May 19, 1999

Bill Knight Oregon Department of Environmental Quality 811 S.W. Sixth Ave. Portland, Oregon 97204

> Re: Public Review Draft Portland Harbor Sediment Management Plan, April 19, 1999

Dear Mr. Knight:

This letter constitutes the comments of Northwest Environmental Advocates on the draft Portland Harbor Sediment Management Plan (plan). These are in addition to any oral comments that we have made to Department staff in private and public meetings. We look forward to obtaining a copy of the responsiveness summary when it is completed.

Introduction

Overall, we find this plan to be largely a set of statements rather than a plan. For example, the plan establishes what legal authority the Department has but fails to set out what the Department will do with that authority. It notes that the Clean Water Act exists but says nothing about how the Act applies and how the Department will use it. The plan is also very confusing. This is specifically true with regard to its geographic boundaries. For example, the plan refers all harbor-wide contamination to site-specific sources, giving the impression that the only sources for contamination in the harbor come from these site-specific sources which have been or will be identified. In other places, the plan is exceedingly vague. The public relations aspect of the plan is a notable example. It simply doesn=t say anything despite the Department=s use of the notion of Alocal control@ as a primary selling point for Superfund deferral. In short, the plan offers few assurances that from a legal, public involvement, enforcement, or technical standpoint that deferral will provide the same level of protection for human health and the environment as an NPL listing.

Main Document

1.1 State Commitment to Manage Sediments in Portland Harbor

Based on the joint DEQ-EPA study released in 1998 DEQ believes there are some areas with elevated contaminant concentrations not associated with a site-specific source. How does the plan address this type of contamination? Assuming these elevated levels pose a risk, where in the plan does it state there are strategies for dealing with a harbor-wide (meaning river-

wide) clean-up, or a known area of contamination not linked to a specific site. DEQ seems to believe that all elevated levels of contamination in the harbor can be linked to site-specific sources. Although this may be true most of the time, the plan does not present a contingency for when non site-specific sources are found.

1.2 DEQ will Accomplish Protective Cleanup Without Superfund Listing

This part of the plan states that DEQ will conduct a harbor-wide Remedial Investigation and Feasibility Study, but based on the plan and Appendix G there seems to be no plan to do just that. The Remedial Investigation seems designed to develop sediment quality guidelines and justify linking all harbor-wide contamination back to site-specific areas. There does not seem to be any mention in Appendix G or other areas of the plan stating that a Feasibility Study will be conducted on a harbor-wide basis. Section 7.1 of the plan notes site-specific evaluation of remedial action options but no reference is made to harbor-wide remedial action options. Section 7.3.6 (pg. 45) notes that if a harbor-wide risk is determined then investigations will turn back towards studies at site-specific areas. The plan notes here that a feasibility study for the entire harbor Amay@ be warranted. This plan seems to be worded to avoid having to do a Feasibility Study and remediation of sediments on a harbor-wide basis. Why doesn=t the plan more directly state how the harbor-wide work will progress through the Contamination Response Process? The plan should clearly specify how the harbor-wide work will fit into the Contamination Response Process. Pg. 56

3.3 Enforcement Strategy to Implement the Plan

How will the public be sure that the appropriate enforcement strategies will be taken to require the responsible parties to pay for the clean-up and that it happens in a timely manner? The plan states that it has option to terminate the voluntary clean-up program but does not provide any details on how the DEQ can or will force a responsible party to pay. More details about how the DEQ will implement this section of the plan are needed for the public to feel confident that the DEQ can be trusted to oversee the Portland Harbor Clean-up. pg. 17-20

3.5 Consideration of CERCLA Requirements

The plan states that the NCP requires remedies to meet two thresholds with one called the applicable or relevant and appropriate requirements (ARARs). At the end of the same paragraph the plan states the ARARs may be waived in certain circumstances. What circumstances will result in waiving ARARs? The plan needs to explain this further. How can the community expect DEQ to ensure an appropriate clean-up takes place when some of the requirements can be waived without explaining further? What are the criteria for waiving the ARARs? pg. 21

- 4.1 Description of the Willamette River and Portland Harbor
- 4.2 Sediment Loading and Transport

The plan notes that Abed transport in the Willamette River is estimated to be insignificant@ but does not detail how this was determined. Clearly this is a critical in determining the movement of contamination in the harbor and beyond the six mile segment noted in the plan. pg. 24 The plan then notes that this issue Ais not yet fully resolved@ and will be incorporated into the remedial

investigation of the harbor. How will this be accomplished through the plan? Appendix G does not seem to make reference to how the data gap of understanding sediment transport will be handled in the Remedial Investigation. These sections also reveal that there are occasions when the water velocities in the river exceed the critical velocities need to transport bed sediments downstream. So why is the study area limited to a six mile reach of the river when some of the known contamination may have been scoured from the river bottom and moved further downstream? Pg. 26

Throughout Section 4 there are several references to the Remedial Investigation Work Plan that will have information pertinent to how data gaps will be filled. There does not seem to be any mention in the plan of whether the community will have an opportunity to review and provide input on this work plan or how this would be done.

Table 7-1 Summary of Technical Evaluation Framework

Why is Objective 3, Protect Human Health via contact or ingestion of sediments, only assessed on a site-specific basis? A harbor-wide assessment should be done as well since the objectives outlined in Section 7.1 do not specify whether the objectives are site-specific or harbor-wide. The objective does not say protect public health only under site-specific areas. pg. 44 and 46

Figure 7-1 Integration of Program, Programmatic and Remedial Investigation Elements

This figure is unclear in the information it is presenting. The diagram indicates in the lower left corner that there may be a situation when there are site-specific toxicity risks and no bioaccumulating risks which leads to a status of No Further Action. How is this route on the flow chart protective of human health and the environment? pg. 49

Several times in section 7.0, the plan notes that if an area is found to be posing a risk or affecting other areas such as the overall harbor then remedial action or a feasibility <u>may</u> be warranted. Why is the DEQ using such subjective terminology when they explicitly indicate that in the Contamination Response Process itself that if a risk is found then a Feasibility Study <u>will</u> be conducted and Remedial Action <u>will</u> be carried out. The choice of words in section 7.0 of the plan indicates that DEQ will not take remedial action on a harbor-wide basis. This section of the plan and others like it should be more clearly written and direct about what the DEQ is and is not going to do on a harbor-wide basis. pg. 56 and 57

7.4.3.2 Outfalls and Natural Drainages

This part of the plan which includes activities related to the City of Portland=s work with CSOs, which empty into the Portland Harbor, is vague. The only other part of the plan that notes activities with the COP for the plan is Figure 8-1c which notes a time line for three activities. Based on conversations with representatives from the COP=s BES in a public meeting the COP has already developed ideas on what the city is planning to do as part of the PHSMP to clean up the outfall areas. Why isn=t this information in the plan? There should be details about how the COP plans on addressing areas contaminated by stormwater outfalls and CSOs.

7.4.3.3 Expanding the Study Area Boundaries

The plan notes that there are other areas of the Willamette River which indicate Asignificant contamination@ so why are the boundaries of this project limited to 6 miles? Additionally the plan says there is contamination upstream and downstream of the Portland Harbor so how can accurate reference sites be selected in the Lower Willamette River? The reference sites are suppose to get Abackground@ or Aambient@ levels of contamination. How will the DEQ ensure they have located appropriate sites if they have already acknowledged that the areas to be sampled are potentially contaminated. Lastly, the information provided in this section seems to indicate the study area should be expanded beyond the 6 mile reach, but the plan provides no criteria to justify not expanding the boundaries. pg. 59

10.0 Costs and Funding? Committing Resources to Get the Job Done

Since DEQ does not know the full extent of the toxic contamination how does the DEQ know that only \$1 million of the state's Orphan Site Account funds will be needed in conducting the RI/FS? Additionally since the cost of the harbor-wide RI/FS is \$2.2 to 3.8 million not including the DEQ oversight costs what firm commitments does the DEQ have that the responsible parties will pick up the rest of the cost? Why aren=t these assurances included in the plan? If costs incurred by the DEQ exceed that \$1 million, then the DEQ will have to delay clean-up efforts at other sites in the state until more funds can be secured. The DEQ needs to commit more financial resources to the Portland Harbor clean-up to prepare for potential problems, and have contingency plans to ensure there are no delays in the clean-up process. The plan also indicates that the responsible parties are suppose to cover the costs associated with cleaning up site-specific areas. What assurances does the DEQ have that they will follow through and not cause a delay in the clean-up process? The plan also does not provide contingencies for when responsible parties are not willing to pay and the state must use the Orphan Site account to clean up the site while litigation tries to get the money from the responsible party. What is the potential for this scenario in Portland Harbor? Why doesn=t the plan discuss the scenario? Can the DEQ afford to use the Orphan Site Account to clean up some of these sitespecific areas, use \$1 million towards the harbor-wide assessment and still maintain the clean-up process at all the other sites in the state? The plan also does not seem to consider what the impact to the project would be if sites are discovered that could not be associated with a responsible party in the Portland Harbor. Traditionally the DEQ would utilize the Orphan Site Account, but with all these other costs potentially coming from this source there is a possibility that the funds may dry up. The state only supplies \$6-8 million to this account on a biennium basis for the whole state.

If a harbor-wide clean-up is warranted then who will be responsible for covering the cost of cleaning it up? This is not covered in the plan and should be because it will cost more to clean up the harbor than to conduct the RI/FS and it will take much longer to do.

What is the likelihood that the DEQ will be able to access fund from the sources in Table 10-1? And why hasn=t the DEQ confirmed whether these sources will be available and applied for them already? The plan gives the impression that there are many additional financial resources available, but there are no assurances that they will work out. The plan should be considering the most conservative funding plan for the state so the Portland Harbor clean-up will not be delayed due to lack of funds and can be prepared for problems that might occur.

In the plan the DEQ notes that financial resources would be available to ensure technical assistance to the public. These funds, such as are available under the federal Superfund program, are necessary to help the community understand the technical issues throughout the clean-up process. Since there are so many sites involved over such a long period of time, and the issues are so complex, the DEQ needs to commit sufficient financial resources for this aspect of the project as well. Details on the amount of funding and the time period of its availability and use should be provided in the plan so the public can be assured that the DEQ is committed to providing the resources.

11.2 Preliminary Discussions with Environmental and Community Organizations

How does the DEQ know it has enough resources and funding to handle the Portland Harbor cleanup when the plan only addresses the project through conducting the RI/FS of the harbor-wide area? What if a harbor-wide clean-up is warranted or if there are several sites identified which can not be linked to a responsible party? pg. 80

13.0 Coordination and Integration of Investigations and Cleanup with Dredging Activities

This section of the plan is critical to an appropriate implementation of the PHSMP and yet its one of the vaguest sections. More details need to be provided on <u>how</u> the DEQ will coordinate clean-up activities with the Army Corps of Engineers.

13.3.3 Modifications to Dredging Projects in Contaminated Areas

The plan states that if it is determined that contaminated material will be exposed at depth after dredging then alternatives may need to be considered. This sounds reasonable until you consider who will be doing the sampling. Since the Army Corps of Engineers homogenizes their samples over barge volumes it raises the question as to whether the Army Corps of Engineers sampling procedure will be able to identify contamination that would be exposed after dredging. How will contamination exposed from dredging be identified and who will be conducting the testing?

When determining the fate of sediments and whether they pose a risk, which set of sampling procedures will be used, the Army Corps of Engineers or the PHSMP? The risk posed by the sediments is the same but the final location of the sediments and interpretation of the data is not. There is a concern that the Army Corps of Engineers dredging process will be used to clean up the harbor since the overall contamination level in the resulting barge will be lower leading to cheaper disposal options. This needs to be clarified and explained in greater detail.

Figure 13-1 Dredging Regulatory Framework Decision Process

The flow diagram asks the question in the lower right hand side of the figure if the sediments are acceptable under the PHSMP. If the answer is yes then no further action is taken, if no then the diagram goes to two options, Upland CID or Natural Attenuation. Based on the plan=s previous discussion of remedial action options the no further action and natural attenuation are the exact same thing. This diagram needs to be clarified because presently it indicates that even if the sediments are Anot acceptable@ then no clean-up measure will be taken. pg. 89

Appendix G Sediment Assessment Methodology

1.0 Background

The Plan refers to the SAM as a tool box from which Athe most appropriate@ tools can be selected. Rather than discussing what is Amost appropriate,@ the Plan should require use of the most conservative tools possible to ensure complete protection of the most sensitive beneficial uses.

The Plan fails to establish what public review of SAPs will take place, and what, if any, participation by public and community representatives will be allowed in the development of these critical plans. In addition, the Plan should establish some guiding criteria for SAPs rather than simply stating that all tests need not be done in each SAP. Much of the outcome of a study can be directed through a SAP. Crucial decisions about what species to sample, location and depth of sediment samples, etc. will largely guide all future work and should be both conservative and consistent.

The plan discusses the applicability of the SAM to the Portland Harbor and indicates the 6 mile reach will be assessed using this methodology including the need for remediation of contaminated sediments. It is unclear from this description and the rest of the plan if the DEQ intends to evaluate sediments throughout the 6 mile reach and determine if clean-up is needed regardless if the contamination can be related to a specific site. pg. G-2

If the SAM, as it states, only applies to the 6-mile harbor and sites within it, what, if anything, applies to the remainder of the Willamette and Columbia Rivers? What are their tool box?

Does the last sentence in paragraph 4 mean that, for example, while it would be desirable to address certain sub-lethal effects of contaminants that to do so might be Abeyond the state-of-the-science@ or Acan not meet reasonable value-of-information criteria@? If not, what does this sentence mean? If so, what other meanings does it have? The Plan should clearly lay out what the DEQ considers the limitations rather than hinting at them here while implying elsewhere that current knowledge will, in fact, be used in this process. pg. G-3

1.1_ Environmental Management Framework

The statement that A[i]mpairment of beneficial uses means exceeding criteria@ is only partially correct. Impairment also includes violation of narrative criteria, the violation of which may be determined by exceedances of guidance levels or other indicators, and direct or indirect measurements of impairment. Therefore, for example, levels of toxic contaminants known to cause detrimental effects and measured detrimental effects are violations of state water quality standards, one measure of lack of beneficial use support. Unfortunately the Plan neither spells out this framework nor does it relate the language used in this paragraph to all of the applicable laws and programs than can or should come to bear on this RI/FS process.

The environmental goals listed in this section indicate there is a desire to Asupport@ commercial use of the Portland Harbor but only Aallow@ human use of the harbor. The choice of words here tends to indicate a preference in goals for using the harbor. This clearly needs to be clarified. pg. G-3 and

Section 7 pg. 44. The goals established for the Portland Harbor clean-up do not include the geographic scope of protection. This section also states, Aevaluation criteria have been established through discussion with stakeholders.@ Does stakeholders include community groups and citizens? pg. G-4

The Plan does not establish if all six management objectives are equal, for example, what=s the relative importance of objective 2? Pg. G-4. Objective no. 3 narrowly defines the human protection sought to be limited to A[p]ersons using the Portland Harbor.@ In fact, human uses requiring protection extend beyond the 6 miles of the harbor. Fish and shellfish upstream and downstream may be contaminated by harbor contaminants, for example. It makes no difference whether a person is exposed within the harbor or outside of it; those beneficial uses require full protection. Similar to Objective no 3, Objective no. 4 is restricted to protection of migratory fish as they transit the harbor but does not extend to protection to migratory fish upstream or downstream of the harbor. Objective No. 6 refers to resident wildlife but does not establish the geographic scope of the populations. The scope of the other objectives implies that protection under this one is similarly restricted to the Harbor. This is inappropriate. This objective also explicitly omits protection of all migratory wildlife that is not threatened, endangered, special status, or indicator species.

Section 1.1

Since Objective No. 2 is based on financial considerations, does DEQ intend to perform a cost/benefit analysis at each site? If so, how does this meet the other objectives? If not, what is the role of this objective? Why are objectives nos. 1 and 2 localized and related only to specific sites? Toxic contamination that migrates off-site to the Harbor and beyond and affects benthic community health should be a concern of the project. In addition, although we object to objective no. 2, why is the objective not relevant to the entire harbor, but rather limited to the specific sites? Even bank-side contamination is relevant to the channel deepening project due to increased sloughing of the sides.

The use of the phrase AHarbor-wide@ in this section is confusing because it often does not seem to be consistent with the definition. For example at the outset of this paragraph presumably the use of the phrase is consistent with the definition but then the discussion uses the phrase Aharbor area,@ which not only is not defined but also implies greater limitation than the definition of harbor wide. This section states that objectives nos. 3 through 6 are generally harbor-wide issues rather than sitespecific issues. This negates the possibility that migrating fish, and threatened and endangered species might be affected by specific sites. Moreover, this paragraph specifically states that evaluations of these species will only address the AHarbor area. @ This eliminates any consideration of harbor impacts downstream. It is inappropriate at this juncture of the study to suggest that evaluations of T&E species are Alargely concerned with piscivorus birds@ thereby negating the impacts to T&E fish. This interpretation is consistent with statements elsewhere in the plan that the Department will look at studies on the impacts of toxic contaminants on T&E fish but hint strongly that the results of these studies will be considered too controversial to apply. It is also inconsistent with the plan which states that dermal contact and ingestion will only be addressed for specific sites. The last sentence in this paragraph reflects this aspect of the plan but uses the phrase Amay be assessed at specific sites.@ Since the plan states that these risks will not be evaluated harbor-wide, it appears that the use of the word Amay@ means that perhaps the risks from dermal exposure and

ingestion will not be addressed at all.

In paragraph 5 of this section, the plan states that the outcomes should be Ascientifically sound@ but fails to explain how the Department will reconcile objective no. 2 with this goal. Moreover, how will the second outcome of being Acost-effective@ be factored in? The reader is simply left guessing. The plan also notes that the outcomes should take into account all Alegal considerations.@ Unfortunately, the plan does not lay out all of these legal ramifications so that the reader can evaluate them him- or herself. This paragraph ends with the statement that the SAM Aprovides a framework for determining whether each of these objectives is being achieved and, if not, for providing information in support of environmental management decisions.@ This is meaningless for the reasons described above, e.g. the possible incompatibility of the objectives. If reduced to its minimal reading, the statement means that decisions will be made and decision-makers will point to information as justification for those decisions, regardless of whether the objectives have been met. This is likely the outcome of this process because of the emphasis on supporting the economic interests of the harbor over all else and because the plan does not state how it intends to address those issues. More specifically, stating that the plan will provide information to the dredging process and/or that programs will be coordinated, ensures that implementation of the plan will not lead to the Department exercising any of its legal authority over those all-important economic interests.

The plan states that evaluation criteria will be created though Adiscussions with stakeholders. @ This fails to make clear what, if any, legal criteria the Department considers binding on this process and who these so-called stakeholders will be.

Section 1.1.1

While stating that support of beneficial uses and water quality criteria are "legally applicable to inwater site cleanups,@ the plan fails to explain how these criteria come into play through the Clean Water Act itself in ways that should affect the clean-up. This plan should not talk about seeking to Aavoid Y303(d) listing Yand subsequent preparation and carrying out of a TMDL plan.@ Rather, it should note that the Department has a legal obligation to list the affected segments of the Willamette and related rivers and to prepare TMDLs for them. Moreover, the plan misses the mark by stating that the cleanups must Abring the site into compliance with the designated beneficial uses.@ First, beneficial use support is just one of four components of a water quality standard, not the only one. Second, collectively the sites are a source of contamination for downstream waters and waters within the harbor which needs to be cleaned in order to meet the allocation of a TMDL for the relevant pollutants. Third, one of the relevant components of the state=s water quality standards is the narrative criterion for toxic contaminants. This should be quoted in this section and the plan should explain how the criterion will be met in all affected waterbodies.

The word Astandards@ in the first sentence of paragraph 4 should be changed to Acriteria.@ Standards are composed of beneficial use support, numeric and narrative criteria, and an antidegradation policy. The confusion in the text about what a standard is affects the meaning of the document. In paragraph 5, in addition to referencing the Atoxicants criteria@ the plan should state both what the criteria are, including the narrative criteria and how it must be applied, and the Department=s 303(d)(1) listing criteria which, although not adopted by rule, are highly relevant to

the application of the standards. This paragraph appears to be the only section of the plan that addresses the other water quality aspects of the cleanup. The plan should not set out information upon which it has nothing to say or no process by which issues will be resolved.

Paragraph 6 demonstrates that the excessive caution in the language of the plan leads to some absurd outcomes. One example is that it states the potential for violations of water quality standards Ashould be@ considered in the development of a conceptual model. In fact, it must be considered. The question is where these criteria must be exceeded for the model to take them into account. The plan does not answer this key question. Although the plan states that the water quality criteria should be included as remedial action objectives, it does not answer why they are not included in the list of objectives presented earlier in the document.

Section 1.2. Many readers of the plan will not understand the reference to NRDA on page G-6. In addition to establishing what a NRDA is, the plan should not make statements that are not explained. While the text emphasizes that this sediment assessment will not be preliminary work toward a NRDA, it does not explain why not, what the difference is, and how that work will be conducted separately or in conjunction with this project effort. Likewise, although it states the plan might Ago a long way toward resolving questions@ it does not explain why or how this might lessen the length of NRDA-related proceedings and comprehensive settlements. In other words, it says nothing. Assuming that this section is improved so that it does say something, it must address the impact of Portland Harbor toxic contaminants on the Columbia River estuary. The plan might want to address whether the plan would be more helpful to the NRDA process if it, in fact, took the estuary into account. Alternatively, if DEQ does not believe that the plan should dovetail in any way with the NRDA, it should simply say so.

2.1 Site Description

The Portland Harbor was defined as existing from RM 0 to RM 14. This is clearly inconsistent with other parts of the report which indicate the area under study is from RM 3.5 to RM 9.5. The former description includes an additional 8 miles of the Lower Willamette River and although this is a more comprehensive approach to addressing the sediment clean-up of Portland Harbor its seems to increase the size of the project significantly. pg. G-9. Rather than simply being errors in the text, the amount of confusion about the geographic scope makes this appear to be a case of deliberate obfuscation.

The plan states that A[m]ost development along the Willamette River has occurred within Portland Harbor. Given the extreme state of overall development, as opposed to specifically heavy industrial use, throughout the Lower Willamette River and the basin generally, this is a poor description. Moreover, it is a misleading one because it implies that these sites are the legitimately the sole focus of attention. The problem with focusing on the most egregious sites alone is that by failing to include the contributions of other sources and other pollutants in determining the risk and remedial approaches for these sources, the clean-up levels for them will be underestimated. The more DEQ insists that it cannot and should not evaluate the risks posed by upstream pollutants, the less conservative its analysis will be. The plan goes on to describe the shipping channel. It is our understanding that technically the shipping channel in the Lower Willamette is bank to bank.

2.2 Contaminants of Interest

Discussions of the use of Abackground@ levels for evaluating levels of contaminants completely avoid the need to conduct Clean Water Act evaluations in order to make sense of this clean-up project. Moreover, it appears that DEQ will disregard the background risk as it calculates the risk posed by the COI, thus failing to protect the beneficial uses. With regard to certain metals, the plan appears to consider this but only for the purpose of determining whether metals may interact to increase or decrease the toxicity of the COIs. The plan does not make a commitment to evaluating this, however, but merely states that Afurther review may be necessary.@

2.2.1 Toxicity

The plan states: AWith the exception of the Corps of Engineers data, these sampling locations were generally biased toward contaminated areas. It is reasonable to assume that these additional analytes are not likely to occur in the Portland Harbor sediments unless there is a history of use and discharge at a specific facility or source area. If these additional analytes are no longer to be assessed in the Portland Harbor then there is a possibility for a large gap in the assessment of contaminants in the Portland Harbor. How will the DEQ know if these analytes are not present in the rest of the harbor if the DEQ does not sample for them? Unless all of the industrial activities along the 6 mile stretch of the Lower Willamette River, past and present, are reviewed then it can not be assumed that the analytes are not present. Another approach to justify your assumption would be to do Aspot checks during the harbor-wide RI/FS to check a few of the samples for these analytes.

This section of the plan also states that chemicals detected less than 5% of the time were not considered COIs in Portland Harbor and dropped from the list. This assessment does not consider the magnitude of these detections. Although a given chemical may be detected less than 5% of the time across the Portland Harbor it may still be an issue for a given site. Additionally the terms Abackground@ and Aambient@ concentrations are used several times but the difference between the two is not clear. ABackground level@ is defined in the glossary of terms, Appendix K, which tends to indicate a level before contamination or a release of hazardous substances occurs. ABaseline@ levels is also used in the same section, and again its definition is not clear. pg. K-1,G13 and G-14.

The plan states that sediment quality guidelines for benthic toxicity will not be developed for a series of potential COIs named in the second full paragraph of page G-13 because Athere are not enough data to perform the calculations. This is an extremely poor rationale on which to base a decision. The text goes on to say that they could be developed on a site-specific basis if needed. The plan does not explain the difference between such guidelines as site-specific and harbor-wide. It does not explain the potential effect of delays caused by the need to gather more data. It does not explain how DEQ will assure that there is adequate analysis of other contaminants in the absence of complete information. It appears that, while DEQ gives lip service to the issue of the additive and synergistic properties of toxic contaminants elsewhere in the plan, it does not intend to actually evaluate that prospect.

This section also indicates that if there is reason to believe a chemical would not be present at a specific site then if could be dropped from the COI list for the site Aat the discretion@ of the site manager. This leaves the decision solely up to the site manager but provides no indication how the

site manager will justify a conclusion to drop a contaminant from the list. Sediment samples should demonstrate that the COI is not present for the site or a documented history of uses should be provided for the site. pg. G-13. Again, the emphasis is on the risk posed by individual COIs (ACOIs are not present at high enough levels to cause adverse effects@), negating the effect of multiple pollutants. Moreover, great emphasis is placed on DEQ=s review of historical records but DEQ admits that such records are a poor source of information. There is nothing in the plan to address this issue.

This section perpetuates the lack of clarity with regard to the geographic scope of this undertaking by adding use of the phrase AHarbor Area@ in the same sentence as AHarbor.@ What subtle distinctions are at work here? In section 2.4.1, the plan discusses the Harbor with regard to shoreline development in downtown Portland. Is that the Harbor too?

2.2.2 Bioaccumulation

Octanol water partitioning coefficients for organic chemicals great than 3.5 were retained as bioacummulative COIs. This was stated as being consistent with other regional clean-up and dredging programs as noted in several references. This partitioning cutoff is critical in determining which COI are classified as bioaccumulating. Further discussions concerning this cutoff of 3.5 should be presented here. Information and or justifications from the references should be introduced here briefly so it=s clear to the public why a partitioning coefficient greater than 3.5 is the cutoff. pg. G-14

How will fish be protected from PAHs? This section of the plan explicitly indicates that many PAHs have an octanol water partitioning coefficient greater than 3.5 and that fish metabolize them and suffer from adverse effects. If PAHs in the Portland Harbor pose a danger to fish then why doesn=t the plan present any information on how tissue guidelines will be developed. pg. G-14

It appears that the issue of exchanging the willing collaboration of the responsible parties for lowering the costs of evaluation and clean-up has already begun, as the plan refers to the Aresearch-intensive@ nature of developing tissue guidelines for fish and wildlife. It then goes on to tally the rather paltry set of samples obtained in previous studies with no information about what species were involved or what type of samples were analyzed. The plan does not explain why this set of data are sufficient upon which to base the decisions about what will be confirmed COIs for tissue, what will be studied, and what will be ignored.

2.3.1 Benthic Community

A reference was made that it was important to determine whether a benthic community could be supported by the harbor if it were not for contaminated sediments. This determination is critical to the Portland Harbor studies, but it is important to not loose sight of the fact that 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 and ho it will affect the harbor clean-up. pg. G-16.

2.3.2 Fish

There is no discussion in this section of the plan about the need to minimize the risk to certain fish species and stocks based on their ESA status. Numeric water quality criteria are determined through calculations that take into account acceptable risks. Since the risks allowed to normal populations obviously should not be deemed acceptable to those populations on the verge of extinction, DEQ should be able to state in this plan that it will recalculate those risks and the process by which it will do so.

Nothing in this section addresses the pathways by which fish are affected by toxic contaminants or information about how they can be evaluated. There is no discussion of lipid content of these fish, of their food sources, of the impact of contamination downstream from the Portland Harbor, of their role as food for other species, of information about what types of pollutants tend to be found in their tissue, etc.. In short, this section is nearly useless with regard to this plan.

2.2.3 Birds and Mammals

This section of the plan is a joke. There is no information presented concerning the levels and types of fish species consumed by piscivorous birds and mammals, an evaluation of a broader geographic area, the likelihood that upland contamination puts these species at greater risk, their relative sensitivity to contaminants, their ESA status, measured impacts to these species from toxic contaminants, the level of information that exists about them, the relationship of downstream contamination on these populations, etc.. There is nothing but a statement that some of the species are Aprotected under the Migratory Bird Treaty Act.@ Of what relevance that has is unclear because the plan does not explain how that law might alter DEQ=s obligations to protect these species.

2.3.4 Human Populations

A river bank fishery along Multnomah Channel was mentioned in this section but its is not clear if the risk assessment will also include this stretch of the Lower Willamette River. Multnomah Channel is directly influenced by activities in Portland Harbor and should be incorporated into the RI/FS of Portland Harbor since it is a popular place for fishing and is just downstream from the harbor. pg. G-20. This section fails to address the use of the Willamette as a commercial crayfishery. No information is presented on risks posed to people consuming fish and crayfish in the area. For example, the 1987 National Bioaccumulation Study evaluated crayfish immediately downstream of McCormick and Baxter. There is nothing said about the use of the river at Cathedral Park, of Willamette Cove. In short, this section is not useful or thoughtful.

2.4 Potential Exposure Pathways

The fate and transport processes listed do not include the transport of contaminants from upstream. Clearly contaminant transport from upstream must be evaluated with the others in order to assess which contaminants came from upstream and which are from local sources in the harbor. Additionally by considering the transport from upstream other contaminated sites may be more readily identified upstream and could be pursued as other active clean-up sites. pg. G-20. This section states that if an exposure pathway Ais not complete@ it does not need to be evaluated further. This simple statement negates the issue of whether the pathway was complete in the past and

whether it may be in the future. To ignore both of these issues is to corrupt the study. How can DEQ say that it will evaluate the Anature and extent of the contamination@ from the sites if it is unwilling to evaluate the extent of past releases? How can it be realistic if it does not take into account natural and anthropogenic disturbances that may Acomplete@ the pathway in the future?

2.4.1 Sediment Sources and Transport

The plan refers to the Harbor as having a Arelatively stable channel. Where is a discussion of the potential effects of a channel deepening project, not only the proposed project but those that are likely to come in the future if this one goes forward? DEQ cannot put blinders on and pretend away development pressures.

According to calculations made on the amount of sediment entering the harbor and from upstream there is about 1.5 million cubic yards of sediment that discharge into the Columbia River from the harbor. Some of this sediment is from upstream of the harbor but some is also from the harbor itself. This needs to be more clearly investigated. Additionally the plan states that most of the sediments settle out either in the Columbia estuary or the Pacific Ocean. Have the sediments in the estuary been tested? Granted there are many potential sources of contaminants which could contribute to any overall contamination in the Columbia estuary from both the Willamette and Columbia basins, but shouldn=t these locations be investigated as well?

Bed load transport from Portland Harbor was described as being minimal but it was stated that the Aissue is not yet fully resolved. So what will it take to resolve it? The issue raised here about better understanding the transport of sediments from the harbor downstream is important. This question needs to be addressed if the contamination in the harbor (and downstream) is to be appropriately addressed. If a better understanding of the sediment transport is not achieved then how can the clean-up be protective of human health and the environment when the movement of potentially contaminated sediments is not understood? Lastly, without understanding the sediment transport from the harbor how can the clean-up line be drawn for the Portland Harbor at RM 3.5 when areas downstream of the harbor could be contaminated by sediments from the Portland Harbor? pg. G-24. The plan itself discusses the substantial percent fines in the area of RM 5.1 to the mouth. This is not only relevant to the extent of the contamination but also the effect on the beneficial uses many, if not most, of which actually move within this area.

Nowhere in this section does the plan use the information that it provides to evaluate the sampling protocols that have been used in previous studies (e.g., sampling the top two centimeters based on the judgment that that represents one year=s worth of deposition). No information is provided on the role of the Multnomah Channel as a link between the Willamette and Columbia Rivers. There is no discussion of how much of what goes where after it leaves the Harbor, or the roles of dredging and high seasonal flows. The plan almost attempts to pretend away these circumstances instead of addressing them head on. Where information is presented, such as that high flow events Amay exceed 2-4 times the critical velocity@ the plan does not evaluate the frequency of such events, the effect of these events, but merely states that this information raises Athe possibility for significant out-of-Harbor transport of contaminated sediment.@ How significant? If DEQ doesn=t know, how will it find out?

2.4.2 Contaminant Sources and Transport

The emphasis in this section is on restricting the scope of the analysis (Ahelp to focus@ and Alimit the number@) without due regard to the need to ensure a broad enough study is performed. In fact, the plan simply doesn=t even discuss the need to weigh these two broad policy objectives against one another. Like other parts of this plan, this section does not clearly evaluate the known or suspected data gaps and discuss how those gaps will be addressed. It merely makes observations such as Avery little data exist.@ That=s what makes this a report, not a plan.

The second paragraph in this section dismisses data about contamination from upstream without making a citation to the data collected and discussed. A conclusion contradictory to this work was then made a sentence later referring to other data collected but no citation to the report or project was made. This kind of discussion is misleading and speculative when not providing citations to actual research conducted. pg. G-25 and G-26

In this section an indirect comparison for evaluating contaminant loading from upstream was suggested. The plan proposes comparing sediments in depositional areas of the navigation channel away from site sources against sediments in near shore areas close to potential sources. This indirect evaluation may be useful as long as the two sites under comparison are at the same or close to the same river mile distances. pg. G-26

Comparisons were made in this section of the plan between the EPA collected data and data collected by Army Corps of Engineers (ACOE). There was no discussion on how the samples taken by the ACOE were done. Were the DDT samples taken as discrete points or as homogenized samples during a dredging operation? Regardless, since it is known that in some cases the ACOE uses a different sampling technique this should be clarified when comparing data. Clearly if the ACOE uses a different sampling technique for the data presented here then a different conclusion might be derived from the results. pg. G-26

Generally, the discussion in this section stops short of being useful. Are grain sizes comparable between studies? How did DEQ or others determine whether contamination came from localized sources or upstream? How can DEQ make assumptions about sediments generally not tending to be resuspended, as if there is no anthropogenic activity or high flow events? What is the relevance of the PGE Electric Station L site, given its location in the river? What other examples are there? Are there no data on migration from the McCormick and Baxter site? How can DEQ state that there is little likelihood of commingling? What=s the basis except for one very large and unsupported assumption? What is the value of this assumption and is it conservative?

2.4.3 Exposure Routes

This section is based on general assumptions and indicates the low level of attention that has been placed on this issue. There is readily available information on the consumption habits of some of the piscivorus wildlife which should be presented here rather than a vague and unhelpful series of statements about general assumptions. Why is there no discussion of data gaps and what will be done to remedy them? Why is there no discussion of conservative assumptions? Why is there no

information presented?

2.5 Conceptual Model

2.5.1. Assessment Endpoints

The plan states that the assessor developing the conceptual model should check with the environmental manager and stakeholders to ensure the model provides the information needed to make appropriate environmental decisions. Who are the stakeholders? What framework has been developed to allow the stakeholders to participate in reviewing the conceptual model? The plan is lacking details in providing information how a larger community can play an active role in how the plan, e.g. the conceptual model is developed and finalized. Then in the next section assessment endpoints are suggested to be discussed with the public and later mentions stakeholders. What is the difference between the two? Do the stakeholders represent the Portland Harbor Group? Between whom is a consensus to be reached? If so then why doesn=t the public have an opportunity to participate in the review of the conceptual model? This is another key aspect of the plan=s implementation and dictates many future actions in the clean-up process. It is important to include the public in these steps to ensure their interests are considered. Where is there a discussion of the Clean Water Act requirements to protect the most sensitive beneficial uses? Does DEQ really believe that endpoints must protect both navigation and sensitive species? Does DEQ believe that the Endangered Species Act supports its stated view that navigation is co-equal to protection of sensitive species? pg. G-28 and G-29.

2.5.2 Testable Problem Statements

The plan states in this section that stakeholders should be involved in developing the criteria for each problem statement and that the assessor should remain faithful to these criteria when conclusions are reached regarding adverse effects. How will the assessor be held accountable to abiding by the criteria established in coordination with the stakeholders? What framework is in place to allow stakeholders to learn about and participate in developing problem statement criteria and assessment endpoints? pg. G-30

2.6 Risk Characterization

When DEQ develops wildlife TTLs and includes an Ainterpretation of ecological significance@ what does that mean? Does that suggest that some species can be sacrificed because they are not threatened or endangered or important to the food chain?

Figures G-1 and G-2

Figure G-1 is missing a connection pathway from the benthos compartment to the fish compartment. pg. G-32 See also Figure 4-3 on pg. 33 for the same error.

In Figure G-2 it is not clear how Phytoplankton Detritus compartment goes to Aquatic Plants in the diagram. Additionally, why isn=t there an arrow from the Phytoplankton Detritus to the Benthic Invertebrates and another from the Aquatic Plants to Benthic Invertebrates? pg. G-33

3.0 Technical Evaluation Framework

The plan states that its objectives Aderive from the mission statement. That=s a problem since the mission statement was created by the Portland Harbor Group and DEQ to the exclusion of the public.

3.1 Site, Harbor, Reference Area Investigation Coordination

Reference area selection was discussed in this section of the plan and noted that reference areas will come from the first 26 miles of the Lower Willamette and not from the Columbia River. This statement, although appropriate, is inconsistent with other parts of the report which state that reference areas may be selected from the Columbia River. Reference sites for the plan should not be taken from the Columbia River basin because the sediments will not be as representative of the sediments typical in the Willamette River basin. The two basins are different both in land uses and the types of pollution which contribute to their respective river sediments. In order to more accurately assess the contamination levels in the Portland Harbor reference sites should be selected from within the Willamette basin, preferably in the Lower Willamette river if Aclean@ sediments can be located. pg. G-34, and Section 7.2.3, pg. 53

This section of the plan states that only if the harbor-wide evaluation of bioaccumulating chemicals indicates there is a risk posed by the contaminants then site-specific investigations of bioaccumulating contamination will be preformed. What does this mean? The plan seems to be suggesting that if there is no harbor-wide bioaccumulating contaminants risk then investigations at specific sites are not necessary. It is these very site specific areas where contamination levels are higher that are likely to have harmful levels of bioaccumulating contaminants. Presently it is difficult to know where a fish will move throughout the Lower Willamette River or how long it will stay in one location, but this should not result in site specific areas being exempt from investigating bioaccumulating contaminants. The plan should be clarified here and expanded to ensure that bioaccumulating contaminants do not pose a risk on a site-specific and harbor-wide basis. pg. G-35

How can literature surveys provide the information needed to avoid Acosts and time@ involved in obtaining required information? Presumably DEQ has already cited all relevant literature. The plan should clearly establish the data gaps and how they will be filled instead of vague references to ways to save money.

The title of this section is about coordination. There is nothing in the text that refers to coordination.

3.2 Objectives (1), (2) - Benthos

Clean sediments are defined as Athose that do not restrict dredging or other commercial activities.@ The purpose of the sediment management plan is to meet all 6 of the objectives stated in the plan and although this section is specific to the first two objectives the definition provided for Aclean@ sediments is not representative of the other objectives of the plan. Additionally, some people would define Aclean@ sediments as having no contaminants at all. This definition puts the commercial interests of the harbor ahead of human health and the environment. pg. G-35

Section 3 in general

What if harbor-wide sediments pose a risk to human health or the environment relative to the concentrations at the reference sites? The plan does not seem to consider this scenario. The plan seems to assume that the contamination found across the harbor is low enough to not pose any risks and hence no feasibility study and clean-up. Whether the harbor-wide sediments do pose a risk or not the plan should openly discuss this scenario.

3.3.1.2 Decision Guidelines (Human Use)

The plan mentions that if a responsible party chooses not to use the Remedial Action Objectives (RAOs) developed from the harbor-wide TTL and BSAF that they can undertake their own testing necessary to develop site specific RAOs. The plan does not discuss how this will be carried out and what will happen once the site-specific RAOs are developed. It is not clear what happens if the RAOs developed by the responsible party result in higher Aacceptable@ levels of contamination than the harbor-wide developed RAOs. Which version of the RAOs will then be used and why? Will the DEQ be making the decision on which set of RAOs to use for the site or will the responsible party be obligated to use their RAOs whether they are higher or lower than the harbor-wide developed RAOs. Although this process sounds reasonable on the surface many details have been left out on how this will be successfully implemented to be protective of human health and the environment. It appears that there is a lot of room for abuse in this approach. pg. G-43 and G-98

Several references are made throughout Appendix G to AFDA action levels@ but this does not seem to clarified as to what they are and how they relate to the rest of the plan. Specifically, it appears that DEQ intends to abandon its own water quality standards in favor of levels of toxic contaminants that are generally much greater. pg. G-44

Figures G-5 and G-6 show decision guideline flow charts for meeting objectives 3 (food), 4, 5, and 6 on a site specific basis but there are no decision guidelines outlined for meeting these objectives on a harbor-wide basis. The plan clearly states that it will be focusing on the 6 mile reach of the Lower Willamette River called Portland Harbor, and decision guidelines for objectives 1 and 2 were discussed on a harbor-wide and site-specific basis. The plan does not clarify this or explain it and it should. The plan states that harbor-wide data will be collected and used to develop the SQGs, TTL, TSC and the BSAF but there does not seem to be any discussion on then using these guidelines to see if there are any non site-specific areas in the Portland Harbor which pose a problem. pg. G-43 and G-46

The plan does not establish how the risks associated with non-treated COIs will be factored into clean-up levels of the clean-up COIs. This perpetuates the notion that appears throughout the plan that if the contamination cannot be strongly linked to a particular site, it somehow does not pose a risk that must be addressed.

3.3.2.2 Decision Guidelines

Again, the plan is short on information and how it will fill data gaps with regard to protection of beneficial uses. Instead of generalizations about typical Northwest consumption patterns, the plan should actually outline what it known and what is not known and needs to be determined and how

about the Portland Harbor and downstream areas.

3.4.2.2 Decision Guidelines (Fish and Wildlife)

This section notes that if harbor area tissue concentrations exceed the TSC then the contamination evaluation moves to a site-specific level. Although this may be a prudent suggestion, it assumes that all harbor area contamination exceedances are caused by identified site-specific sources. What if the tissue concentration exceedance is due to an unknown site source or from harbor-wide contamination? No matter how likely this scenario is the plan needs to address these questions in order to ensure all sources of contamination have been reviewed and subsequent risks assessed. pg. G-50.

Once again, the plan avoids discussion of the lower Willamette and Columbia Rivers, including the estuary, when discussing the impacts to fish and wildlife. The plan states but does not explain how Athe significant differences in gross morphological or histopathological changes in fish soft or hard tissues between Harbor and reference areas could also be used to assess adverse effects. This section of the plan notes the impacts of toxic contaminants in Puget Sound studies but goes on to say that doses chosen would be Apreferably related to a reproductive endpoint. How does this take into account the new information?

4.1 Purpose

The plan does not explain why it is beneficial that A[m]any of the methods described within this plan [for sampling] have been selected in order to be consistent with/complimentary to the existing dredged material management guidance.@ How does this ensure that the objectives are met? When will the public and its representatives get to have input into the detailed work plans for sampling?

Table G-10 Potential Sample Types

How does the 5-10 cm surficial contamination related to the 7 inches of depositional materials from storm events referenced earlier in the plan? Why doesn=t the plan identify where previous sampling indicates that this is an appropriate approach to take? What does this say about previous sampling done evaluating only the top 2 cm of sediments?

4.2.1 Sample Types (tissue residue samples)

Where is the information about the species and type of tissue that will be used to determine sampling? The plan simply notes that there are considerations about human health, about cultural practices, and about wildlife but it does not state what its conclusions are, whether it in fact already has conclusions, who will be involved in making those conclusions if they are not yet made. These kinds of decisions have great impact on the results of the sampling yet little to no information is provided.

4.2.1 Sample Types (surveys of epifaunal and nektonic species)

This paragraph mentions that if the surveys are done over time such as seasonally then temporal information on use of a given site could be determined and used for identifying receptors. This

raises an issue of how these various biotic surveys and chemical sampling will be conducted. The details on where, when and how many sites and samples will be taken is left out of this report (as may be appropriate), but there should be some indication of whether the public will get an opportunity to see another document such as the work plan mentioned in the PHSMP where the sample plan is more thoroughly described. Will temporal studies be conducted in Portland Harbor to better characterize receptors? pg. G-55

4.2.2 Sampling Station Location

How will Aother stakeholders@ be involved in selection of sampling sites? How will DEQ and others determine Aappropriate sampling locations@ which depend Aalmost entirely on what it known about a site@ when DEQ has already acknowledged that it knows very little about the sites. Why does the plan refer to a Amajority of cases?@ There are 17 sites; the plan should be specific about what is known about each. The discussion in the plan is interesting but unhelpful. For example: AThese stations may be evenly spaced or targeted to areas of known contamination.@ There aren=t too many other alternatives. The question is, will there be sufficient sampling done to ensure that enough information is developed about specific contamination as well as its broad distribution or will, in the interests of keeping costs down, will sampling be unduly restricted or skewed to demonstrate low risks or lack of responsibility? The plan does not establish the role of random samples but merely states that where there are records of spills, sampling should follow up.

The plan states that the Aselection of the reference operationally defines the environmentally acceptable endpoint.

It does not explain how this is consistent with the Clean Water Act.

4.2.4 Sediment Sampling Depth

A list of issues is provided when determining the sediment collection depth in this section of the plan. The first item on the list mentions that Aif depositional rates are known,@ which raises an issue not addressed in this list. What if the depositional rates are not known? Will multiple depth samples be taken to ensure the biologically active zone or a contaminated zone are reached and included in the sample? Additionally, this section does not mention what happens if the area experiences scour in the river. This would clearly indicate that any contaminated sediment would be removed from the site to be sampled to a new location. The list of considerations should be more comprehensive. pg. G-57

4.2.6 Other Considerations

These are significant concerns that have been given short shrift.

4.2.8. Timing of Sampling

How can the timing of sampling Agenerally not [be] a critical factor@? This assumption is extremely odd considering the logistical concerns raised in section 4.2.6., the effect of dredging activities, the timing of high flows and deposition, and the use of the waters.

4.2.10 Sampling and Analysis Plan Documentation

This section discusses the site specific Sampling and Analysis Plans which will take place as part of the overall Portland Harbor Sediment Management Plan. Although this section lists what the SAPs must have in common it is not clear how these plans will be coordinated with overall harbor activities. For example, how will the mangers handling the SQGs and the harbor-wide assessment ensure the individual SAPs meet all of the items listed on pg. G-60 in the plan? In order for the SAPs and their implementation to be useful to harbor-wide work the DEQ would need to ensure the individual SAPs meet their needs. How the DEQ will ensure this is not detailed in the plan. pg. G59 and G-60

4.3.3.1 Discrete vs. Composite Samples

In this section, the description justifying sample compositing seems to be quite subjective. It is not clear how the DEQ will ensure that appropriate samples are collected from the harbor when the guidelines for determining whether to take discrete or composite samples are vague. This decision will have tremendous consequences on the sampling analysis and subsequent clean-up objectives. The plan should more clearly delineate the criteria for compositing samples. pg. G-67 6.1.3 Applicability

This section makes reference to using the SQGs, TSCs, and TTLs to assess sediment and tissue quality on a harbor-wide basis. Taken with references from the main part of the plan there is only a vague indication that a RI/FS will be done for the 6 mile stretch called Portland Harbor. This plan has been vague and circumspect about whether a harbor-wide risk assessment will be done and whether a feasibility study and possible remediation will take place on a harbor-wide basis. The plan leads people to believe the RI/FS will be done by reading the main document but after reading the whole plan it appears as though the DEQ is not going to do this. The plan indicates that if harbor-wide risks are found then the focus will be steered towards site specific sources of contamination or blamed on sources from upstream of the harbor. The harbor-wide process needs to be clarified further in the context of the DEQ=s own Contamination Response Process. pg. G-99 and Section 7 of the main document.

This section also mentions that the SQGs developed will not be immediately applied to dredge material evaluations. Why not? It also mentions that the Lower Columbia River Dredged Material Evaluation Framework Amay@ be revised once the SQGs are developed. This needs to be clarified further. Other aspects of this plan indicate there is going to be a lot of collaboration and integration with dredging activities but the statements here read like large loopholes in the plan. What are the criteria for having the dredging framework use the SQGs and why are these details not provided in the plan? pg. G-99

6.2.2.5 Derivation of Bioaccumulation-Based RAOs for Sediments

The plan discusses here the area-weighted concentration which fish would be exposed to in the harbor. The approach used in the analysis implies that the entire harbor is a single exposure unit for fish. Does this further imply that if the contamination level warrants a clean-up that a harbor-wide clean-up will be conducted? The subsequent discussion in the same paragraph implies something

different, that large contributing sources to harbor-wide contamination will be dealt with until the harbor-wide concentration is no longer a risk. This approach leaves many Aholes@ in the clean-up process and should be better explained in the plan and how this piece will be integrated with other RAOs for the Portland Harbor. pg. G-120 and G-121

6.3.1.4 Summary of Chemistry and Bioassay Data

The plan states, AHowever, for risk assessment purposes, it does not appear that a Harbor-wide toxicity study is needed; site-specific investigations should be sufficient to delineate areas of benthic toxicity within the Harbor. @ How was this determined? This conclusion is rather significant for the implementation of the plan and yet there is no discussion about how this conclusion was reached. pg. G-126

Appendix I

Community Relations Plan for the Portland Harbor Sediment Management Plan

The first glaring error to note in the plan is the use of the word ARelations@ in the actual title: ACommunity Relations Plan.@ The word Arelations@ can be defined as Athe act of telling or narrating@ or as Areference or regard, connections@ (New Collegiate Dictionary). The word Arelations@ tends to indicate a separation between the actual agency and plan being implemented and the people affected by its implementation. This is quite different than if the DEQ stated Appendix I was a ACommunity Involvement Plan.@ Involvement indicates Ato draw in as a participant or to include in as a part@ (New Collegiate Dictionary). This results in a different meaning for the plan. If the DEQ is interested in having the community participate in the Portland Harbor clean-up then, to start, Appendix I should be titled ACommunity Involvement Plan.@

How is Section 3 part of a community involvement plan? The information in Section 3 can be found in other parts of the plan and is obviously just for the purpose of making this appendix look bigger.

The origin of Section 4.2 is not clear and as noted in conversations with the DEQ in public meetings is only a sample of the concerns noted by environmental groups and others before the release of the PHSMP. Why are these sample concerns in the Appendix I? Why do comments from community members belong in the community involvement plan? These should be located in either Appendix C: Public Activities Conducted During Plan Preparation or Appendix J: Public Review Comment Responsiveness Summary.

Section 5

This section provides a list of the AKey Stakeholders@ for Portland Harbor but the list does seem to include how subsistence fishers or homeless people who frequent the banks of the Willamette River will be kept informed of issues related to the PHSMP implementation. These are obvious groups of people who may be exposed to contamination through fish consumption or direct contact with sediments.

At minimum signs should be place along both banks of the Willamette River throughout the 6 mile

reach called the Portland Harbor to inform the public that this stretch of the river is an active cleanup project. The signs should be informative, provide some warning about the sediments, and provide information on who to contact at the DEQ if the public has any questions. The signs should not use scare tactics and should be periodically updated as more information about the nature and extent of the contamination in the harbor is known. Additionally, the signs should be very sturdy and well mounted in the ground to discourage vandalism. Lastly, the signs should be in more than one language to reflect the ethnic background of the people who frequent the banks throughout the Willamette River in Portland Harbor.

Section 6

The first bulleted item should refer to section 5.0 not section 4.0. The second bulleted item refers to mailing information out to interested parties, which sounds effective for keeping the public informed, but there is no commitment made as to how frequent information will be mailed out or whether the mailings will correspond with key opportunities for the public to review future documents. Bullets 3 and 4 mention notifying interested parties of public meetings on issues related to the project but again there is no commitment to actually do this on a regular basis. Additionally the plan does not state how an interested community group can request a public meeting. Is it simply a phone call to request one or something more? This needs to be clarified and the DEQ needs to demonstrate their commitment in the plan.

Another bulleted item states the DEQ will provide opportunities for the public to comment on public documents, but again there is no commitment by the DEQ showing how frequently they will provide these opportunities and how the Aopportunities for comment@ will be done. Will there be open houses for each new document? The plan needs to clarify this. This item in the plan also seems to indicate that public comments will be stored in a database but the plan does not mention whether this database will be actively reviewed by project managers to see if comments will warrant changes in the plan or whether implementation might have to be modified to address community concerns.

Appendix G mentions there is an interest in having community groups and/or the public participate in the process of developing sediment quality guidelines through technical workgroups. Why doesn=t Appendix I have details on this and why doesn=t the plan say anything about these technical workgroups? The community involvement plan does mention technical workshops, but these are not the same as the decision making technical workgroups discussed in Appendix G. Clearly this is major oversight in Appendix I because these technical workgroups are so critical to guiding the clean-up. Perhaps this reflects DEQ=s intent to keep the public from participating in these technical work groups as it has in the previous groups that helped prepare this plan.

The plan does not state how public comments will be handled for the draft of the PHSMP. The plans states the comments will be listed and responded to in Appendix J but the plan does not say how individuals will be informed of the DEQ=s response to their comments. Clearly individuals are not interested in sifting through 100 pages or more of responsiveness to find their comments. The plan should consider this issue and should also provide for the instance when comments will result in a change in the plan. The fact that the DEQ plan puts the public comments and responses in a separate appendix indicates the DEQ is not planning on the comments actually changing the plan. This whole

issue of responsiveness to public comments needs to be addressed more extensively.

The report does not state whether there will be additional opportunities for the public to comment on the current plan if the EPA gives its go-ahead to the DEQ in June.

The plan mentions that Aselected@ Multnomah county libraries will be repositories for public information on the project. How will the DEQ let the public know which libraries have the information, and what documents will be supplied to the library and which ones will not be supplied to the library?

Another bulleted item proposes providing technical and financial assistance to a community group during implementation of the PHSMP. The idea sounds good to help the community so they have their own technical assistance in understanding the issues related to implementing the plan. The DEQ provides no details on this technical and financial assistance. How is the public suppose to have faith in the DEQ proposing such an approach if they do not provide the details? Additionally how will the public know about this opportunity and how to apply for the financial resources if the details are not provided in the key plan document released to the public? If the details are provided later, will an announcement be made with as much fanfare and public notice as the PHSMP itself? Lastly, based on discussions with the DEQ the details of what the community wants for such technical and financial assistance will come out of Community Interviews which the DEQ will conduct. This was not mentioned in the plan. Community Interviews are noted in the plan but no details on what these interviews are or will cover are provided. The purpose and goals of the Community Interviews should be detailed and integrated better with other items bulleted in section 6.0.

Section 8.0

The implementation schedule for the community relations plan is vague and short term. While recognizing that the schedule may change over time as noted in the plan, the schedule does not commit to anything after September 1999 nor does it mention how the community will learn how the community involvement plan will change as a result of the Community Interviews to be conducted in June, 1999.

Attachments A through C. How are these part of the community relations plan? Are these here to show examples of what will be coming for fact sheets or examples of what has already been done?

Attachment D. How is a less than five minute spot on the Fox evening broadcast of 1/17/99 considered a Portland Harbor meeting? Not enough information was discussed to educate the public. Additionally if this is what the DEQ calls a meeting then it raises questions about some of the other Ameetings@ listed in Attachment D, in at least one of which the Portland Harbor was not even discussed.

Overall the community involvement plan seems to be poorly put together. There are a lot of great references to keeping the public informed but no commitments in the plan which people could comment on in the draft or rely on later during implementation. The draft PHSMP is the perfect

opportunity for the DEQ to make public involvement commitments to the community and have the public comment back on it through this comment period. This will immediately let the DEQ know what people think is lacking or missing from the plan. The plan presented in Appendix I is so vague there is not much one could complain about because there are no commitments in the plan. The Community Interviews, to find out Ahow the public wants to be kept informed,@ is one approach but should have been done months ago and the results put in the draft plan. How is the public going to find out the results of the Community Interviews and how the community involvement plan will be implemented? How will the community have an opportunity to review the Afinal@ version of the community involvement plan to ensure it meets their needs?

If Sections 3 and 4 and the attachments are removed from Appendix I then there is not much of a Aplan@ there. The appendix says: A2.0 Objectives,@ A3.0 Project Overview,@ A5.0 Participants,@ A6.0 Plan Implementation.@ Where is the actual plan itself? A community involvement plan should have just that, a plan, designed to meet its objectives and then a list of tasks or strategies which will be used to implement the plan can be provided.

For example, in Appendix I references are made to reviewing the plan and addressing community needs but there is no mention of a Afeedback loop@ to change the plan itself or who would be involved in the review process. There should be something like a flow chart showing how the plan will work, how it will change over time, how input can made by the community to modify the community involvement plan and the PHSMP, and include commitments by the DEQ to review the plan quarterly etc. Additionally the DEQ should commit to holding public meetings at specified stages throughout the Contamination Response Process for the specific sites and the harbor-wide process and the development of SQGs. Overall the plan needs more of a plan to it with more details, strong commitments from the DEQ and a demonstrated desire to have the community involved in the PHSMP and Appendix I=s implementation.

Conclusion

DEQ=s plan is insufficiently detailed to provide the assurances needed to obtain a deferral of an NPL listing. It does not set out what DEQ will do or how DEQ will do what needs to be done and often is short on basic information.

Sincerely,

Nina Bell Executive Director