



DEPARTMENT OF
ECOLOGY
State of Washington

Troy Laundry Seattle Site
Responsiveness Summary
Public Comment Period May 10 – June 10, 2013

**For Proposed Amendment to Agreed Order,
Proposed Interim Action Plan,
SEPA Checklist & Determination,
and Public Participation Plan**

**Prepared by Washington Department of Ecology
Toxics Cleanup Program
Northwest Regional Office**

August 26, 2013

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Introduction

This Responsiveness Summary is for the Troy Laundry Site public comment period for the following documents:

- 1.) Draft Amendment to the Agreed Order #DE 8996 for an Interim Action Plan,
- 2.) Draft Interim Action Plan,
- 3.) Draft State Environmental Policy Act (SEPA) Environmental Checklist and Determination, and
- 4.) Draft Public Participation Plan.

The purpose of the public comment period was to invite the public to review and comment on these four documents and to encourage citizen participation in the state Model Toxics Control Act (MTCOA) cleanup process and decision-making at the Troy Laundry Site in Seattle, Washington. The public comment period was held May 10 to June 10, 2013. The documents were available for review at the City of Seattle Library Central Branch, Washington Department of Ecology (Ecology) Northwest Regional Office in Bellevue, and at Ecology's website for the Troy Laundry Site at:

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11690>

The Troy Laundry Site (Troy Site) is located at 307 Fairview Avenue North in Seattle, King County, Washington. The site Cleanup Identification number is #11690 and the Facility Site number is #19135499. Touchstone SLU LLC (Touchstone) purchased the property in 2011 and negotiated and signed a legal agreement called an Agreed Order with Ecology on May 22, 2012. The purpose of the Agreed Order #DE 8996 is for Touchstone to conduct a remedial investigation, then a feasibility study, and prepare a draft cleanup action plan for the Troy Site. This process is currently underway and Touchstone is working on the remedial investigation.

The proposed amendment to the Agreed Order is to add an "Interim Action Plan" for Touchstone to conduct interim remedial actions at the Troy Site prior to completing the remedial investigation. The proposed interim actions are to conduct on-property excavation and post-excavation sampling, in situ groundwater remediation, and soil vapor evaluation. In general, the proposed interim actions will remove source areas of dry cleaning solvents and petroleum chemicals of concern, and decrease possible migration time and migration pathways for these chemicals of concern at the Troy Site.

Historically the Troy Site was used as an industrial dry cleaning facility that operated from 1926 to 1985. Dry cleaning solvents, heating oil, and gasoline products were used at the property and included nineteen product storage tanks. Undocumented releases of dry cleaning solvent and petroleum occurred to the soil and groundwater at the property and extending off-property.

The chemicals of concern identified at the Troy Site are dry cleaning solvents, including: tetrachloroethylene also called perchloroethene, and related products called trichloroethene, cis-1-2 dichloroethene, and vinyl chloride, in addition to petroleum products including gasoline,

diesel and oil-range petroleum hydrocarbons. These substances have been identified in soil, groundwater and/or soil vapor above state cleanup levels.

The four draft documents open for public review and comments are documents dealing solely with the interim action. The interim action will NOT replace the steps in the MTCA cleanup process for completing the Remedial Investigation (RI), Feasibility Study (FS), and Cleanup Action Plan (CAP) for the Troy Site. When the draft final RI, FS, CAP are completed, Ecology will conduct another public comment period. These MTCA steps are required and will be implemented with Ecology approval and oversight.

As of the date of this Responsiveness Summary, Ecology has not approved the Draft RI or the Draft FS for the Troy Site. Ecology has identified that more investigation is necessary to adequately characterize the soil-groundwater-vapor-source control components at the Troy Site. In addition, the RI is not complete until the nature and extent of contamination is adequately characterized; only then can appropriate cleanup alternatives be evaluated in the FS.

Ecology received comments for the Troy Site from Marten Law (June 10, 2013) with a Technical Memorandum by Farallon Consulting, LLC (see Appendix A). No other comments were received. This Responsiveness Summary presents Ecology's responses and recommendations for each of the comments received.

Two consulting firms: SoundEarth Strategies, Inc (SES), for Touchstone, and Farallon Consulting, LLC (Farallon) for Marten Law, submitted Biochlor modeling for the Troy Site. However, the two models had contrary units, different estimations for remediation timeframe, and the model results were a poor fit compared to measured decay rates. Because of these discrepancies, Ecology undertook additional steps and requested clarification from both SES and Farallon regarding the Biochlor modeling used for the Troy Site, in order to adequately respond to the comments. See communications in Appendix B.

Both consultants used the Biochlor model to assess groundwater remediation approaches based on their respective modeling projections on restoration timeframes. SES responded with written explanations (see attached response dated June 26, 2013 in Appendix B). Farallon requested a meeting and met with Ecology on July 8, 2013, however Farallon did not respond to Ecology's request for their Biochlor modeling details.

After review, Ecology determined that the Biochlor model results by both consultants were not compelling enough to provide reasonably accurate estimates of restoration timeframes that supported any of their respective arguments for or against the proposed groundwater remediation approach for this site. Modeling parameters such as decay rate constants were not based on site-specific data and calibration from the Troy Site. Both consultants did not provide clear explanations of choice of model, modeling assumptions, limitations, and modeling errors. Ecology found the Biochlor model results to be ambiguously explained and based on biased modeling parameters not specific for the Troy Site.

Marten Law Comments and Ecology Responses

Marten Law's comments are listed below and followed by Ecology's *responses in italics* (see Marten Law comments in Appendix A).

#1.A. "The Troy Laundry documents do not comply with MTCA or SEPA, specifically SoundEarth Strategies, Inc (SES) must obtain critical missing data, correct basic errors, and use required regulatory criteria."

#1.A. Ecology Response: Marten Law has not specified what specific data in all cases are missing or what errors need to be corrected, therefore Ecology cannot adequately respond to all of this comment.

The Interim Action Plan (IAP) is one step in the MTCA process at the Troy Site. The Remedial Investigation has not been completed to date. The proposed Interim Actions at the Troy Site are consistent with the state regulations. Ecology will require Touchstone to meet remediation levels for the IAP implementation. The remediation levels will be established based on current Ecology CLARC [Cleanup Levels and Risk Calculations under the Model Toxics Control Act Cleanup Regulation] revisions at the time of IAP implementation and will be specified in the IAP Engineering Design Report. The cleanup levels will be defined in the Cleanup Action Plan at a later date based on CLARC revisions at that time. The IAP is not at the MTCA step for selection of cleanup actions described in WAC 173-340-360.

#1.B. "SES's proposed work is not an 'interim action.'"

#1.B. Ecology Response: Touchstone's proposed work is an interim action. An interim action is:

(a) A remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance at a facility;

(b) A remedial action that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or

(c) A remedial action needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action

WAC 173-340-430(1). The proposed IAP will implement elements (b) and (c) and will excavate and remove contaminated soils and install in situ groundwater remediation in order to address contamination issues at the property that may become substantially worse or cost substantially more to address if the remedial action is further delayed at the Troy Site. In addition the IAP will substantially reduce one or more pathways by reducing and removing the source areas of known contaminated soils. Also, the IAP will conduct post excavation sampling and provide significant information for the completion of the Remedial Investigation.

The RI, FS and CAP have not been completed at the Troy Site and the cleanup action has not been selected. The IAP will not foreclose reasonable alternatives for the cleanup action.

#1.C. “The DNS is invalid because the proposed activities are not ‘interim actions.’”

#1.C. Ecology Response: The DNS is not invalid, since, as stated above, the proposed activities are “interim actions,” as that term is defined in WAC 173-340-430. See response to #1.B. The SEPA checklist and Ecology’s determination of nonsignificance are applicable to the implementation of SEPA and the proposed IAP. Implementation of the IAP is estimated to cause no significant impacts to human health and the environment at the Troy Site and surroundings.

#2.A. “The proposal appears designed to achieve commercial objectives, not regulatory requirements.

#2.A. Ecology Response: The proposed IAP meets the regulatory requirements for an interim action as it provides a partial cleanup for contaminated soils, source(s) removal, an in situ treatment to address some groundwater contamination, and provides post-excavation testing information for the Remedial Investigation (WAC 173-340-430(2)).

In addition, the Troy Site Remedial Investigation is not yet complete. The Site boundaries have not been adequately characterized. The two additional off-property monitoring wells do not provide adequate information to complete the Remedial Investigation. As stated earlier, the IAP is one step in the MTCA process and the next steps are to complete the RI, FS and the draft CAP. These steps will be implemented with Ecology approval and oversight.

#2.B. “Requests Ecology to hold a public meeting for the purpose of considering these and any other comments before taking action; or alternatively requests a separate meeting with Ecology and Touchstone to work through these issues.”

#2.B. Ecology Response: An Ecology Fact Sheet was mailed to the surrounding community announcing this public comment period and stating, “A public meeting has not been scheduled and one will be held if ten or more people request a meeting during the comment period.” Marten Law is the only one who requested a public meeting; therefore no public meeting will be held.

After completion of this Responsiveness Summary, Ecology will offer to convene a meeting with Touchstone and Marten Law to discuss the AO Amendment, the Revised Interim Action Plan and next steps at the Troy Site. This is estimated to be scheduled in September - October 2013.

Farallon Consulting, LLC Comments and Ecology Responses

Farallon Consulting, LLC comments are listed below, followed by Ecology’s *responses in italics*. Farallon stated that “...the purpose of Farallon’s review was to provide Ecology with comments and recommendations regarding the proposed remedial action developed by Touchstone for the [Troy] Site.

#1. "Farallon disagrees fundamentally with the preliminary conceptual site model advanced by SES in the Draft IAP. Farallon cites that "...the Remedial Investigation is incomplete."

#1. Ecology Response: The conceptual site model is preliminary and Ecology agrees that the remedial investigation is incomplete and will be completed at a later date.

#2. Farallon states that, "The SES proposed screening and cleanup levels are not consistent with current MTCA screening and/or cleanup levels, and ...the disposal criteria are incorrect."

#2. Ecology Response: Ecology will review and revise the screening, cleanup, and remediation levels to be consistent with the current Ecology CLARC listings at the time of IAP implementation and CAP implementation. The disposal criteria will be evaluated at the time of IAP implementation and corrected accordingly for type of waste/recycling or treatment, level, volume, and best management practices.

#3. "Farallon disagrees with the interpretation and conclusions regarding the fate and transport of [perchloroethene] PCE contamination...SES modeling in Draft IAP were incorrectly interpreted to indicate a long natural-attenuation time frame...Farallon suggests that monitored natural attenuation should be considered as a feasible alternative for remediation of the primary groundwater bearing zone."

#3. Ecology Response: Ecology attempted to address and resolve the differences between SES and Farallon's Biochlor modeling and did not receive specific information from either consultants. Ecology determined that the Biochlor modeling results were not compelling due to lack of model flexibility for different site conceptual model conditions, lack of site-specific parameters and calibration, and ambiguous methodology for arriving at the respective restoration timeframes.

Monitored natural attenuation is a remediation alternative and will be evaluated during the FS and CAP.

#4. "Farallon agrees that additional off-Site source areas may be contributing to a low concentration regional chlorinated solvent plume... based on Farallon's review, source removal, monitored natural attenuation, institutional and engineering controls...should be re-evaluated as a feasible remediation strategy for the Site."

#4. Ecology Response: Ecology agrees that there may be additional off-site source areas affecting the Troy Site. In addition, further remedial investigation is required in order to adequately characterize the site boundaries. Source removal, monitored natural attenuation, institutional and engineering controls are alternatives that will be included in FS alternative evaluation in preparation for the CAP.

#5. Farallon requests that Ecology updates and adds pertinent communications to the Troy Site webpage including the Ecology November 7, 2012 opinion letter from Russell Olsen.

#5. Ecology Response: Ecology posts final decision documents and draft work plans, RI, FS and CAP documents on a site webpage. Ecology generally does not post opinion letters and communications with the Potential Liabile Persons (PLPs) on the site webpage. Ecology will post this Responsiveness Summary on the Troy Site webpage at

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11690>

#6. Farallon adds comments for the SES draft RI and FS for the Troy Site.

#6. Ecology Response: The SES draft RI and FS are not part of this comment period. Ecology will respond to the Farallon comments on the SES Draft RI and Draft FS when a separate comment period is held for these documents. Ecology appreciates Farallon's comments and will review them at the time of reviewing the Draft RI and Draft FS. Ecology has not approved the Draft RI and Draft FS, and additional remedial investigation is ongoing at the Troy Site.

Ecology's Conditional Approval to Implement the Agreed Order Amendment

Ecology issued a conditional approval to Touchstone SLU LLC to implement the Agreed Order Amendment and Interim Action Plan by letter dated July 29, 2013 for the Troy Site with required revisions. Ecology requested that Touchstone submit a revised IAP to Ecology by September 16, 2013 (see conditional approval letter in Appendix C).

No further revisions are required for the Troy Site documents for this comment period except the required IAP revisions listed in the Ecology letter July 29, 2013. The Agreed Order Amendment, SEPA checklist and determination, and Public Participation Plan are complete and final. These documents will be added to the Troy Site webpage. The revised IAP will be added to the webpage after Ecology's approval.

Appendix C

**Ecology Conditional Approval Letter
Dated July 29, 2013**



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 29, 2013

Mr. Shawn Perry
Touchstone SLU LLC
2025 First Avenue, Suite 1212
Seattle, WA 98121

Subject: Conditional Approval to Implement the Agreed Order Amendment and proposed Interim Action Plan at Troy Laundry Site at 307 Fairview North, Seattle, WA
Cleanup Id # 11890 and Facility Site # 18135499

Dear Mr. Shawn Perry:

Ecology conducted a 30-day public comment period May 10-June 10, 2013 for the Troy Laundry Seattle Site (Troy Site or Site) regarding the Amended Agreed Order No. DE 8996, proposed Interim Action Plan, State Environmental Policy Act determination, and Public Participation Plan. The purpose of this letter is to give Touchstone conditional approval to implement the Agreed Order Amendment and the proposed Interim Action Plan, with the revisions listed below.

The AO Amendment and Interim Action Plan (IAP) are the proposed next steps in the Model Toxics Control Act (MTCA) cleanup process at the Troy Site. These steps will **NOT** replace the steps in the MTCA cleanup process for completing the Remedial Investigation (RI), Feasibility Study (FS), and Cleanup Action Plan (CAP) for the Troy Site. When the draft final RI, FS and CAP are completed, then Ecology will conduct the next public comment period. These MTCA steps are required and will be implemented with Ecology approval and oversight.

As of the date of this letter Ecology has not approved the SoundEarth Strategies Inc. (SES) Draft Remedial Investigation or the SES Draft Feasibility Study. Ecology has identified that more investigation is necessary to adequately characterize the soil-groundwater-vapor-source control components for the Troy Site. In addition, the FS is not complete until the nature and extent of contamination is adequately characterized; only then can appropriate cleanup alternatives be evaluated.

With respect to the comment period, Ecology received one set of comments for the Troy Site from Marten Law (June 10, 2013) with a Technical Memorandum by Farallon Consulting, LLC. Ecology is preparing a Responsiveness Summary which will present Ecology's responses and recommendations to each of the comments received. Ecology anticipates that the summary will be issued in August.

Ecology has determined that there are no significant conceptual changes for the proposed Amendment and Interim Action Plan at the Troy Site. However, Ecology will require additional specific steps and revisions for the Interim Action Plan based on the comments received, as identified below.

1. Touchstone will provide Financial Assurance, consistent with WAC 173-340-440(11) to guarantee completion of the MTCA Cleanup Action at the Troy Site.
2. Touchstone acknowledges and confirms that this interim action constitutes a partial cleanup and will not supplant, interfere with, or foreclose the final MTCA cleanup action approved by Ecology. In other words, the proposed IAP, if implemented, and subsequent development may be altered or impacted by the final approved MTCA Cleanup Action.
3. Touchstone will prepare and implement a Post Excavation Evaluation Sampling and Analysis Plan for excavation side wall and excavation bottom sampling to include soil, groundwater, and vapor media with an Ecology approved grid and sampling plan. This information is necessary for the Site Remedial Investigation, Feasibility Study and Cleanup Action Plan. This information is critical for assessing the vapor intrusion hazard from the residual soil contamination and groundwater contamination that remains after the interim action and property redevelopment.
4. Touchstone will evaluate, design and install a dedicated vapor intrusion protection system, if required, based on the Post Excavation Evaluation. If Touchstone decides to directly mitigate the vapor intrusion hazard, the vapor intrusion mitigation system will protect indoor air from vapor intrusion using technologies, performance objectives, and cleanup levels recommended in Ecology Publication 09-09-047 "Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action."
5. Touchstone will evaluate, design and install an active or passive engineered system that will protect the remediated area from possible up-gradient groundwater contaminant source(s), if required, based on the Post Excavation Evaluation.
6. Touchstone will prepare and submit, for Ecology review and approval, an Engineering Design Report for the proposed Interim Action at the 80 percent completion level with Remediation Levels updated and representing current Ecology CLARC levels for Interim Action.
7. All references to "cleanup levels" will be changed to "remediation levels" in the Interim Action Work Plan. The final cleanup levels are yet to be determined at this stage of the MTCA cleanup. Cleaning up soil to be protective of direct contact, if achieved, will be recognized in the RI/FS in the course of completion of the RI/FS and CAP.
8. At present, Ecology does not consider the BIOCHLOR modeling results by SES or Farallon to provide a reliable basis for deciding what constitutes "reasonable" plume restoration times due to the uncertainties in parameters such as post-excavation source mass loading, mixing from upgradient plumes, non-site specific decay rates, lack of any model calibration, and variable hydrologic and hydrogeologic conditions. Ecology will


determine if additional modeling will be required after review of the Post Excavation Evaluation Sampling Results.

- 9 Regarding the proposed groundwater remediation interim action, Ecology recommends proceeding with the proposed interim action for groundwater with the understanding that the final cleanup action will still need to address the remaining groundwater issues determined from data after the completion of the IA and RI/FS. Ecology does not find the BIOCHLOR modeling by SES and Farallon and their simulated restoration times by natural attenuation compelling enough to base its decision to proceed or not with the proposed groundwater remediation on this basis alone. Instead, Ecology finds that the proposed groundwater remediation follows the general requirements for interim actions under WAC 173-340-430(2).

Ecology requests that a revised Interim Action Plan be submitted within 45 days, on or before September 16, 2013. Ecology appreciates your efforts for this Amendment and proposed Interim Action Plan and we look forward to working together to complete these tasks.

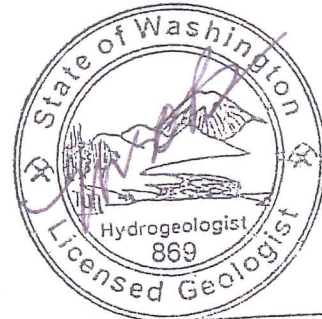
If you need additional information regarding this Conditional Approval, please contact me at the Northwest Regional Office at mobr461@ecy.wa.gov or by telephone at 425-649-7249.

Sincerely,



Maura S. O'Brien, PG/HG #869
Professional Geologist/Hydrogeologist and Site Manager
Toxics Cleanup Program

cc Dori Jaffe, Assistant Attorney General
Bradley M. Marten and Jessica K. Ferrell, Marten Law



MAURA SALAMAH O'BRIEN

