UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ENVIRONMENTAL
CLEANUP

DEC 15 2014

Mr. J. Todd Slater
Assistant Vice President
Legacy Site Services L.L.C.
468 Thomas Jones Way
Exton, Pennsylvania 19341-2528

Re: Determination of Director of Office of Environmental Cleanup Regarding Arkema Dispute dated July 3, 2014, Arkema Inc. Portland Facility, Administrative Order on Consent for Removal Action, U.S. EPA Docket No. CERCLA 10-2005-0191 (June 27, 2005)

Dear Mr. Slater:

This letter sets forth my determination with respect to Legacy Site Services LLC's September 12, 2014 request for a determination regarding the subject dispute. The dispute concerns EPA's June 6, 2014, disapproval of the "Draft Sediment Sampling Work Plan" which LSS submitted to EPA on April 30, 2014. In summary, I hereby determine, and as more specifically described at the end of this letter of determination, as follows:

> EPA and LSS shall endeavor to develop a Sediment Sampling Work Plan, subject to EPA approval, that is intended to inform pre-remedial design and/or remedial design efforts for the Arkema site.

Background

This matter comes under the terms of the Arkema AOC. The Arkema AOC requires Arkema, Inc. to, among other things, perform a non-time critical removal at its Portland facility. In doing so, the AOC requires Arkema to perform all actions necessary to implement the appended Statement of Work[1]. The SOW describes the 10 tasks that Arkema is required to perform to prepare, deliver, and implement[2] the removal action. These tasks included the preparation, delivery, and implementation of an Environmental Engineering/Cost Analysis, Removal Action Design Documents, Removal Action Work Plan, and implementation of the Removal Action.[3] However, Arkema and EPA agreed to terminate the AOC before the final EE/CA was approved and the contemplated removal action was designed and implemented[4]. The agreement to terminate includes 9 numbered paragraphs that describe the terms of the termination agreement. The first paragraph includes the following:

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[1] *In the Matter of: Portland Harbor Superfund Site Arkema, Inc. Facility Portland, Oregon*, Administrative Order on Consent for Removal Action, U.S. EPA Docket No. CERCLA 10-2005-0191 (the "Arkema AOC") at Paragraph 19 of Section XIII, Work To Be Performed.

[2] Statement of Work, Arkema Removal Action Portland Harbor Superfund Site Portland, Oregon at pages 1-2.

[3] *Id.*

[4] March 31, 2014 letter from Steve Parkinson to Lori Cora. The letter agreement makes clear that certain AOC obligations are not terminated. These include Arkema's obligation for access to information (Section IX), record retention (Section X), and payment of EPA and Tribal oversight costs incurred prior to the date the AOC is terminated (Section XV).

LSS seeks to have one last round of sampling conducted under the AOC, and will be submitting a proposed work plan no later than April 30, 2014 for EPA's review and approval or disapproval. EPA and Arkema will execute a termination agreement after any approved sampling is conducted and data report submitted on the approved schedule.

LSS submitted a draft Sediment Sampling Work Plan, hereinafter referred to as the "Work Plan," to EPA on April 30, 2014. The Work Plan included 3 field sampling tasks – characterization of the sediment quality, porewater quality, and benthic toxicity.[5] By letter of June 6, 2014, EPA partially disapproved the Work Plan by limiting the scope of the sampling effort to the tasks described in Section 3.2.1 of the Work Plan and by requesting a revised version thereof. By letter of July 3, 2014, LSS effectively disputed EPA's partial disapproval of the Work Plan by disputing several statements/positions asserted in EPA's June 6, 2014 letter and during a conference call of June 19, 2014. On September 5, EPA responded to the July 3 letter. Because LSS and EPA were unable to consensually resolve the Work Plan dispute, LSS, as noted above, requested a determination by the Director of the Office of Environmental Cleanup which resolves the Work Plan Dispute.

In its request for determination, LSS characterized the issues in dispute, and submitted information that it did not provide to EPA between July 3, 2014 and September 12, 2014[6]. EPA responded to LSS's request for determination on October 1, 20114, and LSS replied to EPA's response on October 10, 2014. In total the parties have submitted over 6,000 pages of material to consider in resolving the Work Plan dispute.

The Issues

Both parties have asserted several arguments in support of its dispute.

LSS has asserted the following:

1. LSS' work plan should have been afforded the same review and approval opportunity that the River Mile 11 work plan received.[7]
2. The Portland Harbor RI/FS has not overtaken the Arkema EE/CA effort. The Work Plan could be reviewed, approved and implemented on a track consistent with the Portland Harbor RI/FS, Arkema is committed to performing an early action, and the goals of the Work Plan are similar to the goals of the River Mile 11 pre-remedial design sampling effort.[8]

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[5] See, sections 3.1 through 3.2 of the Work Plan which describe the proposed sampling stations and rationale and include DDx surface sediment stations (section 3.1.1), PCDD/F surface sediment stations (section 3.1.2), PCB surface sediment stations (section 3.1.3), bioassay and co-located surface sediment pore water and chemistry stations (section 3.1.4), Subsurface stations to evaluate NAPL/sheens and COI (section 3.2.1), and geochronology (section 3.2.2)

[6] As described below, absent agreement between the AOC parties, the Arkema AOC's dispute resolution process did not provide for the submittal of information to resolve the dispute after the close of the "Negotiation Period." However, I have previously determined that Arkema and EPA should be allowed to submit, after the close of the "Negotiation Period," information to assist in resolution of this dispute. See my letter of September 18, 2014 to Todd J. Slater.

[7] LSS Request for Determination letter, dated September 12, 2014 at p.2.

[8] *Id.* at pp. 2-3

3. LSS will only use sampling and analytical methods that EPA has previously approved for the Portland Harbor Site, and that LSS would incorporate the EPA-approved procedures from the River Mile 11 pore water sampling work into the Work Plan.[9]
4. The Work Plan included adequate information regarding sampling objectives, locations, and procedures.[10]
5. The Work Plan would provide data that would support the Portland Harbor feasibility study and remedial design.[11]
6. The existing Arkema EE/CA data are not sufficient, and, contrary to the March 31, 2014 agreement to terminate the Arkema AOC, the EE/CA data are excluded from the Portland Harbor RI/FS data set.[12]
7. Additional site-specific bioavailability data are needed because the Comprehensive Benthic Risk Approach developed for the Portland Harbor RI/FS, is not intended to address risk at a site-specific basis or site-specific confounding factors, and as a result it overestimates risk for the Arkema Site.[13]
8. Figures 5.3.1a through 5.3.1c from the draft Portland Harbor FS demonstrate that the footprint for benthic toxicity within the Arkema Site is much larger than the footprint for DDE, and because the CBRA overestimates benthic risk within the Arkema Site, data necessary to accurately delineate the risk is needed.[14]
9. Data used to support the CBRA is stale since it was collected before upland actions were implemented at the Arkema Site. These actions have decreased chloride releases in groundwater at the Arkema Site, and the toxicity observed in bioassays collected in the vicinity of the Arkema Salt Dock may be confounded due to concentrations of chloride in pore-water.[15]
10. Additional PCB data must be collected because detection limits for previously collected data are too high, and as a result overestimate the extent of PCB contamination at the Arkema Site.[16]
11. EPA's approach for identifying principal threat waste/nonaqueous phase liquid at the Arkema Site is flawed and additional data collection is necessary.[17]
12. LSS should be provided a fair opportunity to implement the March 31, 2014 agreement and conduct the sampling without undue delay.[18]
13. Remedial action levels have not been established for the Portland Harbor FS, and thus, there is significant uncertainty between the extent and distribution of DDx, dioxins and furans as well as benthic toxicity which may require remedial action.[19]
14. EPA has mischaracterized the distribution of NAPL at the Arkema Site, and the mischaracterization is based on likely releases from nearby oil storage facilities or dredged spoils.[20]

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[9] *Id.* at 4.
[10] *Id.*
[11] *Id.* at p. 5.
[12] *Id.* (relying on an August 29, 2014, EPA Portland Harbor FS comment indicating that EPA's plan for including early action datasets in various FS analysis is currently unknown).
[13] *Id.* at pp. 6 -7.
[14] *Id.*
[15] *Id.* at pp. 7-8.
[16] *Id at pp. 8-9.*
[17] *Id* at pp. 9-10
[18] LSS Reply to EPA's October 1, 2014 Response to LSS Dispute, October 10, 2014, at p. 2.
[19] *Id.* at p. 5.
[20] *Id.* at pp. 5-6

EPA has asserted the following:

1. The sampling contemplated by the Work Plan is beyond the objectives of the Arkema AOC and its removal action, equates to RI sampling, and RI sampling can only be requested by the entities performing the Portland Harbor RI/FS, i.e. the Lower Willamette Workgroup, and the dispute is void since it was not raised by the LWG under the Portland Harbor RI/FS AOC.[21]
2. Approval of the Work Plan will likely be time consuming. The River Mile 11 sampling plan took much more time than the 5.5 months represented by LSS, and EPA's experience with LSS is that the review and approval process takes an inordinate amount of time and resources.[22]
3. EPA's staff and resources are focused on completing the Portland Harbor RI/FS and issuing a proposed plan for the Portland Harbor Site. EPA has adequate data for the purpose of selecting a remedy and the sampling efforts for the River Mile 11 and Gasco areas are intended to inform remedial design decisions.[23]
4. Implementation of the Work Plan without EPA approval would create the risk that the generated data would not be useable to support remedy selection or implementation decisions since it may not adequately address the site specific sampling issues posed by the Arkema Site.[24]
5. It would be useful to perform additional sampling that refines the distribution of subsurface sediment NAPL within the Arkema Site for remedial design purposes.[25]
6. Arkema EE/CA data has been incorporated into the Portland Harbor FS database and used to support related FS evaluations, and any dispute regarding the use of Arkema EE/CA data for purposes of the Portland Harbor FS must be raised under the Portland Harbor RI/FS AOC not the Arkema AOC.[26]
7. The identification of risks posed to the benthic community by Arkema Site conditions are based on several lines of evidence -- sediment toxicity bioassays, predicted toxicity, tissue residues (both empirical and predicted), and transition zone and surface water quality – and the lines of evidence are considered in their totality.[27]
8. Sediment management areas in the vicinity of the Arkema facility are likely to be driven by the RALs for total DDx, and total dioxins and furans as opposed to benthic toxicity risks.[28]

While the dispute may appear complex, it is much simpler than its appearance, and boils down to two issues. The first issue is whether LSS and EPA should continue development of the Work Plan. The second issue concerns the timing for the review, approval/disapproval, and if approved, implementation of the Work Plan as well as the Work Plan's purpose – whether it should be used to inform the Portland Harbor feasibility study or pre-remedial design and/or remedial design efforts.

The Dispute Resolution Process

The AOC provides terms for initiating and resolving disputes that arise under the AOC.[29] The process allows Arkema and EPA, at its discretion, to submit and exchange information related to the dispute[30].

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[21] EPA Response to LSS Request for Determination at p. 2.
[22] *Id.* at pp. 4-5.
[23] *Id.* at pp.5-6.
[24] *Id at p. 6.*
[25] *Id.* at p. 8.
[26] *Id.* at pp. 8-9.
[27] *Id.* at 9
[28] *Id.* at 10.
[29] Arkema AOC at Section XVI, Dispute Resolution
[30] Arkema AOC at Paragraph 49.

The process includes a Negotiation Period which allows the parties (1) the opportunity to resolve the dispute by agreement, and (2) to submit and exchange information that each relies on to support its dispute position[31]. If the dispute is not consensually resolved during the Negotiation Period, EPA's final dispute position prevails unless Arkema timely requests a determination by the Director of the Office of Environmental Cleanup that resolves the dispute[32]. The AOC provides that the Director will issue a written decision on the dispute based upon the record generated during the Negotiation Period[33]. In this instance, both Arkema, through LSS, and EPA have submitted additional information to aid in the resolution of the dispute. I have permitted the submittal of such materials[34].

The Arkema AOC does not expressly provide a standard of review for resolving a dispute. However, to the extent that the dispute concerns the selection, timing or adequacy of a response action, CERCLA provides a standard for review. CERCLA section 113(j) provides the framework for review of response actions[35]. Section 113(j)(1) limits review of any issue concerning the adequacy of any response action taken or ordered by EPA to the administrative record[36]. Section 113(j)(2) requires a court to uphold EPA's decision in selecting a response action unless the objecting party can demonstrate, on the administrative record, that the decision was arbitrary and capricious or otherwise not in accordance of law[37]. To the extent that the underlying dispute concerns issues related to the adequacy of response action taken or ordered by EPA, it seems reasonable to apply the limits of and standards for judicial review established by CERCLA section 113(j). As such, to the extent that the subject dispute concerns issues related to the adequacy of response actions taken or ordered by EPA, the dispute will be resolved upon the record created by the parties -- their submittals to the dispute resolution official as well as those materials exchanged during the Negotiation Period -- and the EPA decision will be reviewed under the standard established in section 113(j).

Analysis/Disapproval of the Sampling Plan

As noted above, there are two primary issues. This analysis will first address whether EPA and LSS should continue to work on the development of the Work Plan. A negative determination on this issue moots the need for consideration of the second issue.

By letter of March 31, 2014, EPA and Arkema agreed to terminate the Arkema AOC. The terms of the agreement included a commitment to engage in the development of a final field sampling effort. This commitment provided LSS with the opportunity to seek "one last round of sampling conducted under the AOC,[38]" and to submit "a proposed work plan no later than April 30, 2014 for EPA review and approval or disapproval.[39]"

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[31] *Id.*
[32] Arkema AOC at Paragraph 50.
[33] *Id*
[34] Letter from Richard Albright to J. Todd Slater, Re: Request for Determination, In the Matter of: *Portland Harbor Superfund Site Arkema, Inc. Facility Portland, Oregon*, Administrative Order on Consent for Removal Action, U.S. EPA Docket No. CERCLA 10-2005-0191 (September 18, 2014)
[35] 42 U.S.C. § 9613(j).
[36] 42 U.S.C. § 9613(j)(1).
[37] 42 U.S.C. § 9613(j)(2)
[38] March 31, 2014 letter from Steve Parkinson to Lori Cora at para.1, p.1.
[39] *Id.*

The commitment articulated EPA's and Arkema's agreement to "execute a termination agreement after any approved sampling is conducted and data report submitted on the approved schedule.[40]"

In its final reply to EPA, LSS condensed its dispute position to a request for "fair implementation of the terms of its March 31, 2014 agreement with EPA" and the opportunity to conduct the proposed sampling. LSS makes this request in response to two related EPA assertions. First, that the proposed sampling is beyond the objectives of the Arkema AOC, which include the performance of the tasks necessary to evaluate, select and implement a non-time critical removal action at the Arkema Site. Second, the proposed sampling is the type that is performed as part of a remedial investigation, RI sampling can only be requested by the entities performing the Portland Harbor RI/FS, i.e. the Lower Willamette Workgroup, and thus, the dispute is void since it was not raised by the LWG under the Portland Harbor RI/FS AOC.

The first assertion lacks merit. The March 31, 2014 agreement to terminate the AOC meant that AOC's main objective – the performance of a non-time critical removal action - would not be selected or performed. Thus, when this agreement was consummated EPA and Arkema knew that any proposed sampling would not support the primary objective of the Arkema AOC. Thus, this does not provide a creditable basis for disapproving the Work Plan.

Nor is EPA's assertion that the proposed sampling can only be conducted pursuant to the Portland Harbor RI/FS AOC compelling. The Arkema AOC expressly allows the parties to modify the AOC by a written agreement.[41] The authority to modify the AOC would only be limited by the authority under which the AOC was issued.[42] The AOC was issued under the authority provided by EPA under sections 104, 106(a), 107 and 122.[43] Thus, any modification that provided for implementation of a response action, excluding the performance of remedial action, is within the scope of the AOC's modification authority.[44] The March 31, 2014 agreement is a modification of the Arkema AOC and provides for the performance of response actions – sampling and analysis -- within the scope of the AOC's authority.

In fairness to EPA, EPA did technically follow the conditions in the March 31, 2014, letter to review and approve or disapprove the Work Plan when it disapproved the Plan. However, I would note that EPA nearly always engages in a back and forth dialogue concerning the adequacy of work plans, giving responsible parties an opportunity to develop an approvable plan. In this case, and although EPA did provide LSS with the opportunity to submit a less robust work plan, EPA deviated from this practice, despite efforts to work with other Portland Harbor responsible parties on similar plans. This lack of engagement with LSS, in combination with the possibility that additional study could add to our understanding of site-specific conditions at the Arkema Site, concerns me.

Thus, LSS could, and in my mind should, be afforded a fair opportunity to engage in the development of a final round of field sampling and the scope of such sampling effort is only limited by the authority

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[40] *Id.*

[41] Arkema AOC at para. 87 of Section XXVII (Modification).

[42] Arkema AOC at para. 2 of Section I (Jurisdiction and General Provisions).

[43] *Id.*

[44] See, 42 U.S.C. §§ 9604 (a)-(b), 9606(a), & 9622(a) & (d)(1)(A). Section 122(d)(1) requires that cleanup agreements that implement remedial action be in the form of a consent decree that has been approved by the Attorney General and entered by appropriate United States district court.

upon which the Arkema AOC was issued as tempered by the site specific conditions posed by the Arkema Site. Fair engagement does not necessarily mean approval and implementation of the Work Plan. Approval of the Work Plan is within the discretion of EPA as tempered by the Arkema AOC's dispute resolution process, and is conditioned upon the quality of the submittal. But it is my expectation that the LSS and EPA effort to develop and review the Work Plan is to be in good faith.

Timing for Review, Approval/Disapproval, and Implementation of the Work Plan

The second issue concerns the timing for the review, approval/disapproval, and if approved, implementation of the Work Plan as well as the Work Plan's purpose – whether it should be used to inform the feasibility study or pre-remedial design and/or remedial design efforts.

LSS asserts that the Portland Harbor FS does not contain sufficient data to support remedy selection, implementation of the Work Plan would fill data gaps that support remedy selection, and by consequence, the Work Plan review, approval, and implementation must proceed on a fast track[45]. EPA's response is twofold. First, disputes related to the adequacy of Portland FS dataset must be brought under the terms of the Portland Harbor RI/FS AOC. Second, the FS dataset is appropriately robust for the purposes of the FS and remedy selection. Related to this response is EPA's concern that informing the Portland Harbor FS with data generated by the Work Plan, if approved and implemented, would divert EPA's staff and unnecessarily delay completion of the Portland Harbor FS.

EPA's first response on this issue is determinative. LSS through a dispute brought under the terms of the Arkema AOC effectively asks EPA to change the schedule and tasks for implementing the response actions required by another administrative order on consent[46]. Arkema, formerly known as ATOFINA Chemicals Inc., is a Respondent to the Portland Harbor RI/FS AOC. The Portland Harbor RI/FS AOC includes a dispute resolution process which allows for resolutions of "disputes concerning activities or deliverables required under this Order."[47] Simply put, LSS seeks relief under the wrong AOC, and which is outside the scope of the Arkema AOC. LSS's request that the Work Plan review and approval process, and as appropriate, implementation, be used to inform the Portland Harbor FS is denied, and LSS and EPA are directed to work cooperatively to develop a Work Plan that if approved by EPA would support pre-remedial design or remedial design efforts at the Arkema Site. This direction does not require LSS to re-develop or re-submit the Work Plan, however, this direction informs the parties as to the purpose of the intended sampling as well as its schedule for implementation[48].

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[45] LSS also contends that EPA has not incorporated the data generated in support of the Arkema EE/CA database into the Portland Harbor FS data base as required by the Termination Agreement, see, LSS Request for Determination at p. 5. EPA contends that it has. See, EPA Response at pp. 8-9. LSS does not appear to further contest this issue in its Reply to EPA's Response, however, to the extent that EPA has not incorporated data that was generated before March 31, 2014, to support the Arkema EE/CA into the Portland Harbor FS, EPA is hereby directed to do so.

[46] Administrative Order on Consent as twice amended and entitled: *In the Matter of: Portland Harbor Superfund Site*, Administrative Order on Consent for Remedial Investigation/Feasibility Study, U.S. EPA Docket Number CERCLA 10-2001-0191 (hereinafter the "Portland Harbor RI/FS AOC").

[47] Portland Harbor RI/FS AOC at Section XVIII (Dispute Resolution).

[48] This decision places the Arkema site on the same footing as the River Mile 11 and Gasco sites where pre-remedial design field investigations have been approved, thus addressing a fundamental concern of LSS. See, LSS's Request for Determination at p. 5, and LSS's reply at pp. 4

Moreover, and assuming that this portion of the dispute was within the scope of the Arkema AOC, it is clear that LSS has failed to demonstrate that EPA's decision not to tie the Work Plan effort to the Portland Harbor RI/FS is arbitrary and capricious. The primary objective of a feasibility study is to ensure that appropriate remedial alternatives are developed and evaluated such that relevant information concerning the remedial action options can be presented to a decision-maker and an appropriate remedy selected.[49] Nowhere in its submittals does LSS cogently suggest that the failure to fill the asserted data gaps would frustrate this paramount objective. The Work Plan largely proposes that site-specific data gaps be filled. None of the gaps concern hazardous substances, pollutants or contaminants that have not yet been found within the Arkema site. Instead, the gaps would provide additional information related to the location, extent and toxicity of such contamination. Arkema does not demonstrate that filling these gaps will result in the identification of remedial approaches that are not or could not be identified with the dataset that currently supports the Portland Harbor FS. The Work Plan may provide information that refines EPA's understanding of the location of where and at what scale and scope elements of a selected remedy should be implemented. As such, EPA's conclusion that additional sampling is not necessary to support the Portland Harbor FS and may benefit pre-remedial design or remedial design efforts is not only rational but well founded.

Decision

1. EPA and LSS shall endeavor to develop an acceptable Sediment Sampling Work Plan that informs pre-remedial design or remedial design for the Arkema site.
2. Within 15 days of the date of this determination letter, LSS shall provide EPA with written notification of its intent to proceed with the review and implementation of the Sediment Sampling Work Plan.
3. EPA's Review, approval/disapproval, and LSS' implementation of the Draft Sediment Sampling Work Plan shall occur independent from and on a separate track than the feasibility study that the Lower Willamette Work Group is developing pursuant to a separate AOC with the EPA.
4. EPA shall provide LSS with its specific comments regarding the Draft Sediment Sampling Work Plan within 60 days of the date it receives written notice from LSS pursuant to Paragraph 2 above.
5. EPA and LSS shall have until July 31, 2015 for EPA to approve or disapprove the Draft Sediment Sampling Work Plan.
6. EPA's review, approval/disapproval, and LSS's implementation of the Sediment Sampling Work Plan shall proceed pursuant to the terms and conditions of the Arkema AOC.
7. Except as provided in the March 31, 2014, letter agreement between EPA and LSS. The Arkema AOC shall terminate upon the earliest of the following: LSS notification, pursuant to paragraph 2 above, that it does not intend to proceed with the review and implementation of the Sediment Sampling Work Plan; subject to the dispute resolution process of the Arkema AOC, EPA's disapproval of the Draft Sediment Sampling Work Plan; or EPA's written notification that all tasks required by an approved Sediment Sampling Work Plan have been completed to its satisfaction.

Sincerely,

Richard Albright, Director
Office of Environmental Cleanup

[49] 40 C.F.R. § 300.430(e).

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cc:
Tom Gainer, Oregon DEQ
Rick Kepler, Oregon Department of Fish and Wildlife
Rob Neely, NOAA Coastal Resources Coordination
Dr. Nancy Munn, NOAA Fisheries
Jeremy Buck, US Fish and Wildlife
Preston Sleeger, US Department of Interior
Brian Cunninghame, Confederated Tribes of the Warm Springs Reservation of Oregon
Rose Longoria, Confederated Tribes and Bands of the Yakama Nation
Pete Wakeland, Confederated Tribes of the Grand Ronde Community of Oregon
Tom Downey, Confederated Tribe of the Siletz Indians
Audie Huber, Confederated Tribes of the Umatilla Indian Reservation
Erin Madden, Nez Perce Tribe
Jean Lee, Environment International Ltd.
Jennifer Peterson, DEQ
Matt McClincy, DEQ
Mike Poulsen, DEQ
Alex Cyril, DEQ
Cy Young, DSL
Lance Peterson, CDM
Shawn Blocker, EPA
Sean Sheldrake, EPA
Lori Cora, EPA
Kristine Koch, EPA

Administrative Record

The administrative record includes the documents that provide the basis for this decision. The administrative record includes documents that were exchanged by and between EPA and LSS during the Negotiation Period, and the documents that were submitted to the dispute decision official during and after LSS' request for determination. LSS submitted written materials as well as a disc which contains 3 attachments and 15 exhibits. EPA submitted written materials and electronic files. The administrative record supporting this decision includes:

Legacy Site Services LLC, Request for Determination by EPA Region 10's Director of the Office of Environmental Cleanup (September 12, 2014).

Legacy Site Services LLC, Dispute letter with 8 attached exhibits (July 3, 2014)

EPA letter Re: Submittal of Draft Sediment Sampling Work Plan (June 6, 2014)

EPA letter Re: Dispute of EPA Letter dated June 6, 2014 (September 5, 2014)

Steve Parkinson letter to Lori Cora, Re: Arkema Early Action with enclosures (June 14, 2011)

Steve Parkinson letter to Lori Cora, Re Arkema Inc. – Portland Oregon (March 31, 2014)

LWG Comments on EPA's Feasibility Study (August 30, 2014)

Map and Cross-Section Reproduced for Illustrative Purposes Only From Draft Provisional LWG Submission to EPA on July 3, 2014

Subsurface Sediment Location Map and Cross Section with RAL Exceedances for Draft FS and EPA RALs

Maps 12-1A and B, Portland Harbor RI/FS Draft Final BERA

Appendix P. Comprehensive Benthic Approach Portland Harbor RI/FS Draft Feasibility Study

Figures 5.3-1a through 5.3-1c Portland Harbor RI/FS Draft Feasibility Study

Figure 3-5, Arkema EE/CA Work Plan

Maps Reproduced for Illustrative Purposes Only From Draft Provisional LWG Submission to EPA on May 14, 2014

PCB Map for EPA CAG Presentation, July 9, 2014

Figure 2-9, Draft Arkema EE/CA Report

A Guide to Principal Threat and Low Level Threat Wastes, OSWER, EPA, Superfund Publication: 9380.3-06FS (November 1991)

LWG Response to EPA's Principal Threat Waste Approach pp. 2-11 (undated)

Legacy Site Services LLC Letter Re: Dispute of EPA Comments (January 24, 2014)

EPA Response to Legacy Site Services' September 12, 2014 Notice Seeking Formal Dispute Decision (October 1, 2014)

2005 Administrative Order on Consent entitled: In the Matter of: *Portland Harbor Superfund Site Arkema Inc. Facility Portland, Oregon*, Administrative Order on Consent for Removal Action, U.S. EPA Region 10 Docket No. CERCLA 10-2005-0191

2001 Administrative Order on Consent as twice amended and entitled: I*n the Matter of: Portland Harbor Superfund Site*, Administrative Order on Consent for Remedial Investigation/Feasibility Study, U.S. EPA Docket Number CERCLA-10-2001-0240

Letter from Sean Sheldrake to Todd Slater, Re: EPA comments on Draft Engineering Evaluation and Cost Analysis, Arkema Early Action (February 11, 2013)

Letter from Sean Blocker to Doug Loutzenhiser, Re: Dispute of EPA's Letter dated June 6, 2014 (September 5, 2014)

Exhibit 4. Table 2.0-1. Summary of Investigation Performed by Other Parties Included in the RI Data Set from the Draft Final Remedial Investigation Report, Portland Harbor RI/FS (August 29, 2011)

Memorandum to Sean Sheldrake from Lance Peterson, RG and Stephen Dent, PhD, subject Arkema Offshore NAPL Evaluation (June 25, 2013)

LSS Reply to EPA's October 1, 2014 Response to LSS Dispute (October 10, 2014)

Letter from Richard Albright to J. Todd Slater, Re: Request for EPA Determination, In the Matter of: *Portland Harbor Superfund Site Arkema Inc. Facility Portland, Oregon*, Administrative Order on Consent for Remedial Action, U.S. EPA Region 10 Docket No. CERCLA 10-2005-0191 (September 18, 2014)