



February 19, 2008

**Delivered by Electronic and First Class Mail**

Ms. Lori Houck Cora  
Assistant Regional Counsel  
Office of Regional Counsel  
ORC-158  
U.S. Environmental Protection Agency Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

Mr. Sean Sheldrake, RPM  
Environmental Cleanup Office  
ECL-115  
U.S. Environmental Protection Agency Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

Re: Disputed Directed Changes to May 2007 Arkema Draft EE/CA Work Plan  
U.S. EPA Region 10 Docket No. CERCLA 10-2005-0191

Dear Lori and Sean:

Legacy Site Services LLC (LSS), agent for Arkema Inc. (Arkema), submits this dispute position statement to the U.S. Environmental Protection Agency Region 10 (EPA) as a supplement to LSS's letters dated October 4 and 30, 2006 and Arkema's letters dated January 5 and February 2, 2006. In addition, this dispute position statement addresses (1) EPA's decision to eliminate the evaluation of a confined disposal facility (CDF) in EPA's version of the Arkema draft EE/CA work plan prepared by Parametrix on behalf of EPA dated May 11, 2007, titled *Arkema Early Action EE/CA Work Plan* (the "EPA Work Plan"); and (2) EPA's decision to use screening level values (SLVs) as cleanup standards for this site. In addition, LSS seeks EPA's formal approval of LSS's comments on the EPA Work Plan as presented in the attached redlined tables at Tab 1. You will note that the redline text represents what LSS considers to be minor edits and clarifications to EPA's November 28, 2007 version of the tables. This dispute is invoked pursuant to Section XVI, Paragraph 48 of the Administrative Order on Consent in the above-captioned proceeding.

Pursuant to your direction, we are submitting this dispute position statement to you with the understanding that you will forward it to Dan Opalski as the formal position statement we will present in our dispute resolution meeting with Mr. Opalski. We suggest March 13, 2008 as a

Legacy Site Services LLC  
468 Thomas Jones Way  
Exton, PA 19341-2528  
Tel: 610 594-4421

meeting date with Mr. Opalski. Please be advised that we will be presenting to Mr. Opalski the full, animated version of the mass removal approach we presented to your team on June 26, 2007. Hardcopy slides of that presentation are attached to this dispute position statement at Tab 2 along with a reference to the animated version available on EPA's website.

Lastly, as agreed to by the parties, issues under dispute related to EPA's oversight cost bill will remain separate from the technical dispute.

### PROJECT STATUS UPDATE

In July 2006, LSS submitted its revised draft EE/CA work plan to EPA on schedule. The LSS Work Plan is over a thousand pages in length comprising a two-volume set of text (not including information provided on CD's such as the complete Arkema site Upland RI Report), figures and tables and a separate map folio of 334 individual site maps required by EPA to describe pictorially the nature and extent of contamination at the site. LSS could not find another draft EE/CA work plan produced in Region 10 (or the country) of the size, comprehensiveness and detail of its Work Plan. By letter dated September 21, 2006, EPA's Project Coordinator Sean Sheldrake notified LSS's Project Manager Todd Slater that EPA had decided to disapprove and modify the work plan itself rather than provide comments. By letter dated October 30, 2006, Doug Loutzenhiser, LSS's Executive Vice President, submitted LSS's dispute position statement concerning, among other things, the EPA Project Coordinator's decision to disapprove and modify LSS's draft EE/CA work plan. By letter dated November 29, 2006, Daniel Opalski notified Mr. Loutzenhiser that he supported the EPA Project Coordinator's decision, but advised, among other things, that the EE/CA work plan "needs to be substantially complete by no later than February 21, 2007, so that Arkema can proceed with development of the field sampling plan(s)." (Memo Attachment to Opalski November 29, 2006 Letter at 5). The EPA Work Plan was delivered to LSS in mid-May 2007.

In his November 29 letter, Mr. Opalski also directed EPA and LSS to agree upon a date no later than February 20, 2007 to meet in person for a full day and stated that:

[N]o less than seven working days prior to the agreed upon date of the meeting, EPA shall provide Arkema in writing EE/CA Work Plan language that addresses, at a minimum, the definition of principal threat(s) at the site, the methodology for determining the RAA, and the remaining disputed issues between the parties. EPA shall provide the language in a red-line/strike-out format to facilitate Arkema's review.

(Memo Attachment to Opalski November 29, 2006 Letter at 6).

Although LSS and EPA met on February 15, 2007, EPA did not provide EE/CA work plan language in a red-line/strike-out format for Arkema/LSS review. Rather, in advance of the meeting, EPA presented a one page concept outline of RAA delineation criteria and a sentence suggesting a definition of principal threat material (PTM) along with two figures depicting

exceedances of probable effects concentrations (PEC) screening level values (SLVs) for DDT, DDD, and DDE within individual sediment sample grid cells. It should be noted that these EPA figures did not provide any new information. All information presented in the EPA figures had already been provided by LSS in its revised July 2005 draft EE/CA Work Plan. At the February 15 meeting, EPA distributed a new four-page document describing a definition of PTM and the process used to identify the RAA. No agreement was reached on either the definition of PTM or the methodology for determining the RAA boundary at the meeting.

After the EPA Work Plan was provided to LSS in mid-May 2007, LSS attempted to resolve the major disagreements between the LSS and EPA project teams by proposing a mass removal approach for the site. At a June 26, 2007 meeting in Seattle, Washington, LSS presented its general comments noting several deficiencies in the EPA Work Plan and provided the rationale for using a mass removal approach at the Arkema site. The hard copy presentation material for the mass removal approach is attached to this position statement at Tab 2, and the full animated version (with the exception of 2\_evs\_cut2.avi) can be found at

<http://yosemite.epa.gov/r10/CLEANUP.NSF/ph/June+26+Arkema+Presentation>.

Pursuant to agreements reached at the June 26, 2007 meeting, by letter dated July 13, 2007 from Mr. Slater to Mr. Sheldrake, LSS submitted a list of key issues that required further technical resolution and discussion prior to finalization of the EE/CA work plan. Those issues included, among others, technology screening and analysis and RAA boundary/PTM definition issues. Mr. Sheldrake responded to Mr. Slater in a letter dated August 28, 2007, and in relevant part, stated that EPA agreed to remove the term “principal threat material” from the EPA Work Plan. Mr. Sheldrake stated:

EPA will agree to remove the term “principal threat material” in relation to the SLVs, 1 x PEC and 1,000 x bioaccumulation SLV. We will not remove the SLVs from the Work Plan. Both the 1 x PEC and bioaccumulation SLV will be retained *as risk screening levels* for defining the basis for a dredging evaluation in the EE/CA. Additionally, EPA will agree that the preliminary RAA boundary as drawn on the map attached as Appendix A to the Administrative order on Consent can constitute the outer boundary within which further EE/CA analysis and dredging evaluations will be conducted, including additional site characterization for data gaps.

(Emphasis added) (Sheldrake August 28, 2007 Letter at 7).

Mr. Sheldrake’s August 28 letter establishes the following: (1) PTM will no longer be defined as 1 x PEC and 1,000 x bioaccumulation, nor to define the RAA, (2) the preliminary RAA boundary is back to the map originally negotiated in the AOC, and (3) SLVs will be used in the EE/CA as risk screening levels, not as cleanup levels.

With regard to screening technologies, Mr. Sheldrake indicated that EPA accepts that on-site upland disposal would be retained for screening alternatives. (Sheldrake August 28, 2007 Letter

at 4). Mr. Shel Drake's letter was silent as to either confined aquatic disposal facilities (CADs) or confined disposal facilities (CDFs).

LSS responded to Mr. Shel Drake by letter dated September 28, 2007 from Mr. Slater. In that letter, among other items discussed, LSS agreed with EPA's proposal to remove the term "principal threat material" in relation to SLVs and to retain the 1 x PEC and 1,000 x bioaccumulation SLV "*as risk screening levels* for defining the basis for a dredging evaluation (*i.e., evaluating the effectiveness and protectiveness for any dredging remedies*) in the EE/CA." (Emphasis added)(Slater September 28, 2007 Letter at 1).

The LSS and EPA project teams continued to work diligently through the Fall of 2007 to sort and resolve hundreds of comments on the EPA Work Plan. By November 2007, the teams were narrowing the list to the last major issues and beginning to reach agreement on them. In a November 7, 2007 letter to Mr. Slater, Mr. Shel Drake set out the status of discussions on all comments, categorized by priority as Category A and Category B Comments, and included the agreed upon PTM language. Mr. Shel Drake stated, "Lastly, EPA agrees with the October 23, 2007 proposed revisions to the language supporting dredging at the Arkema site, enclosed." (Shel Drake November 7, 2007 Letter at 2). This letter as well as the LSS October 23, 2007 proposed revisions accepted by EPA are attached at Tab 3.

Mr. Slater responded to Mr. Shel Drake's November 7 letter by letter dated November 16, 2007. In Mr. Slater's letter, LSS agreed to EPA's acceptance of the PTM language and most of the Category A and B Comments. However, LSS rebutted EPA's position explaining why the 46 government team comments listed in EPA's disapproval of the LSS Draft Work Plan but not addressed in the EPA Work Plan are no longer deemed relevant by EPA. Also, LSS reiterated its disagreement with EPA's insistence on using only an addendum instead of incorporating agreed changes into the final EPA Work Plan (as contemplated by Mr. Opalski's November 29, 2006 decision letter). However, in the interests of completing the EPA Work Plan, LSS agreed to the use of an addendum, but only if the proposed changes to the plan would be set out in clear, straightforward terms at the beginning of the EPA Work Plan and permanently attached to that Work Plan. LSS indicated it could then agree to finalizing the work on the remaining technical issues in the Category A and B Comments.

By letter dated November 29, 2007, Mr. Shel Drake set out EPA's understanding of the status of Category A and B Comments and proposed a teleconference or meeting to resolve any remaining disputed issues. In the table of comments attached to that letter, EPA provided its assurance that the final addendum will be attached to the beginning of the EPA Work Plan and the final addendum and Work Plan will be posted on EPA's website. Discussions between Mr. Shel Drake and Mr. Slater continued into December 2007.

On December 17, 2007, Lori Cora, counsel for EPA, and Claudia Powers, counsel for LSS, discussed the last issue that, if resolved, would allow LSS to accept significant compromises on remaining issues and agree to disagree on others in order to move the EE/CA work plan into final production.<sup>1</sup> The last technical issue was whether EPA would allow LSS the opportunity to

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<sup>1</sup> LSS agrees with EPA that resolution of the contested oversight costs is distinct from the EE/CA Work Plan dispute and will be addressed on a separate track. See Shel Drake November 29, 2007 Letter.

evaluate the feasibility of a confined disposal facility (CDF) in the Draft EE/CA Work Plan in accordance with the AOC and EPA guidance. Had EPA allowed LSS this opportunity, the remaining issues arising from the myriad comments would have been resolved as well. However, EPA did not agree to allow evaluation of the CDF, and instead, by e-mail dated January 30, 2008, offered a proposal to settle the matter by exchanging an EPA decision on LSS's earlier mass removal proposal for LSS's agreement to waive its request for the opportunity to evaluate a CDF. (See Tab 4)

By e-mail dated February 4, 2008 LSS offered a counter proposal. (See Tab 5) During the course of the discussion concerning LSS's counter proposal between EPA and LSS on February 5, 2008, another dispute arose; i.e., the use of screening level values (SLVs) as cleanup standards for dredging. LSS believes EPA is now requiring LSS to use SLVs as the cleanup standard for dredging within the yet to be finalized RAA of the Arkema Site. LSS disagrees with this requirement, particularly in view of the explanation LSS included in its proposed language for addressing PTM in the EPA Work Plan. (See Tab 3).

#### SUMMARY OF CDF ISSUE

Specifically, LSS disputes the following directed change required by EPA to the EPA Work Plan:

#### **Directed Change Arising from LSS Comment No 38: Confined Disposal Facility (CDF)**

LSS Comment No. 38 is listed as an "A Comment" directed to the EPA Work Plan, page 7-5 in Section 7.2.3. LSS's problem statement is presented as follows:

Deletion of 'nearshore CDF (constructed along the Willamette shoreline), and CAD' from disposal options. As previously commented, nearshore and upland disposal options should be considered as part of the in-water EE/CA. These are viable options LSS would like to consider for future use of their property.

(Attachment to July 13, 2007 Letter, LSS Comments on the Draft Arkema Early Action EE/CA Workplan prepared by Parametrix for USEPA at 24-25).

EPA's comment resolution is presented as follows:

An on-site upland disposal facility is a viable option that can be considered in the EE/CA. A nearshore CDF or CAD remains excluded from consideration as stated in the May 11, 2007 Work Plan.

(*Id.*).

As indicated in Comment 38, this issue arose as an omission in the EPA Work Plan. LSS initially submitted Comment 38 to EPA on July 13, 2007, objecting to the omission. In a December 10, 2007 e-mail discussing the remaining technical issues to be resolved, Mr. Slater wrote to Mr. Shel Drake that Comment 38 pertaining to the CDF and confined aquatic disposal (CAD) technology screening in the A Comments list was still at issue. Mr. Slater explained that, in his opinion, an on-site upland disposal facility is very similar to a CDF. He went on to offer the following compromise:

[S]o, if you can agree that the EECA [sic] can evaluate a near shore CDF, then I can also agree that a Confined Aquatic Disposal (CAD) would remain excluded from the EECA [sic]. I think if we agree on this ... this will be the last point and we can memorialize the end of the dispute on the EECA [sic] Work Plan and get on with the work.

(Slater December 10, 2007 e-mail).

Mr. Shel Drake responded that same day, in pertinent part, that “EPA in no way considers a nearshore [sic] CDF to be similar to an upland disposal facility.” In his e-mail, Mr Shel Drake elaborated the reasons why, in his opinion, a CDF is different from an upland disposal facility, concluding that EPA would not deem a CDF option protective, and therefore, “the appropriate action to take in this case is to screen the alternative out.” However, as has been demonstrated at a number of EPA and Sediment Management Work Group (SMWG) conferences, CDFs can and have been designed to handle Superfund, RCRA, and TSCA materials and are fully protective.<sup>2</sup>

In the initial EPA comments on LSS’s original September 26, 2005 draft EE/CA Work Plan, EPA did not have the concerns that Mr. Shel Drake expressed after EPA produced the EPA Work Plan. In EPA’s initial set of comments on the September 2005 draft EE/CA Work Plan, Comment 53<sup>3</sup> addressed the CDF issue specifically. At that time, EPA’s requirement or concern was that a CDF at the Port of Portland’s T-4 or other local CDFs could only be used with the pre-treatment of sediments. In response to Comment 53, LSS agreed to evaluate pre-treatment if required.<sup>4</sup> In EPA’s response to LSS’s second July 2006 draft EE/CA Work Plan, Comment 53 was not listed as one of the “non-responsive” comments. Therefore, LSS concluded that there was no dispute regarding the CDF issue. As stated above, the issue arose again by EPA’s omission in the EPA Work Plan. LSS responded with Comment 38 noting, among other things,

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<sup>2</sup> *Integration of Dredging, Transportation, Treatment and Disposal* presentation by Norman R. Francingues, MSEE at Sediment Remediation Short Course: How Do You Select and Design Options? (presented by U.S. Environmental Protection Agency; Oregon Department of Environmental Quality; Hazardous Substance Research Center South & Southwest; and Sediment Management Work Group in Portland, OR on September 5-7, 2007).

<sup>3</sup> EPA’s comment no. 53 on LSS’s September 26, 2005 draft EE/CA work plan states: “The T4 CDF, other possible CDFs in the area of contamination, if selected will not accept Arkema material without treatment. Possible use of the T4 CDF should only be considered in tandem with sediment pre-treatment.” Attachment to Shel Drake November 1, 2005 Letter at 14.

<sup>4</sup> *Comment Summary Resolution Table*, July 2006 Work Plan, Appendix I, Comment 53.

that the CDF and the CAD disposal options had been deleted, an unexpected reversal of EPA's previous decisions concerning options that should be evaluated as part of the in-water EE/CA. EPA and LSS remain in disagreement concerning the inclusion of an evaluation of a CDF in the technology screening and analysis section of the EE/CA Work Plan.

### ANALYSIS OF CDF ISSUE

One of the most significant problems with EPA not agreeing to LSS's evaluation of various technologies for the Arkema site, particularly in view of other recent EPA decisions to limit the EE/CA technologies to be evaluated,<sup>5</sup> is that it reduces what otherwise would be an EE/CA to a presumptive remedy; i.e., landfill disposal. To the contrary, EPA's Contaminated Sediment Remediation Guidance for Hazardous Waste Sites (EPA 2005) specifically emphasizes that the feasibility analysis should be site-specific:

[D]ue to the limited number of approaches available for contaminated sediment, generally, project managers should evaluate each of the three major approaches monitored natural recovery (MNR), in-situ capping, and removal through dredging or excavation at every sediment site. Depending on site-specific conditions, contaminant characteristics, and/or health or environmental risks at issue, certain methods or combinations of methods may prove more promising than others. Each site and the various sediment areas within it presents a unique combination of circumstances that should be considered carefully in selecting a comprehensive site-wide cleanup strategy. At large or complex sediment sites, the remedy decision frequently involves choices between areas of the site and how they are best suited to particular cleanup methods rather than a simple one-size-fits-all choice between approaches for the entire site.

(Page 7-3, EPA 2005).

Also, EPA's seventh risk management principle (from EPA's 11 risk management principles for sediment sites, EPA 2002) directs EPA to: "Select site-specific, project-specific, and sediment-specific risk management approaches that will achieve risk-based goals." In addition, the Statement of Work (SOW) in the Administrative Order on Consent (AOC) for Removal Action between Arkema and EPA states that the EE/CA Work Plan is to include a description of the analysis to be conducted to determine disposal facility or containment options for contaminated sediment.

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<sup>5</sup> EPA has determined in its responses to comments that "capping may be considered to address limited conditions (emphasis added) ..." and "mechanical dredging without hydraulic containment does not meet EPA's protectiveness criteria ...." (Sheldrake August 28, 2007 Letter at 4).

The SOW further states that investigation activities will result in data to evaluate technologies for sediment remediation including capping, dredging, treatment, including any necessary treatability testing, and disposal (on-site and off-site). The SOW also requires that the EE/CA Report contain identification and analysis of removal action technologies, identification and analysis of removal action alternatives (including the identification and analysis of disposal facility or containment options), and comparative analysis of removal action alternatives.

By screening out the CDF before a fully fledged option has been evaluated and presented, EPA is attempting to modify the AOC and jump over the site-specific considerations and specific risk management approaches that are embedded in both law and guidance.

One of the additional reasons EPA does not want to review an evaluation of a CDF, expressed during informal dispute resolution discussions, is that it is not willing to commit the government team's review time to a CDF option since the harbor-wide RI/FS will be taking up the majority of the government's review time for the next several years. LSS recognizes and appreciates EPA's opinions regarding its resource priorities and the potential difficulties and expense that LSS may incur in developing an analysis of a CDF. LSS understands and appreciates the implications of the delay in the development of the Port's T-4 CDF. However, given the history of the Port project, the Lower Willamette RI/FS, and the Arkema project, it is clear that uncertainties regarding disposal options are important and may change in the future. Not allowing LSS to evaluate a disposal option even before the EPA Work Plan is completed is not advisable and is not consistent with the AOC, agency guidance or policy. Therefore, LSS respectfully requests that EPA allow LSS the opportunity to evaluate a CDF option in the screening technologies section of the EPA Work Plan.

#### **SUMMARY OF SLV ISSUE**

As set out in the Project Status Update section above, a new dispute became apparent during LSS and EPA's discussion on February 5, 2008. LSS disagrees with what it understands is EPA's new requirement to use SLVs as cleanup standards for dredging within the yet to be finalized RAA of the Arkema Site. In view of the explanation LSS included in its proposed language for addressing PTM in the EPA Work Plan, EPA appears to have changed its position significantly. LSS disagrees with this new required use of SLVs.

#### **ANALYSIS OF SLV ISSUE**

As discussed above in the Project Status Update section of this dispute statement, LSS's explanation and language regarding text to be inserted into the EPA Work Plan Addendum, addressing the use of "principal threat material" or "PTM" in the Work Plan, was accepted by EPA. In his November 7, 2007 letter to Mr. Slater on page two, Mr. Sheldrake stated: "Lastly, EPA agrees with the October 23, 2007 proposed revisions to the language supporting dredging at the Arkema site, enclosed." Enclosed with Mr. Sheldrake's letter is LSS's proposed language

and explanation of why LSS revised the last sentence of EPA's earlier proposal. EPA's language read: "The screening level values will remain in the Work Plan, both the 1 x PEC and bioaccumulation SLV, as risk screening levels for defining the basis for a dredging evaluation in the EE/CA." (Sheldrake November 17, 2007 E-mail). LSS changed the sentence to read, in relevant part: "The screening level values will remain in the Work Plan, *including* both the 1 x PEC and *1000 x* bioaccumulation SLV, *for the purpose of evaluating dredging and judging the effectiveness of the removal action* in the EE/CA." (Italics indicate changed text.) LSS's proposed changes to EPA's language are explained in the attachment to Mr. Todd Slater's October 23, 2007 e-mail which states:

The following paragraph for inclusion in the Arkema Early Action EE/CA Work Plan is Legacy Site Services' (LSS's) redline version of EPA's suggested language sent to Mr. Todd Slater on October 17, 2007. LSS proposes changing the last sentence of the paragraph because (1) the language proposed by EPA is premature in that the feasibility analysis conducted as part of the EE/CA evaluation determines the scope of the dredging and capping work necessary to achieve the remedial action objectives in the Scope of Work, (2) there are more than two SLVs within the Work Plan as it is currently written, and (3) additional SLVs may factor into the evaluation of the work depending on progress and results of the RI conducted by the LWG.

Clearly, based on this explanation, LSS did not intend to use SLVs as cleanup standards, nor did LSS consider using SLVs to determine the scope of the dredging and capping work. Rather, as stated in Mr. Slater's October 23 e-mail, the feasibility analysis determines the scope of the dredging and capping work necessary to achieve the remedial action objectives (RAOs) in the SOW. In Mr. Sheldrake's November 7, 2007 letter, EPA accepted the following changes to its proposed text based on LSS's explanation (also included in Mr. Sheldrake's November 7 letter):

EPA and Arkema agree that the term "Principal Threat Material" or "PTM" should be removed from the May 2007 Work Plan as unnecessary for articulating the basis for taking a removal action at the Arkema site. EPA and Arkema were not able to come to agreement as to what concentrations and chemicals at the site constitute Principal Threat Material, but EPA and Arkema have agreed on the RAA boundary in which the EE/CA analysis will be conducted, and agree that a non-time critical removal action in that RAA boundary will address a significant amount of high concentration sediment and will significantly reduce risk to human health and the environment. Principal Threat Material and/or PTM is no longer deemed relevant to the discussion of the screening level values in Chapters 6 and 7 of the May 2007 Work Plan. EPA and Arkema agree to remove the term "principal threat material" in relation to the screening level values, e.g., 1 x PEC and 1,000 x

bioaccumulation SLV. The screening level values will remain in the Work Plan, including both the 1 x PEC and 1,000 x bioaccumulation SLV, for the purpose of evaluating dredging and judging the effectiveness of the removal action in the EE/CA.

(Enclosure with Sheldrake November 7, 2007 Letter).

The October 23, 2007 language that LSS and EPA agreed upon does not address cleanup levels – SLVs or otherwise. The October 23, 2007 language does address the area to be evaluated for dredging and specifically in the last sentence states that “The screening level values will remain in the Work Plan, including both the 1 x PEC and 1,000 x bioaccumulation SLV, for the *purpose of evaluating dredging and judging the effectiveness of the removal action* in the EE/CA.” (Emphasis added). Evaluating dredging and judging the effectiveness of a removal action means, for example, comparing sediment concentrations to SLVs and prioritizing areas for dredging that have the highest exceedances above an SLV and have the highest potential for a complete exposure pathway. The comparison to SLVs would also be used to determine how effectively the dredging might reduce risks at the site by comparing estimated post dredging residual sediment concentrations.

The use of SLVs as *de facto* cleanup levels directly contradicts EPA’s Joint Source Control Strategy (JSCS) guidance for the Portland Harbor which includes SLVs to address upland sources that need to be controlled. Section 3.2 of the JSCS guidance states that:

It should be noted that the SLVs are not cleanup levels; they are comparisons used to establish priority for potential source control. The EPA Portland Harbor ROD(s) will establish contaminant specific cleanup levels for the Superfund Site using applicable or relevant and appropriate requirements (ARARs) or risk-based levels.

Note that many of the SLVs used in the JSCS are the same as those that EPA required in the EPA Work Plan. Finally, as Mr. Sheldrake stated clearly in many meetings and conferences during the course of the informal dispute resolution effort, EPA would not consider the removal of SLVs from the work plan because, in Mr. Sheldrake’s words, they were needed as a “risk communication tool,” not as cleanup levels.

Therefore, EPA’s January 30, 2008 proposal to settle the last outstanding issue to avoid formal dispute was confusing in that it included language stating, “As previously agreed during the informal dispute process, *within the final RAA selected in the Action Memo, dredging would then take place to risk-based SLVs* as defined in EPA’s 3rd ee/ca workplan, as amended or modified by the EE/CA analysis.” (Emphasis added) (EPA January 30, 2008 e-mail from Lori Cora to Claudia Powers). Also, EPA’s proposal language appeared to misstate the mass to volume breakpoint discussed earlier in the course of evaluating LSS’s mass removal approach to the site. EPA’s proposal stated, “EPA will agree that the EE/CA assessment for removal of contaminated sediment may be limited to the area with a maximum areal/horizontal extent of 5 ppm DDx as measured at surface and detected at depth.” (*Id.*).

LSS's February 4, 2008 revisions to EPA's proposed settlement responded first to the perceived mistake in the mass to volume breakpoint calculation. LSS stated:

As set forth in our letter to Sean Sheldrake dated September 28, 2007, based on the current analysis of data available to date, the logical breakpoint in the mass to volume relationship falls in the  $\pm 90\%$  range of total DDx. This percentage may fluctuate up or down based on the data collected as part of the data gaps analysis/EE/CA site investigation.

LSS will agree that the EE/CA assessment for removal of contaminated sediment will be limited to the area with a maximum areal/horizontal extent of  $\pm 90\%$  of the total DDx within the Removal Action Area (RAA), as measured at surface and detected at depth. Based on current information, the  $\pm 90\%$  falls within a 5 to 10 ppm concentration range.

(Attachment to Powers February 4, 2008 E-mail to Cora).

To clarify that SLVs would not be considered as cleanup standards for the dredging, and to be consistent with all prior understandings of the use of SLVs in the EPA Work Plan, LSS offered the following language to revise EPA's proposal:

Once further characterization of the area comprising  $\pm 90\%$  of the total DDx or higher is bounded, the EE/CA evaluation may further refine the RAA due to other constraints discussed in the workplan to yield the final RAA. Within the final RAA selected in the Action Memo, dredging will take place to the breakpoint of  $\pm 90\%$  of the total DDx, as amended or modified by the EE/CA analysis. To the extent there is residual DDx remaining in post-dredging sediment, if necessary, these residual sediments will be addressed with the placement of a thin-layered cap over the dredged area.

(*Id.*).

LSS's February 4, 2008 e-mail simply clarified the relationship between the DDx mass-to-volume relationship and the DDx concentrations in the sediment. LSS believed it was in agreement with EPA to use the  $\pm 90$  percent breakpoint in this relationship, which would demarcate both the RAA laterally and the mass of DDx at depth that would be subject to the removal action. The February 4, 2008 e-mail also addressed the inevitable presence of residual DDx after dredging. In the latter case, the e-mail language assumed that a cap may be necessary to address residuals; however, no cleanup level – SLV or otherwise – was contemplated.

Consistent with previous understandings concerning the use of SLVs as screening and risk management tools, LSS respectfully requests that EPA confirm SLVs will not be used as cleanup standards or remedial action objectives.

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CONCLUSION

As set forth above, LSS respectfully requests that EPA (1) allow LSS the opportunity to evaluate a CDF option in the screening technologies section of the EPA Work Plan, (2) confirm that SLVs will not be used as cleanup standards or RAOs at the Arkema site, and (3) approve the A and B Comments set forth in Tab 1 of this dispute statement of position. Thank you for consideration of our requests.

Very truly yours,



Doug Loutzenhiser  
Executive Vice President  
Legacy Site Services LLC

cc: Todd Slater, LSS *via e-mail only*  
Claudia K. Powers, Ater Wynne  
Audie Huber, Umatilla Tribe  
Brian Cunninghame, Warm Springs Tribe  
Rose Longoria, Confederated Tribes and Bands of the Yakama Nation  
Erin Madden, Nez Perce Tribe  
Sheila Fleming, Ridolfi  
Jeff Baker, GrandeRonde Tribe  
Tom Downey, Siletz Tribe  
Rob Neely, NOAA  
Jeremy Buck, USFW  
Greg Smith, USFW  
Jim Anderson, DEQ  
Matt McClincy, DEQ  
Mike Poulsen, DEQ  
Jennifer Peterson, DEQ  
Rick Kepler, ODFW  
Cyril Young, DSL  
Lori Cora, EP A  
Chip Humphrey, EPA  
Eric Blischke, EPA  
Kristine Koch, EPA  
Rene Fuentes, EPA  
Dana Davoli, EPA  
Deb Yamamoto, EPA  
Nancy Munn, NOAA-NMFS  
Preston Sleeper, USDOJ