Pre-RD Agreement, including reviewing and approving all sampling plans, directly observing sampling activities, collecting "split samples" that are independently tested for contaminant levels,

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¹ Split samples are two or more representative portions taken from a sample or subsample and analyzed by different analysts or laboratories.

and reviewing and approving final data and reports.

Additional Quality Assurance activities (e.g., direct oversight by members of the public) are not required under the Pre-RD Agreement and are not planned.

12. Where are samples being collected from? Does it only include the Willamette River, or are other areas such as slough areas also being sampled?

Almost all samples are being collected in the main channel of the Willamette River with the exception of a few samples that are being collected near the entrance to Multnomah Channel. The sampling program also includes off-channel areas such as Swan Island Lagoon.

How Data are Being Managed and Used

1. How will PRPs use the data collected? Are those uses appropriate for the types of data being collected?

Data use objectives for data collected as part of the Pre-RD Project are specified in Section 1.3 of the Pre-RD Agreement Work Plan. The data use objectives consist of the following six items:

- Baseline sampling to update existing site-wide data;
- Gather data to be used as part of a baseline dataset for future long-term monitoring;
- Assist in refining the scope and extent of the remedial actions that will be performed at the Site, including refining SMAs, informing technology assignments consistent with the decision tree in the ROD (Figure 28), and refining the extent of the dredging and capping areas;
- Collect data to facilitate completion of the third-party allocation by PRPs; this allocation process is independent of EPA oversight;
- Collect additional data regarding upstream conditions and contaminant loading into the Site; and
- Update and evaluate site conditions to refine the conceptual site model (CSM) for all pathways consistent with the ROD, page 106 (Post-ROD Data Gathering).

Additional information on data interpretation and analysis included in the Pre-RD Project is provided in Table 8 at the end of the Work Plan, an attachment to the Pre-RD Agreement.

2. How are data from the study being stored and managed? Will the data be available to the public?

The Pre-RD Project includes development of a Data Quality Management Plan (DQMP) that specifies how data will be managed, reported, and consistently formatted for uploading to EPA systems. The Pre-RD Project consultant team completed the DQMP for this project and it has been approved by EPA. The DQMP requires all data be uploaded to EPA's Scribe.NET database, where members of the public can access the data.

Separately, EPA is drafting a template data management plan for the entire site that can be tailored for specific sampling projects throughout the site.

3. Will data from the Pre-RD Project be used by Oregon Health Authority to develop fish advisories?

EPA will provide any relevant fish tissue data to the Oregon Health Authority including data collected by the Pre-RD Project. These data may be used by the Oregon Health Authority to update the fish advisory for the Lower Willamette River.

- 4. Do other organizations have data that EPA could compare baseline sampling data to as well?

 Data collected outside of an agreement with EPA are rarely considered because it is very difficult for EPA to ensure that the data were collected in accordance with EPA's Quality Assurance Plan. However, high quality data, such as that collected by the Natural Resource trustees may be useful and/or used
- 5. Will these data replace the existing information on the site collected from previous sampling efforts? How will the older data from the Remedial Investigation be compared or used in relation to this new data from the Pre-RD group?

for baseline and ongoing monitoring.

The intent of the Pre-RD Agreement data is to capture current site conditions and form part of the baseline dataset that will be compared to future monitoring efforts. These data are supplementing data from previous sampling efforts, not replacing them. It is anticipated both existing data and data collected under the Pre-RD Project (especially the sampling focused on the sediment management areas) will be used to supplement information for future remedial design work.