STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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November 15,2000

Paul W. Agid
Senior Environmental Program Manager
Seattle-Tacoma International Airport
17900 International Blvd. Suite 402
SeaTac, Washington 98188-4238

John Wietfeld
Site Manager for SeaTac Airport Agreed Order
Washington Department of Ecology

Dear Paul:

Attached is a list of items that are currently not completed on Agreed Order 97TC-N122. Also included is notification of all items completed.

The attached list and letter is Washington States Department of Ecology's written notification of the items that are completed as required per Section IV of Agreed Order 97TC-N122.

If you have any questions or concerns, please contact me at (425) 649-7282.

Sincerely,

John Wietfeld

John O. Wietfeld
Acting Unit Supervisor Tanks Unit
Toxics Cleanup Program
Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Cc: File
Steve Alexander
Roger Nye
Ching Pi Wang
Elizabeth Leavitt R.E.A.

Department of Ecology, NWRO

November 2, 2000

TO: Steve Alexander, TCP Section Head, NWRO
John Wietfeld, TEC Unit Supervisor

FROM: Roger Nye Roger Nye

SUBJECT: Checklist for Sea-Tac Agreed Order Tasks

Tasks stipulated in the Agreed Order that the Port must complete, and status of Tasks:

NOTE: The information on status of the Tasks is "as has been reported to Ecology".

1. Research existing information to provide a background hydrogeological description of the aquifers and their relation to the AOMA and to water wells and surface waters. *COMPLETED.*

2. Research existing information to identify known areas of soil and groundwater contamination within the AOMA and its near vicinity (¼ mile). *COMPLETED.*

3. Research existing information to identify potential unknown areas of soil and groundwater contamination (based on historical operations) within the AOMA and its near vicinity (1/4 mile). *NOT COMPLETE. Status: The Port identified some potential historical areas of contamination but Ecology questioned the thoroughness of this work. Written comments were provided to the Port regarding this work along with information from Ecology archives that indicated possible historical sources of solvents not identified by the Port. The written comments and attached materials were mailed to the Port on February 7, 1999. The Port did not respond to this material.*

4. Research existing information to identify potential preferred pathways of contaminant transport. *NOT COMPLETE. Status: Unknown*

5. Research existing information to identify any publicly recorded, operational, private drinking water supply wells within one mile of the AOMA that could potentially be impacted by contamination within the AOMA. *NOT COMPLETE. Status: Unknown*

6. Research existing information to compile a database of wells screened across the surface of the Qva aquifer throughout the AOMA and its near vicinity (1/4 mile). *COMPLETED.*

7. Acquire a set of wells representative of the entire AOMA and its near vicinity (1/4 mile) from the database compiled in Task 6. The final selection of the representative set of wells "will be agreed upon by Ecology and the Port". *COMPLETED.*

8. Collect four quarterly rounds of groundwater elevation data from the set of representative wells, determine the groundwater elevation contours, and report the data to Ecology after each quarterly round. *COMPLETED. The Port included some additional data from wells not in the "representative set" over one mile from the AOMA, which was outside the scope of the Task.*

9. Develop a groundwater flow model. The selection of model software and methodology must be" by agreement of Ecology and the Port". *NOT COMPLETE. Status: A conceptual groundwater flow model, which included existing data from over 400 borings and numerous interpreted hydrstratigraphic cross sections, has been completed. The groundwater flow model software (MODFLOW) and methodology regarding this model (boundary conditions, grid, etc.) were selected by the Port and agreed to by Ecology. The groundwater flow model is apparently not "up and running" however.*

10. Develop a contaminant fate and transport model. The selection of model software and methodology must be "by agreement of Ecology and the Port". *NOT COMPLETE. Status: As part of this work, the locations of potential unknown areas of groundwater contamination within the AOMA and vicinity must be identified. As per Task 3, Ecology has not agreed to an initial set of locations identified by the Port. Software has not been discussed. Modeling methodology in known areas of contamination has not been discussed. Ecology has agreed to "particle tracking" methodology to model contaminant transport in potential unknown areas of contamination.*

11. Evaluate all data and modeling results generated by the previous work and determine a scope of work for any necessary additional investigation activities to be described in an Addendum to the Agreed Order. This work includes determining the need for and locations of up to 10-15 new wells to confirm modeling results conduct characterization of groundwater and/or perform long-term monitoring. The wording in the Agreed Order implies this work will be completed together and in agreement with Ecology. *NOT COMPLETE. Status: All other work must be completed first.*

12. Prepare a report (STIA Ground Water Study Phase I Report) compiling and evaluating data generated from all previous work. *NOT COMPLETE. Status: All other work must be completed first.*

13. Conduct pollution prevention actions specifically for UST systems at Sea-Tac Airport that are deferred or exempt from the Washington UST regulations. These actions are:

(a) consult with owners/operators, (b) understand the operations of UST systems, (c) review in-place leak detection/prevention methods (LDPMs), (d) identify additional LDPMs, (e) identify time lines for implementing additional LDPMs, (f) request owners/operators to implement LDPMs, and (g) track the progress of implementing the LDPMs. The Agreed Order states that "Ecology and the Port will work together" to accomplish this work. *NOT COMPLETE. Status: No work has been done.*

14. Create a database for all UST systems at Sea-Tac Airport. *COMPLETED.*

15. Update the Sea-Tac Airport UST database annually for five years with current information. Acquire the current information regarding UST systems by annually presenting all UST owners/operators with a written request to provide information regarding any changes/upgrades that were made to UST systems and the leak detection/prevention methods used. Report the updated UST information annually to Ecology. *NOT COMPLETE. Status: Two updates have been completed and reported to Ecology. The last update will be completed in 2003.*

16. Prepare a report (STIA Fuel Systems Pollution Prevention Report) documenting the results of pollution prevention activities as per the Agreed Order. *NOT COMPLETE. Status: All other work regarding pollution prevention must be completed first.*

Tasks stipulated in the Agreed Order that Ecology must complete, and status of Tasks:

1. Agree to the final selection of the representative set of wells. *COMPLETED.*

2. Agree to the selection of groundwater flow model software and methodology. *COMPLETED.*

3. Agree to the selection of contaminant fate and transport model software and methodology. *NOT COMPLETE. Status: The Port presented identified locations of potential unknown areas of contamination, but Ecology has not agreed with this work. Software has not been discussed. Modeling methodology in known areas of contamination has not been discussed. Ecology agreed to "particle tracking" methodology for use in potential unknown areas of contamination.*

4. Work jointly with the Port to evaluate the results of the data research and modeling, and agree to a scope of work for additional investigation activities to be stipulated in an Addendum to the Agreed Order. *NOT COMPLETE. Status: All other work must be completed first.*

5. Work jointly with the Port to conduct Pollution Prevention actions regarding the implementation of leak detection/prevention methods for UST systems at the airport that are deferred or exempt from the UST regulations. *NOT COMPLETE. Status: No work has been done.*

6. Conduct an inspection of all UST systems at Sea-Tac Airport that are regulated by the provisions of the UST regulations (WAC 173-360). Report updated information and results of inspection s to the Port. *NOT COMPLETE. Status: The UST inspections are 90% complete.*

7. Prepare a report presenting the results of the UST inspection work to be included in The Port's report (STIA Fuel Systems Pollution Prevention Report). *NOT COMPLETE. Status: Report will be prepared when UST inspections and any required follow up actions are complete.*