

January 15, 2010

**VIA EMAIL AND U.S. MAIL**

Stephen Zylstra, PhD  
Portland Harbor NRDA Case Manager  
U.S. Fish and Wildlife Service  
2600 SE 98th Avenue, Suite 1100  
Portland, OR 97266  
Stephen\_Zylstra@fws.gov

**RE: Comments on Draft Portland Harbor Superfund Site Natural Resource Damage Assessment Plan**

Dear Dr. Zylstra:

We represent the following interested parties with respect to the Portland Harbor Superfund Site (“Site”): **BAE Systems San Diego Ship Repair Inc.**, successor by merger to Northwest Marine, Inc.; and **The Marine Group LLC**, successor in interest to Northwest Marine, Inc. (collectively, “our Clients”). Our Clients are active participants in the Portland Harbor Superfund Site Participation and Common Interest Group, which as you know is involved in the remedial action for the Site. Our Clients also have an ongoing interest in the natural resource damage assessment (“NRDA”) and restoration process in which the Portland Harbor Natural Resource Trustee Council (“Trustee Council”) is involved. We are submitting these comments on our clients’ behalf with respect to the Draft Portland Harbor Superfund Site Natural Resource Damage Assessment Plan dated November 23, 2009, including appendices (“NRDA Plan”).

Section I of our comments discusses legal issues and concerns with respect to the NRDA Plan. Section II contains a discussion of general technical issues and provides bulleted comments on specific technical concerns.

**I. DISCUSSION OF LEGAL ISSUES**

The NRDA Plan states that potentially responsible parties (“PRPs”) will be required to pay “contributions” and “charges” in excess of the natural resource damages (“NRDs”) for which they are legally responsible. For example, PRPs are expected to compensate for the anticipated future acts of third parties and acts of nature. The NRDA Plan provides:

Experience at other NRDA sites in the Pacific Northwest and elsewhere shows that restoration projects are often vulnerable to colonization by invasive vegetation and can be subject to human disturbance (e.g., encampments,

vandalism, trash dumping). Consequently, provisions also must be made for continual monitoring and maintenance of restoration projects – after project permit requirements expire – to ensure that the ecological benefits of the projects are not lost due to neglect. Settling parties will be expected to contribute toward the costs of a permanent stewardship program the Trustee Council intends to develop to address project site oversight and maintenance in perpetuity. For cash-based settlements, the dollar-equivalent figure will also include a contribution to the permanent stewardship program.

NRDA Plan at B-12. The NRDA Plan apparently anticipates that this contribution toward a permanent stewardship program will be in addition to recovery of damages in compensation for the natural resource injury and the costs of assessment. *See id.* at 11-12.

The NRDA Plan also appears to provide for double compensation, likewise resulting in PRPs being required to pay amounts in excess of the NRDs for which they are legally responsible. For example, the Trustee Council expresses “a preference for restoration projects in the [Portland Harbor Assessment Area (“PHAA”).” NRDA Plan at B-11. Thus, if a settling party proposes an otherwise acceptable restoration project near, but not in, the PHAA, the amount of credit the project produces under the Trustee Council’s habitat equivalency analysis (“HEA”) model will be lower than an equivalent project within the PHAA. *Id.* In addition to this restoration-credit adjustment, there will be “a cost-avoided offset charge” for a project located outside the PHAA, because the Trustee Council assumes such a project might cost less than an equivalent project within the PHAA. This charge is a problem because the settling party would be compensating the Trustees twice for the project’s location outside the PHAA.

The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 *et seq.* (“CERCLA”) expressly prohibits double recovery of NRDs. 42 U.S.C. § 9607(f)(1) (“There shall be no double recovery ... for natural resource damages ... for the same release and natural resource.”) Similarly, the Trustee Council is not entitled to recovery of damages from PRPs for injuries caused by third parties or acts of nature. In recognition of this limitation, DOI policy provides that the duration of legal protections for a restoration project “is a function of scaling” the restoration to compensate for the natural resource injuries. *See* Memorandum to Mat Millenbach from Charles P. Raynor (Nov. 23, 1999).<sup>1</sup> As discussed in the NRDA Plan, continued oversight and monitoring may be an important component of ensuring the long-term success of a restoration project, but the cost of these activities cannot be levied on top of full compensation for the natural resource injuries. Instead, these costs, if imposed, must be included as a component of total NRD compensation.

In addition, it is not clear that all the legal prerequisites to conducting a full NRDA on the entire PHAA, including the Multnomah Channel, have been satisfied. Very little information is given in the January 2007 Preassessment Screen for the Site<sup>2</sup> and the NRDA Plan regarding the

---

<sup>1</sup> available at <http://restoration.doi.gov/pdf/9deedrestrictions.pdf>

<sup>2</sup> available at <http://www.darrp.noaa.gov/northwest/portharbor/pdf/Portland%20Harbor%20Preassessment%20Screen.pdf>

actual exposure and impacts to trust resources in the Multnomah Channel. Section 1.4.1 of the NRDA Plan acknowledges that it is important “to provide a foundation for determining the need and efficacy of proceeding with an NRDA.” It is not clear from the existing information provided in the Preassessment Screen and the NRDA Plan that there is sufficient evidence to establish, even preliminarily, a causal link between a release of hazardous substances and injury to natural resources within the Multnomah Channel. In light of this paucity of injury information, it is questionable whether the Trustee Council has complied with the requirement to “ensure that there is a reasonable probability of making a successful claim before monies and efforts are expended in carrying out an assessment,” 43 C.F.R. § 11.23(b), and it appears unlikely that the prerequisites for conducting an injury assessment have been satisfied, *see* 43 C.F.R. § 11.23(e).<sup>3</sup>

## II. DISCUSSION OF TECHNICAL ISSUES

### General Comments

The NRDA Plan provides only a general overview of the methodologies that will be used in Phase 2 to: (1) determine injuries and damages, (2) plan restoration activities, and (3) determine the settlement and the NRDA allocation process. While this simplistic approach may be sufficient for NRDA's with one PRP, one contaminant of concern (“COC”), and one trust resource being evaluated, the NRDA for the PHAA is orders of magnitude more complex (hundreds of PRPs, dozens of COCs, numerous trust resources). Due to this complexity, a simplistic evaluation will not be adequate for the NRDA for this Site, and complex and sophisticated evaluations will require a level of detail and cooperation between PRPs and the Trustee Council that is not evident from the existing draft NRDA Plan.

Provided below are specific issues that need to be addressed to create a meaningful cooperative process and incentivize maximum participation from the numerous PRPs for this Site.

---

<sup>3</sup> 43 C.F.R. § 11.23(e) provides:

Based on information gathered pursuant to the preassessment screen and on information gathered pursuant to the [National Contingency Plan], the authorized official *shall* make a preliminary determination that *all* of the following criteria are met before proceeding with an assessment:

- (1) A discharge of oil or a release of a hazardous substance has occurred;
- (2) Natural resources for which the Federal or State agency or Indian tribe may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the discharge or release;
- (3) The quantity and concentration of the discharged oil or released hazardous substance is sufficient to potentially cause injury, as that term is used in this part, to those natural resources;
- (4) Data sufficient to pursue an assessment are readily available or likely to be obtained at reasonable cost; and
- (5) Response actions, if any, carried out or planned do not or will not sufficiently remedy the injury to natural resources without further action.

(emphasis added).

## Specific Comments

### *Phase 2 Goals*

- The Trustee Council's goal of having cooperating PRPs settle at or near the time the U.S. Environmental Protection Agency ("EPA") issues the remedial record of decision ("ROD") for this Site is premature and cannot be assessed by PRPs at this time because no schedule is presented for PRP participation, no legal mechanism for PRP funding and participation is provided,<sup>4</sup> and no estimate of the magnitude of the potential damage allocation and restoration is presented. As the NRDA Plan acknowledges, EPA's selection of the remedy will have a significant effect on the magnitude of ongoing NRDs, and implementation of the remedy may contribute additional NRDs. However, the NRDA Plan does not explain how the Trustee Council will address these issues.
- There are too many key biological resources being considered for the injury assessment. At present, the key biological resources to be assessed as described in the NRDA Plan include: juvenile salmon, lamprey ammocoetes, sturgeon, sediment, benthos, piscivorous birds (osprey/bald eagle), piscivorous mammals (otter/mink), other natural resources (undefined) with Tribal value and other fish (undefined) covered by advisories or having recreational value. Recreational service losses and tribal service losses also will be addressed. The NRDA Plan contains an insufficient level of detail describing how this complicated evaluation will be conducted, and consequently its adequacy cannot be determined. Simplifying assumptions will need to be made, which will result in a conservative Phase 2 evaluation. While we agree that the evaluation will need to be simplified and focused on surrogates, it is critical that the approach is clearly identified, presented and agreed upon by the Trustees and cooperating PRPs.
- The Trustee Council has not made a final determination of the geographic scope of the NRDA, which creates a high degree of uncertainty for PRPs considering cooperation and early settlement. Considering that the remedial investigation is focused on the 11 river miles defined as the Site, why does the Trustee Council include a larger geographic scope in Phase 2 (the Multnomah Channel) and even a potentially larger area in Phase 3? What is the basis for expanding the NRDA to outside of the Site? How can PRPs evaluate the uncertainty of potential Phase 3 expansion? Moreover, how can different geographic areas be addressed in a combined allocation of the remedial costs and the NRDs at the end of Phase 2?

---

<sup>4</sup> For example, the NRDA Plan does not state whether the Trustee Council intends to use the participation agreement from Phase 1 or something different, nor does it discuss the extent to which the Trustee Council will be willing to negotiate conditions of participation with PRPs.

### *Assessment Process*

The NRDA Plan summarizes in general terms the methodologies that will be used to determine injury and damages to trust resources in Phase 2; however, there is no discussion of how the cooperative process between the cooperating PRPs and Trustee Council will work. Some specific examples of areas that lack clarity include:

- **Cooperating PRPs:** The scope of PRP participation in Phase 2 of the NRDA and the early settlement process is undefined. Page 1-9 of the NRDA Plan states that only those PRPs who fund Phase 2 activities, including a damage-specific liability allocation process, will be able to participate in early settlement. However, Section B.6 in Appendix B does not mention this limitation. Will PRPs that choose not to participate in Phase 2 be offered an opportunity to settle at the end of Phase 2? If not, what is the legal basis for excluding them?
- **Benefits of cooperation:** It is not clear in the NRDA Plan what the benefits of participation in Phase 2 are. Cooperative NRDA generally have an interactive component between the Trustees and the PRPs that allows for PRP concerns to be addressed. This NRDA Plan does not specify whether the cooperative process proposed is interactive. Because the NRDA Plan is nonspecific and many of the plan elements are incomplete, PRPs cannot conduct a cost-benefit analysis to evaluate potential participation.
- **Schedule and Cooperating PRP Participation Plan:** Considering the complexity of the proposed Phase 2 studies, it is expected that at key points in Phase 2 it will be critical for the Trustee Council to receive input from the cooperating PRPs. Additionally, considering the overall goal of finalizing Phase 2 and negotiating early settlements at or near the time that the EPA issues the ROD, it is not clear how all the Phase 2 activities will be completed in 2 years. (It is our understanding the ROD is scheduled for issuance in 2012.) When will there be critical decision points, and how will the cooperating PRPs be engaged to coordinate and discuss next steps? Since there is no schedule for Phase 2 activities discussed in the NRDA Plan, how will the cooperating PRPs know if Phase 2 is on schedule to meet the ROD deadline? If the remedial investigation/feasibility study (“RI/FS”) schedule and date for the issuance of the ROD change, what is the plan for coordinating the NRDA schedule?

### *Addition of Multnomah Channel*

As explained in Section I of these comments, the proposed addition of the Multnomah Channel to the PHAA is neither explained nor warranted. Inclusion of the channel opens up a huge new area for assessment of potential liability – the channel is 21 miles long, which is twice the length of the Site. Thus, it is important that valid justification for inclusion of the channel is provided, but this information is absent from the NRDA Plan. This omission raises a number of technical and practical concerns, including:

- Because the Multnomah Channel is not within the Site (which has been investigated extensively), there is little collected or peer-reviewed data with respect to the potential impacts of activities by PRPs for the Site on the Multnomah Channel. In addition, as the NRDA Plan acknowledges, there are other known polluters with differing contaminants located in the Multnomah Channel. The potential impact from other contaminant discharges from storm drains, groundwater, historical operations or spills has not been evaluated, quantified nor has any linkage to the Site been established. The Trustee Council's assertion that they "will likely focus their review on samples that have been collected upstream of these specific sites to develop assumptions about contaminants that may have moved downstream from Portland Harbor" is not proper or acceptable.
- For the Multnomah Channel evaluation it is not clear how relevant the existing data are to evaluate injury. We are not convinced that the necessary data exists about the types, sources, impacts or risks of contamination in the Multnomah Channel.

### *Phase 2 Methodology*

The NRDA Plan provides only a general overview of the methodologies that the Trustee Council will use to determine injuries and damages and to engage in restoration planning. Due to the complexity of Phase 2, a simplistic evaluation will not be adequate; rather, complex and sophisticated evaluations likely will be required. Examples of issues that require more clarification include:

- Injury and Damage Assessment to Ecological Resources: HEA and resource equivalency analysis ("REA") are the proposed methods to estimate service losses in Phase 2. While these are well-established tools, the actual methodologies that will be used to address the key resources and provide an integrated assessment of ecological service loss for habitat are not clear. Other NRDA's, in recognition of the complexity of addressing multiple contaminants and resources, have aggregated the evaluations so that the probability of under- or over-estimating damages is minimized.<sup>5</sup> Considering the number of different approaches that can be used to ensure a fair evaluation when aggregating service losses, it is critical that more information on the planned approach be given so that the adequacy of the approach can be reviewed and evaluated.
- Habitat Value Factors: How will habitat value factors be developed and applied to habitat in the PHAA? How will current conditions and potential impacts from a currently unascertained remediation be addressed?

---

<sup>5</sup> See Munns Jr, WR, RC Helm, WJ Adams, WH Clements, MA Cramer, M Curry, LM DiPinto, DM Johns, R Seiler, LL Williams, D. Young. 2009. Translating Ecological Risk to Ecosystem Service Loss. *Integr Environ Assess Manag.* 5(4):500-514.

- **Baseline Conditions To Estimate Service Losses:** The Lower Willamette River is a highly modified urban waterway. The Trustee Council has an appropriate goal of accounting for baseline factors including non-contaminant-related stressors. However, the NRDA Plan should clarify that the impact of non-contaminant-related and other baseline factors must be subtracted from the cumulative injuries, not just “factored in.”
- **Background Conditions:** We understand the efficacy of using the RI/FS approaches but are concerned that the Trustee Council may consider additional information or choose to draw different conclusions from those in the RI for the purposes of NRDA (see pg B-5 of Appendix B) which would render allocation settlements and cleanup/restoration agreements useless. Additionally, the RI has been time consuming and expensive and has had input from the Trustees throughout the process. The statement on page B-5 suggests that the Trustees do not believe or trust the RI results.
  - Is this statement suggesting that the RI is flawed?
  - Is this statement suggesting that if the RI does not give the Trustees a preconceived outcome that the Trustees will not use the results of the RI?
  - Is this statement suggesting that the Trustees chose to not use the RI and that more costly studies may be required?
- **Injury to Tribal and Recreational Resources:** This discussion is very general and does not provide any specific detail on how losses unique to the Tribal Trustees or lost recreational use will be assessed. Moreover, it is unclear whether the Trustee Council or only the Tribal Trustees will conduct the tribal trust resource assessment, and whether the level of information sharing with cooperating PRPs will be different for tribal trust resources.
- **Complexity of Process:** As noted above, integration of service losses to numerous key resources, including the evaluation of tribal and recreational service losses, the application of habitat value factors, baseline condition factors, and the determination of background conditions result in an extremely complicated injury and damage assessment. Considering that the description of this process is contained mainly within a few pages of Appendix B, how could PRPs make a determination of the adequacy of this approach and agree to participate in Phase 2 with so little information?

### ***Coordinated CERCLA and NRDA Allocation***

- We do not believe a coordinated NRDA/remediation allocation approach is workable; rather, we believe independent liability allocation for NRDA (separate from remedial allocation) is required. The remedial allocators are being evaluated for their ability and understanding of CERCLA, contamination sources, and chemical impacts, not on NRDA-related biological or habitat issues. We also believe that the remedial allocator likely will be too busy on the remedial allocation to work jointly on the NRDA

allocation. Also, joint allocation would be complicated by the lack of geographic correlation between the remedial and NRDA processes.

- There are a number of legal and procedural barriers to a joint allocation. For example, the remedial and NRDA allocation factors necessarily will differ substantially. In addition, although the NRDA Plan acknowledges that the remedial allocation process will involve confidential information, there is no discussion of how the Trustee Council would address this issue, and we believe it is highly inappropriate to give the Trustee Council “access to the analysis of contaminant/discharge linkages developed in the remedial allocation.” NRDA Plan at B-13. It also is unacceptable for the Trustee Council to reserve the right to reject the allocation results unilaterally and at its discretion. *See id.* at B-14. These are just a few examples of the many reasons why remedial and NRDA liability should be allocated in separate processes.

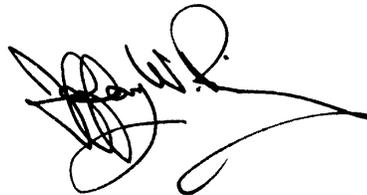
### ***Restoration Planning***

- How are recontamination issues being addressed? Will those impact restoration opportunities, especially since many of the proposed restoration projects are related to daylighting culverted creeks and outflows that may have contamination upstream?
- The restoration and settlement plan discusses a cost-avoided offset charge for offsite restoration projects. As discussed above, we believe such a charge would not be consistent with CERCLA. In addition, even if permissible it is unclear how that charge would be developed and applied.

We agree with the Trustee Council that a truly collaborative NRDA process has the potential to result in more rapid resolution of liability at a much lower cost, which benefits all the parties involved in the NRDA process and most importantly benefits the public and the injured natural resources. However, we have concerns that this NRDA Plan lacks the necessary elements to create such a process. Thank you for the opportunity to submit these comments.

Very truly yours,

BATEMAN SEIDEL MINER BLOMGREN  
CHELLIS & GRAM, P.C.



By: J.W. Ring  
Karen L. Reed  
Christine L. Zemina

cc: Arthur Engel, The Marine Group  
Laura Machado, The Marine Group  
Raymond Parra, BAE Systems  
Ronald Lucchesi, Argonaut Insurance

Email from: William Egan <fishcrappie@yahoo.com>  
CC to: Herb Doumitt Jr." <hdoumitt@spiritone.com>, Jim Robison  
<jim@jimrobison.org>

Received: 1/13/10

Having reviewed the Natural Resource Trustee Councils' plan for damages to the Portland Harbor Superfund Site we are in agreement with your findings. We would like to be notified of restoration efforts for fisheries in the harbor and surrounding area. Please let us know of planned restoration efforts so we can comment or be involved. Thank you, Oregon Bass and Pan Fish Club, P.O. Box 1021, Portland, Oregon 97207-1021

January 15, 2010

Stephen Zylstra  
U.S. Fish and Wildlife Service  
2600 SE 98th Avenue, Suite 100  
Portland, OR 97266

Subject: Comments & Questions – November 23, 2009 Draft Natural Resource  
Damage Assessment Plan, Portland Harbor Superfund Site

Dear Mr. Zylstra:

I am submitting the following comments and questions to the Portland Harbor Natural Resource Trustee Council (Trustee Council) regarding the November 23, 2009 Draft Natural Resource Damage Assessment Plan for the Portland Harbor Superfund Site as part of the public comment process with regard to that document:

**1. Areas to be included under the Natural Resource Damage Assessment (NRDA) are not clearly delineated.**

The study area of the Portland Harbor Superfund Site has loosely been defined within the Assessment Plan between river mile 1 and 11.8 and includes the Multnomah Channel, which has not been included in earlier site characterizations. The text leaves the possibility for expanding this area by stating that the Trustee Council has not made a final determination of the geographic scope of the PHAA (Portland Harbor Assessment Area; PHAA). Furthermore section 2.1.1 states that other areas may be included in subsequent phases of the assessment. This statement is rather vague giving no indication of when the final geographical area will be determined.

- If the PHAA is expanded after Phase 2 settlements, will there be future liabilities for early settling PLPs after Phase 3 data collections?

The text does not address the criteria that will be used to determine if additional areas should be included, and role that PLPs will play in this determination.

Within section 2.1, the current PHAA is defined as the geographic areas where hazardous substances released to the Site have come to be located. It is clear however that contaminants exist upstream of river mile 11.8, and that the Portland Harbor Area is a depositional environment.

- How will upstream impacts be differentiated from impacts originating within Portland Harbor?
- How do historic contaminants differ from releases (historic) from PLPs addressed in the NRDA?

- Does this suggest that upstream areas will potentially be included within the NRDA?
- Will expansion of the PHAA occur during or after Phase 2 early settlements?

It is stated within the Assessment Plan that very little information exists regarding contaminants in the Multnomah Channel. However it also mentions Multnomah PLPs.

- Are these parties currently identified?
- Is there a reference for this information?

In addition, no methodology is discussed that addresses how impacts within Multnomah Channel arising from the identified Willamette River PLPs will be differentiated from impacts originating from potentially new upland sites within the Multnomah Channel.

The Assessment Plan indicates that assumptions about contaminants that may have moved downstream from the Portland Harbor and into the 21 miles of the Multnomah Channel will come from data collected upstream of St. Helens, Oregon. However the Plan then states that an additional source of data for characterizing fish impacts in the Channel as ODEQ's monitoring program was collected Near St. Helens. This seems contradictory and confusing, please explain this rationale.

Notation in Appendix B states that Phase 2 will not include the Columbia River; this notation is not included in Phase 1.

- Does this mean that an intention exists to include the Columbia River in later phases?

**2. The level of involvement of the participating PLPs during the drafting or implementation of the NRDA is unclear.**

Within Section 1.0 it is stated that the Assessment Plan is organized according to NRDA regulations, however, the Trustee Council reserves their discretion to deviate from the regulations if necessary. While it is stated multiple times within the text that the Plan has been devised to facilitate working cooperatively with parties potentially liable for natural resource damages, nowhere does it discuss how decisions to deviate from the regulations will be deemed appropriate; how and when PLPs will be notified of deviations; and to what extent the participating PLPs will be allowed to participate in the decision.

**3. It is unclear how baseline conditions will be evaluated.**

REA/HEA methods involve two fundamental steps: 1) determination of the baseline services provided by the natural resource and 2) determination of the scale of the restoration required to compensate for the service loss caused by hazardous

substances relative to the baseline. How the NRDA will define baseline services is not clearly outlined within the Assessment Plan.

Many significant historical releases occurred at the Site prior to any permitting under environmental laws, and these contaminants continue to be present at the Site and potentially are causing injury to this date. The Assessment Plan does not indicate what impacts will be delineated as historical releases and how the NRDA will address historical impacts in both damage assessments and recovery.

It has been well documented that the loss of resources within the Portland Harbor has been occurring over many decades and impacts cannot be singly attributed to chemical impacts. Section 2.1.2 of the Assessment Plan states that in the last century, anthropogenic activities such as dam construction, river channelization, dredging, bank hardening (riprap, seawalls), non-native species introduction, fisheries supplementation, timber harvesting, agriculture, urbanization, and industrialization have altered the historic habitats and biota of the basin. The plan further states in section 4.9.1 that the use of control or reference sites will be used. However due to extensive modifications in the Portland Harbor Assessment Area (PHAA) it is unlikely that a non-impacted control site can be located. The Assessment Plan does not address this.

- If multiple lines of evidence are used for establishment of baseline, how will the PLPs be involved in the selection process of appropriate sites that are representative of control or baseline?
- If control sites are selected with physical and hydrological characteristics of the lower Willamette River, will levels of chemicals within these areas be set as the baseline levels for remedial activity?
- What if these “baseline” levels exceed toxicity screening criteria?

The start period considered for baseline within the NRDA is 1981.

- Does this imply that baseline conditions will be based on conditions that existed within Portland Harbor pre-1981?

Impacts to the Portland Harbor have been observed for over 100 years. Dredging activities have been occurring as early as the 1870s and in 1911 Oregon Board of Health declared the lower reaches of Willamette River an “open sewer” and fish from those areas unsuitable to eat. In 1930 the Oregon State Sanitary Authority declared the Willamette a “menace to health.

- If baseline is to consider conditions prior to 1981 how will the NRDA address both chemical impacts and loss of habitat impacts that existed pre-1981? Clearly the PHAA was severely impacted prior to 1981.

It is known that the use of DDT occurred in Vanport City prior to the May 1948 Vanport flood, which flooded the entire Vanport area. It is likely that this and other

similar events contributed to a significant fraction of the chemical impacts within the Portland Harbor. The Assessment Plan does not clearly indicate how liability from these non-point source impacts will be allocated.

It is likely based on the history of chemical usage at the Site that historical data will show higher concentrations for certain chemicals of concern than those measured currently. For example DDT use was banned in 1972 and levels will be decreasing over time. Table 3.7 shows higher levels of DDT in osprey eggs in the 1999/1997 time point than that observed in 2001.

- How will the NRDA address chemicals found at higher concentrations prior to 1981 but still currently exist at unsafe levels?
- How will liability be handled for releases that occurred and stopped prior to 1981?

#### **4. It is unclear how the injury assessment will use toxicity criteria.**

Marine organisms have the ability to accumulate arsenic present in seawater and in food items, as opposed to just from local pollution sources.

- How will naturally occurring background concentrations of metals be dealt with in the damage assessment?

For example, it is known that arsenic is a naturally occurring element found throughout the environment at concentrations that fall within the range displayed in section 3.2.1 (0.33 to 0.75 µg/L). Additionally studies indicate that a large percentage of the arsenic found in fish and shellfish is organic arsenic, which is much less toxic than inorganic arsenic.

- Will any attempt be made to differentiate between toxic and non toxic forms of a metal?
- Will a hierarchical approach be used for the selection of appropriate toxicity reference values (TRVs)?

Little discussion is given to how exceedances of both sediment quality guidelines (SQGs) and TRVs will be correlated to percent damages of resources. Within toxicity studies, an exceedance of a TRV is used to determine the presence of risk. However, small exceedances are unlikely to cause the same magnitude of service loss as those caused by exceedances that are orders of magnitude larger than the respective TRV. The plan does not address how this difference will be approached.

- Will resource damages be scaled to reflect the uncertainties in the applied toxicity criteria?
- For example, will exceedances of sediment criteria established using direct measurements of sediment toxicity be assigned the same magnitude service loss as exceedances determined using modeled sediment toxicity?

Contamination within the Portland Harbor Superfund Site has existed for over 100 years. The text discusses certain SQGs and ecological TRVs that will be used to determine injury. However these values may not appropriately take into account issues such as bioavailability and adaptation both of which have the ability to mitigate toxicity.

- How will these effects be incorporated into impact evaluations?

The Plan does not address how it will determine uncertainties due to natural variation in habitat diversity/productivity unrelated to chemical stressors.

Table 3.1 presents summary sediment data for selected substances in sediments collected between RM 2 and 11. The plan however indicates that it is covering a larger area (RM 1-11. 8 and Multnomah Channel) and potentially will include even more area than this. Appendix B states that limited samples have been collected in the first mile of the Multnomah Channel downstream of the Willamette River during the Remedial Investigation (RI).

- Why is this data not presented in any of the Assessment Plan tables?
- Will analysis of impacts be only limited to the first mile of the Multnomah Channel?
- Does this indicate the potential PLPs exist only in the 1<sup>st</sup> mile of the channel?

Sections 4.3.1 and 4.5.1 (Impacts to surface water and groundwater) indicate that Trustees may consider these injuries based on drinking water standards in Phase 3. This affected area is zoned industrial and would seem inappropriate to evaluate either surface or groundwater based on drinking water criteria. Additional information or references on local areas that currently or have historically use surface or groundwater within the Port of Portland would be useful if such a statement is to be included in the report.

One line of evidence regarding impacts to biological resources are shown in Tables 3.7 and 3.8 both which show that there are significant levels of contaminants have been detected in osprey eggs and mink upriver of Portland Harbor.

- Are the levels that are detected upstream of the PHAA viewed as appropriately safe levels?
- How will remedial activities ensure that animals with large foraging areas such as the Osprey and the Eagle are not being exposed to contaminants levels higher than the appropriate TRVs outside of the PHAA?

Appendix B suggests that the Trustee Council will also consider the results of the Phase 1 osprey egg study for characterizing biological impacts within Multnomah Channel. One of the eggs sampled was from a nest located at the head of

Multnomah Channel. This sampling includes too few eggs to draw any significant conclusions.

- In addition due to the foraging range of Ospreys how will conclusions from this nest be used to delineate impacts arising specifically from Multnomah Channel?

## **5. Concerns regarding impacts to benthic organisms.**

It is important to determine what type of benthic community could be supported by the harbor if sediment contamination were not present. This determination is critical to the Portland Harbor studies, since dredging activities, like bottom trawling in the ocean, leaves the river bottom devoid of habit structure and plant life to help support a benthic community. The plan is not clear about how it will make this benthic habitat determination. Furthermore the plan focuses on impacts associated with exposure to contaminants and little attention is given to impacts arising from loss of habitat. For example the highest value habitats for ecological recovery are shallow water, low-gradient shorelines, riparian buffers, off-channel cool water refuges, or marsh/wetlands, all of which could be disrupted by dredging. It is not clear on how loss of habitat due to activities like dredging will be separated from impacts due to contaminants.

In section 2.1.2 the Asiatic clam (*Corbicula fluminea*) is included in the list of invertebrate species. This species is a non-native marine invertebrate and is capable of disrupting ecosystems. The introduction of these species in similar habitats has caused disruptions in the benthic communities potentially replacing niches contained by native species. It seems inappropriate to include these in a list of representative invertebrate species. Furthermore the plan does not address the presence of invasive species, whether the presence of non-native species has replaced native resources and how the impacts of invasive species to the natural resources will be addressed.

## **6. Additional concerns**

A change in recreational usage of the river most likely has been influenced not only by changes in water quality but also by changes in population. The plan does not discuss how changes in local population overtime will be factored into the determination of recreational resource losses. Due to the historical nature of PHAA (highly impacted) and local increases in populations it is likely that recreational usage has increased over time.

- How will these effects be determined within the NRDA?

Many of the tribal resource losses would likely also be addressed under the biological resources. The Assessment Plan does not address the likelihood of these resources being counted twice. Please address this more clearly.

The Plan places a good deal of emphasis on remedial activities within the PHAA when space for remedial activities is limited and will be more expensive than other alternatives. It seems that remediation outside of the areas of contamination would have a higher likelihood of success and produce longer lasting results. In addition non-PHAA remediation would aid in increasing populations of species that could potentially migrate into the PHAA

The Assessment Plan does not indicate how orphan shares will be handled.

- If participating PLPs choose to settle during Phase II how will orphan share responsibility be allocated during this phase?
- Will non-participating PLPs found liable during Phase III be held responsible for orphan shares?

The Plan should provide more details on the scope of the legal releases that would be in any resulting settlement documents.

- For example will PLPs that settle prior to Phase III be held liable for any further damages that may be determined during later phases of the assessment?
- Additionally will PLPs that settle during Phase II be held liable if the PHAA is increased or new screening criteria implemented during Phase III?

Within Appendix B, the assessment plan states “The Trustee Council maintains that contaminants have become so commingled in Portland Harbor sediments that any party responsible for releasing hazardous substances to the Site is jointly and severally liable for all the resulting natural resource damages.” This statement is not clear in how it relates to contamination that occurred prior to 1981.

I appreciate your consideration and look forward to receiving the Trustee Council’s response to the above comments and questions.

Sincerely,

John R. Kiefer, P.E.  
290 North Almenar Drive  
Greenbrae, CA 94904



## RIDDELL WILLIAMS P.S.

1001 FOURTH AVENUE, SUITE 4500 | SEATTLE, WASHINGTON 98154-1192  
206.624.3600 TELEPHONE | 206.389.1708 FACSIMILE  
WWW.RIDDELLWILLIAMS.COM

LOREN R. DUNN  
206.389.1794  
LDUNN@RIDDELLWILLIAMS.COM

January 15, 2010

### VIA E-MAIL AND U.S. MAIL

Stephen Zylstra, PhD.  
Portland Harbor NRD Case Manager  
US Fish and Wildlife Service  
2600 SE 98th Ave, Suite 100  
Portland, OR 97266

**Re: Comments on Draft Natural Resource Damages Assessment Plan for  
Portland Harbor Superfund Site**

Dear Dr. Zylstra:

We are forwarding this comment letter, and the enclosed memorandum, to you on behalf of Portland General Electric. PGE has been working with, and has provided funding to the Trustees in support of development of the Portland Harbor Trustees' Damage Assessment Plan (the Plan).

We are pleased to say that, for the most part, PGE agrees with the approach and objectives of the Natural Resource Damage Assessment outlined in the Draft Assessment Plan released on November 23, 2009.

We have, however, identified a number of continuing concerns. The more technical matters are identified in the attached memorandum from URS. Please let us know if you need any further information about any of the questions or concerns that are raised in that memo.

We also have some more general observations, which we will touch on briefly here.

PGE, and other parties involved in the Harbor site, will be considering whether to participate in the Trustees proposed Phase 2 work based in part on the contents and specificity of the Plan. The Plan is a good document. It is understandable, and covers a lot of ground.

But, it leaves many of the key details of the assessment and subsequent negotiations / working relationships up in the air, and to be worked out as part of Phase 2. This includes:

- 1) How baseline will be established, including development of baseline factors to account for non-contaminant-related stressors.
- 2) Distinguishing between compensable and non-compensable losses.
- 3) Finalizing the geographic scope of the assessment.
- 4) Identification of measures of success for restoration projects.
- 5) Whether or not DSAY banking or DSAY swapping will be allowed;
- 6) How habitat value will be determined.
- 7) How double counting of Tribal resources will be avoided.

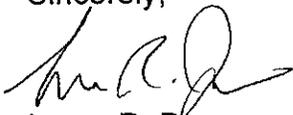
We understand that it may be difficult to determine in advance all the details of how these matters will be addressed. It is also clear that much of the site-specific data, as well as regional precedent for addressing these issues, will need to be weighed.

However, many of these issues are fundamentally policy issues, or can be informed by existing data and would not require an extensive investigation phase.

We would like to urge that the Trustees move quickly to come to, at least, a preliminary resolution on these issues. We would like to see the broadest participation possible in funding and supporting the Phase 2 work. We are concerned that efforts to gain significant support for Phase 2 may be impaired if something more definite cannot be said about these key issues.

Again, PGE appreciates the opportunity to comment on the Plan, and looks forward to working with the Trustees this spring.

Sincerely,



Loren R. Dunn  
of

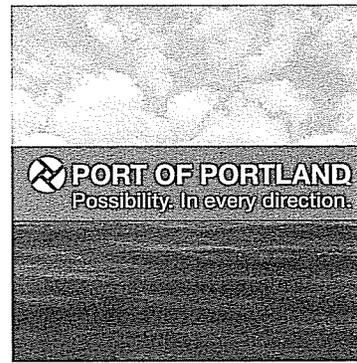
RIDDELL WILLIAMS P.S.  
Counsel for Portland General Electric

Enclosure

cc: Arya Behbehani-Divers

Stephen Zylstra, PhD.  
January 15, 2010  
Page 3

Rich George  
Jayne Allen  
Laura McWilliams



January 15, 2010

Sent electronically via email

Stephen Zylstra  
NRDA Case Manager, Portland Harbor  
U.S. Fish and Wildlife Service  
2600 S.E. 98<sup>th</sup> Ave., Ste. 100  
Portland, OR. 97266  
[stephen\\_zylstra@fws.gov](mailto:stephen_zylstra@fws.gov)

Re: Port of Portland Comments on the draft Portland Harbor Superfund Site Natural Resource Damage Assessment Plan

Dear Mr. Zylstra:

Enclosed are the Port of Portland's comments on the public draft of the "Portland Harbor Superfund Site Natural Resource Damage Assessment Plan," dated November 23, 2009. Thank you for the opportunity to review the plan. We look forward to attending the meeting on February 16, 2010 to discuss the process for moving forward.

Please contact me with any questions.

Sincerely,



Jim McKenna  
Superfund Program Manager

Cc: Krista Koehl

Enclosure

**Port of Portland Comments on the Public Draft of the document  
"Portland Harbor Superfund Site Natural Resource Damage Assessment Plan,"  
November 23, 2009**

The above document was prepared by Stratus Consulting on behalf of the Natural Resource Trustees, and made available to the Public in December, 2009.

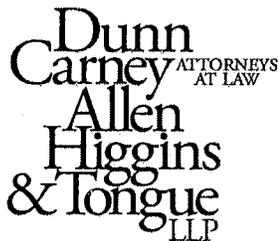
1. Overall, the development of information in the Assessment Plan does not appear to go beyond the level that was available at the time of the Preassessment Screen (2007). As such, this version of the plan may not meet the requirements of 43 CFR 11.31 regarding content and level of detail for the Assessment Plan. Future documents should provide this additional level of detail.
2. Section 2. , page 2.8 last paragraph. The following sentence is incorrect: "*Little industrial activity occurs downstream of RM 2 on the LWR, although the Port of Portland grain terminal (Terminal 5) at RM 1 has received slag from Oregon Steel Mills (Integral Consulting et al., 2004).*" There is no record that the grain terminal property ever received slag from Oregon Steel Mills.
3. Section 2.6 (Services, Uses, and Values Provided by Natural Resources). The current version of the Assessment Plan does not contemplate assessing damages from loss of navigation services from the Willamette River in Portland Harbor. Navigation services are a protected beneficial use of the Willamette River in Portland Harbor under federal and state law, and the State of Oregon is both trustee and manager of this resource, including acting as local sponsor for the US Army Corps of Engineers (Corps). Further, navigational services are a "committed use" as set forth in 43 CFR section 11.84(b)(1) and (2).

Due to natural sedimentation, the navigation channel requires periodic maintenance dredging to make the channel deep enough for navigation, particularly for large vessels. Because of the presence of hazardous substances in the sediment, the Willamette River navigation channel has not been dredged since 1997. In 2009, the Corps abandoned its effort to adopt a Dredge Material Management Plan for Portland Harbor due to the complexities of dredging within a Superfund Site. The presence of hazardous substances is causing an increase in the cost of harbor maintenance, will cause an increase in the future cost of dredging and dredge material management, and likely will cause a loss of shipping business as shipping companies decide not to use Portland Harbor because of the difficulty and added cost to get ships in and out of the harbor.

Therefore, the Portland Harbor NRDA should include assessment of damages resulting from loss of navigation services.

4. Section 4.8.2 (Injury Quantification). The text of this section generally cites text of 43 CFR 11, part 71 as the basis for quantification. However, in responses to comments from Participating Parties on the Preliminary Review Draft (Response 8.D), the trustees indicate that injury will be quantified at the individual level for a wide range of endpoints. This is contrary to the 43 CFR 11, Part 11.71(l) which states that quantification should be determined at the population, community or ecosystem level. In general, how will injury quantification be translated from individual endpoints to population, community or ecosystem levels; and how will such estimates be converted to losses in service flowing from these levels of biological organization?

5. Table A.2: The below is a repeat of comments made on the previous draft of the Assessment Plan that do not appear to have been addressed.
- a. "Cascade General" references the "Swan Island Shipyard". But there is no listing for the Swan Island Shipyard, just Portland Shipyard – Swan Island. Please note that the appropriate listing is the Cascade General Shipyard.
  - b. Willamette Cove is listed with St. John's Riverfront at RM6-7, and both are listed as ECSI# 2066, which is the ESCI# for Willamette Cove. St. John's riverfront is north of Willamette Cove and is not part of ESCI# 2066.



January 15, 2010

ELIZABETH E. HOWARD

DIRECT DIAL  
503.417.5514

E-MAIL  
ehoward  
@dunn-carney.com

ADDRESS  
Suite 1500  
851 S.W. Sixth Avenue  
Portland, Oregon  
97204-1357

Phone 503.224.6440  
Fax 503.224.7324

INTERNET  
www.dunn-carney.com

**Via Electronic and Regular Mail**

Stephen Zylstra, PhD  
Portland Harbor NRDA Case Manager  
U.S. Fish and Wildlife Service  
2600 SE 98th Avenue, Suite 1100  
Portland, OR 97266

stephen-zylstra@fws.gov

Re: Portland Harbor Superfund Site Natural Resource Damage  
Assessment Plan Draft dated November 23, 2009  
Our File No. POR 51-7

Dear Mr. Zylstra:

This office previously submitted comments on behalf of Portland Terminal Railroad Company (PTRR) to the Natural Resource Trustees Council's participating party preliminary review draft of the Natural Resource Damage (NRD) Assessment Plan. We submit the following supplemental comments in response to the publicly released draft NRD Assessment Plan dated November 23, 2009. PTRR appreciates the opportunity to provide comments and the Trustees' consideration thereof.

**General Comments**

1. The Plan provides a general framework for a phased assessment approach. One of the objectives listed for the Plan (1.1 Statement of Purpose) is to conduct a streamlined assessment at a reasonable cost. The Plan, however, does not clearly present the scope of elements that will be conducted in Phase 2. In addition, there is no discussion of a schedule, other than a reference to completing Phase 2 as EPA issues a record of decision (ROD). There is no discussion of Phase 2 costs. A list of the key elements or milestones (*e.g.*, additional studies, reports, work plans, or addendums) associated with Phase 2 should be provided along with a discussion of preliminary costs.
2. The Plan does not appear to directly address impacts of non-industrial releases. Combined sewer overflows and surface water runoff in industrialized areas are known to contribute to contaminant loading to receiving water bodies. These contributions should be accounted for as part of the assessment process.



### Specific Comments

1. Section 1 Introduction: The site definition is an important element that should be defined as part of the Assessment Plan. There appears to be a discrepancy between EPA's definition of the Site; RM 1.9 to RM 11.8 (LWG, 2009) and the Trustee Council definition of RM 1 to RM 11.8. This is further complicated by the inclusion of Multnomah Channel in the site definition in Section 2.1 (see comment 2). This is a 21-mile long channel and there is no discussion of the geographical limits, if any, on the extent of the channel being considered. Understanding the limits of the area being assessed will be important to PLPs in determining whether to fund Phase 2 activities.
2. Section 2.1.2 Description – Biological Characteristics: It is unclear from the information provided which biological resources are directly associated with the Portland Harbor Assessment Area ("PHAA") and which are reflective of the biological resources in the vicinity, which may include the nearby Columbia River.
3. Section 2.1.2 Description - Economic Characteristics: The Trustee Council makes a statement regarding the economic importance of sport fishing in the area and references an economic value of \$34.7M (Dean Runyan Associates, 2009). The Trustee Council fails to mention that the value reported includes resources associated with the Columbia River. This is an important distinction when addressing the economic value or economic loss of a recreational resource associated with PHAA. This value should not be interpreted as an indicator of the potential economic value of sport fishing on the Willamette River; as written, the statement is misleading.
4. Section 4.9.1 Baseline Assessment: Baseline conditions are critical to assessing losses and injuries and their associated damages. The Trustee Council has not provided a clear description of how background or baseline conditions will be determined. Only general statements are made regarding the use of multiple approaches using some relevant information that may be useful. The Trustees also confuse the discussion by indicating they may evaluate information collected during the RI/FS, but then draw different conclusions than those in the RI/FS. A more precise explanation of how the Trustees will determine baseline is needed to help PLPs assess their involvement in Phase 2. The approach to defining baseline needs to a practical and realistic definition of baseline conditions.
5. Section 4.9.2 Natural Resource Recovery Assessment: Although the Trustee Council cites a plethora of sources for determining resource recovery time lines, no time periods for recovery are offered. The recovery period has a significant impact on determining service loss and assessing restoration options. Further details on the methodology, values, and timelines being considered are necessary.

6. Section 5. Damage Assessment: The Trustee Council indicates that they plan to utilize three approaches in assessing damages: HEA, REA, and BT. This section of the Plan, however, does not provide any details on which methodologies will be used to assess what specific resource, nor are the specific resources to be evaluated clearly identified. The Trustees need to ensure that the measure of damages is realistic and not overestimate damages.

#### Appendix B.

1. The Trustees have very few data points are insufficient in quantity and by themselves spatially inadequate to assess the potential transport of contaminants from the Portland Harbor Site to the Multnomah Channel. The Trustees should remove this Multnomah Channel from their assessment. The Trustees lack the data to adequately characterize this area to determine if it is appropriate to include in the Site boundaries.
2. B2. Injury to Ecological Resources: In Phase 2, the Trustee Council will apply HEA/REA modeling to quantify natural resources and ecological service losses. However, in the Plan itself, the Trustee Council does not identify the specific resources to be evaluated and instead uses ambiguous terms including “key species such as...” or “key resources.” The framework should identify the specific natural resource and the associated methodology to assess injury.
3. B2. Injury to Ecological Resources: The Trustee Council recognizes the potential for double counting injuries, especially related to the REA and HEA methodologies. We encourage the Trustee Council to provide a methodology to address this issue.
4. B2. Injury to Ecological Resources: There is ambiguity in the data sets that will be used to support the injury assessment. Currently, the plan indicates data collected from the RI/FS, other Site-specific laboratories, other published literature, and additional data collection may be necessary. A clearer understanding of the available data and any additional data needed to support the chosen methodologies should be provided.
5. B2. Injury to Ecological Resources: The plan currently indicates that service loss thresholds and habitat value factors will be established. Further explanation is required to understand how these thresholds and factors will be determined for the HEA and REA.
6. B4. Injury to Recreational Resources: It is unclear how the Trustee Council plans to resolve the identified data gaps associated with the benefit transfer approach. Following review of existing data (secondary), four critical data gaps were identified by the Trustees. There is no discussion on how these

Stephen Zylstra, PhD  
January 15, 2010  
Page 4

data gaps will be addressed other than “investigating multiple sources of information.” Many of these sources are presumably secondary data previously identified and reviewed by the Trustees. PTRR supports an approach that is based primarily, if not wholly, on existing data and literature. Further explanation of how these data gaps will be resolved in Phase 2 is needed.

Again, we appreciate your consideration of these comments. We look forward to additional information from the Trustee Council so as to allow us to further assess PTRR’s interest in participating in the funding of Phase 2.

Sincerely yours,

A handwritten signature in black ink, appearing to be 'EEH', with a long horizontal flourish extending to the right.

Elizabeth E. Howard

EEH:ld

Greg A. Christianson  
Direct Phone: 213.680.6620  
Direct Fax: 213.830.8620  
greg.christianson@bingham.com

January 15, 2010

**Via E-Mail and Federal Express**

Stephen Zylstra, Ph.D.  
Portland Harbor NRDA Case Manager  
U.S. Fish & Wildlife Service  
2600 S.E. 98th Avenue, Suite 100  
Portland, OR 97266

**Re: Comments on Draft Portland Harbor  
Natural Resource Damage Assessment Plan**

Dear Dr. Zylstra:

I write on behalf of Schnitzer Steel Industries, Inc. and Schnitzer Investment Corp. (collectively, "Schnitzer") regarding the Portland Harbor Natural Resource Trustee Council's November 23, 2009 Draft Natural Resource Damage Assessment ("NRDA") Plan. Schnitzer's comments and proposed revisions to the Draft NRDA Plan are set forth below.

Geographic Scope

Schnitzer is concerned by the Trustee Council's decision to include the Multnomah Channel in Phase 2 of the NRDA. As you know, the Multnomah Channel extends 21 miles from its confluence with the Willamette River to the Lower Columbia at St. Helens, Oregon. Given the Trustee Council's intent to limit Phase 2 work to "the Portland Harbor Study Area and the immediate surrounding areas" as stated in Section 2.1.1 of the Draft NRDA Plan, Schnitzer requests that the description of the Phase 2 PHAA be modified to clarify that the Trustee Council does not intend to assess the entire length of the Multnomah Channel in Phase 2, but only those portions adjacent to the confluence with the Willamette River. For example, the first mile of the Channel downstream of the Willamette River may be an appropriate area since it already has been sampled as part of the Remedial Investigation ("RI") overseen by the U.S. Environmental Protection Agency.

While the Draft NRDA Plan notes at page B-2 that data also has been collected in separate investigations of a few additional sites further downstream in the Channel, all three of those sites are located in an industrial area of St. Helens

Boston  
Hartford  
Hong Kong  
London  
Los Angeles  
New York  
Orange County  
San Francisco  
Santa Monica  
Silicon Valley  
Tokyo  
Walnut Creek  
Washington

Bingham McCutchen LLP  
Suite 4400  
355 South Grand Avenue  
Los Angeles, CA  
90071-3106

T 213.680.6400  
F 213.680.6499  
bingham.com

Stephen Zylstra, Ph.D.  
Portland Harbor NRDA Case Manager  
U.S. Fish & Wildlife Service  
January 15, 2010  
Page 2

more than 18 miles from the confluence with the Willamette. Numerous potential sources outside of the Portland Harbor Site lie in between, as well as other potential inputs including creeks, bays and other off-channel bodies of water. This additional data is therefore irrelevant to the current NRDA and its use will only confuse and complicate the process, undermining the chances for a successful resolution to the NRDA. Schnitzer therefore requests that Appendix B.1 of the Draft NRDA Plan be revised to delete the references to these additional sites and note that any assessment of the Multnomah Channel during Phase 2 will be limited to a review of data collected in the RI process.

#### Anthropogenic Modifications

At Section 2.2 of the Draft NRDA Plan, the Trustee Council provides a brief summary of anthropogenic modifications in the lower Willamette River, including physical and hydraulic changes. However, this Section includes no mention of the fact that such changes unrelated to hazardous substance injuries are not compensable under CERCLA. While Appendix B includes a brief statement in this regard, we request that Section 2.2 be revised to state expressly that the Trustee Council has no NRDA claims for any losses unrelated to the release of hazardous substances.

#### Contingent Valuation Analyses

At Section 2.6.4 of the Draft NRDA Plan, the Trustee Council discusses contingent valuation analyses as a means of assessing the value of resources that are not currently being used, including theoretical losses sometimes described as "option values," "existence values" and "bequest values." The assumptions and techniques underlying these valuation methods, however, are controversial and often lead to highly inflated estimates of losses that bear little relation to any defensible values. Such techniques are particularly unreliable at sites in industrialized areas that have undergone extensive anthropogenic modifications. Unlike the example of the Grand Canyon cited in Section 2.6.4, sites such as the Portland Harbor Site do not lend themselves to such analyses, and it will be difficult, if not impossible, to parse out any quantifiable losses in "feelings" caused by the presence of hazardous substances from those "feelings" attributable to modifications that are not compensable under CERCLA. We therefore caution against using such speculative and controversial techniques.

At Section 2.6.5 of the Draft NRDA Plan, the Trustee Council notes that it intends to "determine which methodologies are feasible and appropriate to measure or

Stephen Zylstra, Ph.D.  
Portland Harbor NRDA Case Manager  
U.S. Fish & Wildlife Service  
January 15, 2010  
Page 3

estimate losses or gains for specific resources and services.” Given the speculative nature of contingent valuation analysis, however, Schnitzer requests that the reference to these approaches at Section 2.6.4 be deleted or, at a minimum, that the Draft NRDA Plan be revised to state expressly that the Trustee Council will first assess the feasibility of these approaches under the circumstances here before any significant resources are devoted to this effort.

#### Baseline Assessment

At Section 4.9.1, the Trustee Council states that NRDA regulations require that “baseline data should be collected from control areas.” As noted in other portions of the Draft NRDA Plan, the baseline conditions inquiry must distinguish between losses attributable to hazardous substances and other non-compensable losses. Accordingly, any process for identifying “baseline data” must take into account the non-compensable anthropogenic modifications at the Portland Harbor Site. Given the complexity of this analysis, we agree with the Trustee Council’s statement in the second paragraph of Section 4.9.1 that they will “use reference and control sites as appropriate and feasible, as well as modeling and the use of reasonable assumptions.” Schnitzer requests, however, that Section 4.9.1 be revised to indicate expressly that any site used as a “control area” must exhibit physical and hydrological modifications similar to those in the Lower Willamette River.

We look forward to the Trustee Council’s response to these comments and proposed revisions to the Draft NRDA Plan. In the meantime, please contact me if you wish to discuss any of these issues further.

Sincerely,



Greg A. Christianson



WILLIAM J. JACKSON  
BJACKSON@JGDPC.COM

T 713.355.5050  
F 713.355.5001

January 15, 2010

Stephen Zylstra, Ph.D.  
Portland Harbor NRDA Case Manager  
U.S. Fish and Wildlife Service  
2600 SE 98th Avenue, Suite 1100  
Portland, OR 97266

Re: Portland Harbor Superfund Site Natural Resource Damage Assessment Plan  
(Public Review Draft)  
Union Pacific's Comments

Dear Mr. Zylstra:

On behalf of Union Pacific Railroad Company ("Union Pacific"), we have reviewed the Portland Harbor Superfund Site Natural Resource Damage Assessment Plan ("Plan") dated November 23, 2009. We appreciate the opportunity to comment on the Plan. On behalf of Union Pacific, we previously provided comments on the September 1, 2009 version of the Plan in a letter to you dated September 24, 2009.

All of our comments in the September 1 letter are applicable to the public review version of the Plan, in particular our concerns about key structural and legal uncertainties in the Phase 2 Framework set forth in Appendix B. Although the Trustee Council provided responses to our comments, we continue to believe there is substantial uncertainty in how the Trustees intend to implement many of the key elements of the assessment process. We plan on participating in the February 16, 2010 meeting with the Portland Harbor Trustee Council ("Trustee Council") to learn more about the Trustee Council's plans and budget for the Phase 2 work.

As stated in the Phase 2 Framework, we appreciate that the Trustee Council will evaluate the extensive Remedial Investigation data to assess injuries for the Portland Harbor Superfund Site ("Site"). Our expectation, however, is that the Trustee Council will not use risk assessment determinations in establishing injury thresholds for benthos, fish and wildlife at the Site.

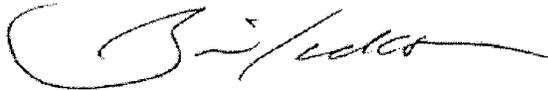
The Phase 2 Framework also states that the Trustee Council will assess potential injuries within the Multnomah Channel. We recommend that the Trustee Council consider the finding in the Remedial Investigation which stated that sediments immediately downstream of the Site in the Multnomah Channel show little evidence of chemical migration from the Site.

The Phase 2 Framework suggests that many of the assessments of injuries (*e.g.*, injuries to ecological, tribal and recreational resources) will rely on modeling and "conservative" assumptions, in addition to Site-specific data. We hope that the Trustee Council and its consultants are willing to work cooperatively with representatives of the participating parties to develop reasonable models and conservative assumptions that will establish a basis for

negotiating settlements after Phase 2 is completed. If the Trustee Council chooses to develop such models and conservative assumptions without direct involvement from the participating parties, the likelihood of reaching settlements will be significantly reduced.

We look forward to meeting with the Trustee Council on February 16, 2010.

Sincerely,

A handwritten signature in black ink, appearing to read "W. J. Jackson", with a large, sweeping initial "W" and a long, horizontal flourish extending to the right.

William J. Jackson

WJJ:rrw