Olympic View
DE-00SWFAPNR-1729
FS 79649975

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

January 31, 2001

Mr. Dan Wilson, Site Manager
Olympic View Sanitary Landfill
P. O. Box 990
Bremerton, WA 98337

RE: AGREED ORDER FOR OLYMPIC VIEW LANDFILL

Dear Mr. Wilson:

This letter accompanies your copy of the fully executed Agreed Order for the investigation at Olympic View Landfill. I agree with and have initialed your minor changes.

If you have any questions, please call Don Seeberger at 425-649-7218.

Sincerely,

George Sidles, Section Supervisor
Solid Waste & Financial Assistance Program

GS/dm

Enclosure

cc: Ms. Jan Brower, Bremerton-Kitsap County Health District
Ms. Leslie Nellermoe, Heller Ehrman
Mr. Mark Verwiel, Waste Management
Mr. Cullen Stephenson, Program Manager, SW&FAP

FS-70-2017

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:	NO. DE 00SWFAPNR-1729
Olympic View Sanitary Landfill Corporation,	AGREED ORDER

TO: Mr. Dan Wilson
OVSL
P.O. Box 990
Bremerton, WA 98337

I. JURISDICTION

This Agreed Order ("Order") is issued pursuant to the authority of RCW 70.105D.050(1).

II. FINDINGS OF FACT

Ecology makes the following Findings of Fact.

1. The Olympic View Sanitary Landfill ("Landfill") is located in the Olympic View Industrial Park Complex at 10015 SW Old Barney White Road, Port Orchard, Washington. The Site ("Site"), including the Landfill, is in the northeast quarter of Section 10, Township 23 North, Range 1 West. The Site encompasses the area shown in Figure 1-1 attached to this Agreed Order, and extends vertically and laterally to any area where hazardous substances from the Landfill have come to be located.

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2. Olympic View Sanitary Landfill, Inc. ("OVSL") is the current owner of the Landfill site. The site is approximately 500 acres with 65 acres permitted for a solid waste landfill.

3. In 1963, the landfill, then known as the Old Barney White Landfill, was developed as a burning dump. The Old Barney White Landfill reportedly accepted U.S. Navy (demolition, industrial, and putrescible), municipal, and self-hauled municipal wastes.

4. In 1970, Brem Air Disposal, Inc. acquired the site and renamed it Brem Air Northwest Disposal. Brem Air Disposal operated the landfill until 1975. Brem Air Disposal stopped burning at the Landfill, and, in 1975, developed the Landfill to comply with the state regulations, the Minimum Functional Standards for Solid Waste Handling, and permit requirements imposed by the Bremerton-Kitsap County Health District. After 1975, the Landfill accepted mixed municipal waste solid waste, industrial waste, demolition waste and special waste which included coal ash, asbestos, septage and sewage sludge.

5. In 1975, a new corporation, Kitsap County Sanitary Landfill, Inc., (KCSL) was formed by the Brem Air Disposal Inc. shareholders to own and operate landfills. KCSL continues to operate the Landfill, although its name was changed in December 1995 to Olympic View Sanitary Landfill, Inc.

6. The landfill is scheduled to cease accepting waste in mid-2002, before its permitted capacity is reached.

7. The Landfill is regulated under state and local regulation by the Bremerton-Kitsap County Health District. Presently the Landfill accepts municipal and non-municipal

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solid waste, including industrial, inert and demolition, wood waste, and other wastes approved by the Bremerton-Kitsap County Health District.

8. OVSL operated the Landfill at the time releases of hazardous constituents were identified.

9. Certain products of solid waste decomposition have been released into the environment at the Site and their presence has been confirmed in the following documents:

Conceptual Hydrogeologic Model Report, Olympic View Sanitary Landfill, USA Waste Services, Inc., Kitsap County, Washington, Geomatrix Consultants, March 1997.

Quarterly and Annual Environmental Monitoring Reports for Olympic View Sanitary Landfill, Olympic View Sanitary Landfill between 1989 though 1998.

III. ECOLOGY DETERMINATIONS

1. OVSL is an "owner and operator" as defined at RCW 70.105D.020(12) of a "facility" as defined in RCW 70.105D.020(4).

2. The "facility" is known as Olympic View Sanitary Landfill and is located at 10015 SW Old Barney White Road, Port Orchard, Washington.

3. The substances found at the facility as described above are "hazardous substances" as defined at RCW 70.105D.020(7).

4. Based on the presence of hazardous substances at the facility and all factors known to the Department, there is a "release" or "threatened release" of hazardous substances from the facility, as defined at RCW 70.105D.020(20).

5. By a letter dated April 22, 1999, OVSL voluntarily waived its rights to notice and comment and accepted Ecology's determination that OVSL is a "potentially liable person" under RCW 70.105D.040. OVSL enters into this Order voluntarily.

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6. Pursuant to RCW 70.105D.030(1) and 70.105D.050, the Department may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances, whenever it believes such action to be in the public interest.

7. Based on the foregoing facts, Ecology believes the remedial action required by this Order is in the public interest.

IV. WORK TO BE PERFORMED

The purpose of this Agreed Order is for OVSL to complete and document a state remedial investigation and feasibility study as per WAC 173-340-350. Numerous investigations have been and are being conducted at OVSL under a phased program developed jointly among the BKCHD, Ecology, and OVSL. This Agreed Order continues the phased approach to complete the remedial investigations to define the nature and extent of contamination in groundwater, surface water, and sediments while building on all pertinent, existing, and available information. For each task listed below Ecology will review and approve draft documents, final documents, and work plans. All workplans shall include a detailed schedule for implementation and completion. OVSL will implement Ecology approved work plans. If either party identifies a data gap, then either Ecology or OVSL may propose additional work to fill the data gaps under Section VII (I) of this Agreed Order. The completion of remedial investigations will assist in the preparation of the feasibility study and selection of potential cleanup actions. Exhibit B provides the schedule for completing the tasks listed below and is herein incorporated by reference.

A. TASK 1

1. OVSL shall submit to Ecology a draft remedial investigation report which summarizes all existing field and technical information related to the Site. The report will include, at a minimum, the following technical details and information:

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a) Local geology and hydrogeology (Union River watershed including off-site domestic wells) and site-specific geology and hydrogeology;

b) An updated inventory of domestic wells within a one (1) mile radius of the Site property boundary based on all pertinent, existing, and available information;

c) A work plan for water quality sampling of selected off-site domestic wells within the groundwater flow path of the Landfill;

d) Updated cross-sections of the Site using a common survey datum incorporating the new wells installed since the March 1997 conceptual hydrogeologic model report. OVSL shall construct a minimum of three (3) cross-sections with one being down the axis of the contaminant plume, one from the southeastern corner of the leachate lagoon to MW-36, and one from MW-4 to MW-27. Each cross-section shall include, at a minimum, subsurface stratigraphy and hydrostratigraphy, total depth of well or boring, screen interval, groundwater elevation, and soil classification using the Unified Soils Classification system ("USCS");

e) A Site plan map with boring and groundwater monitoring well locations;

f) Maps showing the groundwater potentiometric surface using the new survey information;

g) Confirmation of the recharge and discharge area based on new survey data;

h) Cross-section(s) of the Site illustrating the predicted groundwater to surface water pathway;

i) Estimates of the rate of transport (include method or model for determination);

j) Groundwater data (for representative indicator chemical constituents) presented as concentration vs. time graphs for representative groundwater monitoring wells which show, at a minimum, analytical detection limits, the chemical constituent concentrations, and sample collection dates;

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k) Isopleth cross section down the axis of the plume (see d) for representative indicator chemical constituents (see k) using the most recent groundwater monitoring data. The isopleth cross section will include time series data plots for all pertinent wells (i.e. wells with detectable concentrations);

l) Isopleth maps for representative indicator chemical constituents (including, at minimum, arsenic, manganese, iron, specific conductance, vinyl chloride, and cis-1,2-dichloroethylene) using the most recent groundwater monitoring data. Each Isopleth map will include time series data plots for all pertinent wells (i.e. wells with detectable concentrations);

m) A summary of the status of previously identified data gaps and a description of new or remaining data gaps summary and evaluation of corrective actions that have been implemented at the Landfill;

n) Identification and evaluation of the potential sources of contamination at the site using all existing and available information, which will include, at a minimum, the following:

(i) Old Barney White Cell (If the distance separating the Old Barney White Cell from groundwater can not be practically determined, the report will assume that groundwater could be in contact with waste.)

(ii) Lined portions of the landfill

(iii) Stormwater retention ponds

(iv) Leachate lagoons (former and existing)

(v) Leachate conveyance system

(vi) Any additional sources of contamination

2. OVSL shall submit to Ecology a final remedial investigation report after incorporating Ecology's comments on the final draft report.

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B. TASK 2

OVSL will conduct a focused investigation and assessment along the toe of the slope between the Landfill and the eastern and southern shoreline of Wetlands B, C, and D between the upper end of Wetland B and approximately the western tip of the leachate pond in Wetland D (Study Area). The purpose of this task is to assess the potential for adverse ecological impacts to the wetland flora, fauna and water resources resulting from OVSL's operation, including, but not limited to, the discharge of emergent groundwater that may contain chemicals associated with wastes in the Landfill. The Focused Wetland Assessment Work Plan will define the criteria used to identify significant adverse impacts to the wetland via the various lines of evidence collected in the study.

This investigation and assessment will span one growing and wet season from April 2000 to December, 2000. The investigation will include the following activities:

1. A wetland delineation will be performed along the eastern and southern shoreline of the study area. Active seeps and outfalls will be identified and surveyed. The wetland delineation and discharge points will be placed on a digitally-generated base map.

2. New water level fluctuation (WLF) measurement points were established for the Study Area. Daily WLF measurements will be collected for the remainder of the amphibian breeding season (April and May 2000). Weekly observations will be made for the remainder of the study duration. Because the Focused Wetland Assessment Work Plan was not completed until May of 2000, a memo describing the locations and monitoring techniques was submitted to Ecology for review and comment on April 4, 2000. The parties selected sampling locations on May 23, 2000. Ecology will approve the memorandum and work plan before this Agreed Order is signed.

3. OVSL will prepare a Focused Wetland Assessment Work Plan in coordination with Ecology staff. The Work Plan will be provided to Ecology for expedited review/comment and approval in June of 2000 and will include the following tasks:

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(a) A series of investigation locations intended to evaluate the existence and magnitude of the impact of landfill operations on the wetlands, will be established by the parties in the field. Possible sampling locations will be identified using high conductivity as a preliminary screening tool with final selection made using the parties' best professional judgment.

(b) A single round of surface sediment sampling will be conducted at these locations along potential gradient transects from the point of discharge in the wetland.

(c) Co-located surface water samples and physical parameter measurements will be collected along the transects. Surface water sampling events will occur in the early growth season in June, the late growth season in September and the wet season, in November or December.

4. OVSL will conduct an assessment of the historical groundwater monitoring data for wells adjacent to the Study Area to identify chemicals of potential ecological concern (COPCs) that will be addressed in the sediment and surface water sampling program. The COPCs and methods of their selection will be described in a technical memorandum to Ecology in May 2000.

5. Macroinvertebrate sampling will be conducted in the spring sampling round along the transects described in paragraph 3) at locations co-located with the sediment and surface water sampling. The data will be used to evaluate potential correlation between changes in sediment and water conditions (physical and chemical) along the transect and the abundance and richness of aquatic macroinvertebrates. The purpose of this investigation component is to evaluate the potential correlation between water quality conditions associated with groundwater flow into the adjacent wetlands from the Landfill and the richness and abundance of macroinvertebrates along a flow path, not to compare the "health" of the wetlands to other Puget Sound wetlands. Benthic invertebrate sampling will be conducted during the first sampling event to establish a baseline data set for the invertebrate community. Following

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analysis of the data collected in 2000, the parties will use their best professional judgment to determine whether additional biological sampling will further understanding of the nature and extent of landfill effects on the wetlands. If the parties disagree as to whether additional biological sampling will be necessary, the dispute resolution mechanisms of Section VII of this Agreed Order shall apply.

If a chemical gradient is not detected at any of the individual transects using June sampling event data, the parties will meet to reevaluate the appropriateness of the investigation and assessment strategy for those specific transects.

6. Storm water outfalls will be sampled and the samples analyzed for an agreed-upon list of COPCs and physical parameters once during the wet season (April or May, 2000,) and once during the dry season (September or October, 2000).

7. OVSL will prepare a wetland investigation and assessment report that will summarize all of the field activities, present the collected data, and provide meaningful data summaries and correlative comparisons between sediment, surface water and benthic macroinvertebrate parameters for each investigation transect. This report will be submitted to Ecology for review and comment within sixty (60) days of the final sampling event. A detailed schedule will be provided in the Focused Wetland Investigation and Assessment Work Plan.

C. TASK 3

1. OVSL shall develop and submit to Ecology a new monitoring plan for the Site based on all available information regarding all appropriate media, including groundwater, surface water , leachate analysis of influent, and soil gas monitoring. Until the new monitoring plan has been approved, OVSL shall continue with the current monitoring plan as outlined in Exhibit A.

D. TASK 4

1. OVSL shall submit to Ecology a final draft feasibility study written in accordance with WAC 173-340-350 that contains, at a minimum, methods for evaluating the technical, environmental, human health and financial costs associated with each remedial option.

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2. OVSL shall submit to Ecology the final feasibility study report after incorporating Ecology's comments on the final draft feasibility study report. However, if OVSL does not agree with Ecology's requested revisions, OVSL may request dispute resolution pursuant to Section VII of this Agreed Order.

V. DATA

OVSL shall follow the reporting guidelines in WAC 173-340-840 for all parts of this Agreed Order unless otherwise agreed to by the designated project managers for Ecology and the OVSL. All data generated pursuant to this Agreed Order shall be submitted to Ecology-NWRO, including all outlier and duplicate data. In addition, all groundwater, sediment, surface water, leachate influent and landfill soil gas data generated pursuant to this Agreed Order shall be submitted to Ecology-NWRO as copies of the original reported laboratory data sheets, in tabulated data format and in an electronic format approved by Ecology-NWRO for all referenced environmental media. Laboratory detection limits and practical quantification limits shall be reported for each constituent concentration detected.

VI. MONTHLY REPORTS

OVSL shall submit monthly status reports and meet quarterly with Ecology-NWRO, starting from the effective date of this Agreed Order and continuing until all of the requirements of this Agreed Order are completed to Ecology's satisfaction. The monthly status reports shall be due on the tenth calendar day of the month. The frequency of meetings and status reporting may be changed with the concurrence of both parties. In each monthly status report, OVSL shall include all work conducted pursuant to this Agreed Order during the last month, including, but not limited to:

1. Occurrence of any problems, how problems were rectified, deviations from the workplans and an explanation of all deviations;

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2. Projected work to occur in the upcoming month including a list of deliverables if different from the schedule in Exhibt B; and

3. Summaries of significant findings, changes in personnel, summaries of significant contacts with all federal, state, local community, and public interest groups.

OVSL shall submit quarterly and annual environmental monitoring reports as outlined in Exhibit A until the revised monitoring plan (Task 3) is approved by Ecology.

VII. TERMS AND CONDITIONS OF ORDER

A. Definitions.

Unless otherwise specified, the definitions set forth in ch. 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

B. Public Notices.

WAC 173-340-600(10)(c) requires a thirty (30) day public comment period before this Agreed Order becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to withdraw this Order should public comment disclose facts or considerations which indicate to Ecology that the Order is inadequate or improper in any respect.

C. Remedial Action Costs.

OVSL shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, and Order preparation, oversight and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). OVSL shall pay the required amount within 90 days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed by each staff member will be provided with each statement. Itemized

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statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs will result in interest charges.

D. Designated Project Managers.

The project manager for Ecology is:

Name: Don Seeberger
Address: Department of Ecology
Northwest Regional Office
Solid Waste and Financial Assistance Program
3190 160th Avenue S.E.
Bellevue, WA 98008-5452

Phone: (425) 649-7218
Fax: (425) 649-7089
E-mail: dsee461@ecy wa gov

The project manager for OVSL is:

Name: Jeff Altman
Address: Olympic View Sanitary Landfill, Inc.
P O Box 990
Bremerton, WA 98337

Phone: (360) 415-2734
Fax: (360) 674-7138
E-Mail: jaltman2@wm com

The project managers shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and OVSL, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project manager(s). Should Ecology or OVSL change project manager(s), written notification shall be provided to Ecology or OVSL at least ten (10) calendar days prior to the change.

E. Submittals.

Once approved in writing by Ecology, all submittals to Ecology are incorporated by reference and become enforceable parts of this Agreed Order, as if fully set forth herein.

All submittals, whether draft or final, shall also be submitted concurrently to the Bremerton-Kitsap County Health District at the following address:

Name: Mike Means
Address: Bremerton-Kitsap County Health District
Solid and Hazardous Waste
P.O. Box 1076
Poulsbo, WA 98370-0050

F. Field Modifications.

During the performance of work under an approved submittal, field modifications of the work may be agreed to verbally by the Project Managers. In such case, OVSL shall submit a description of the modification to Ecology's Project Manager in writing within seven (7) working days after the verbal agreement, and Ecology's Project Manager shall provide written confirmation of the agreed modification.

G. Disputed Modifications.

If following submission of a draft submittal, OVSL disagrees with or has questions concerning Ecology's comments and/or required modifications, OVSL, within ten (10) working days after receipt of Ecology's comments and/or required modifications, may in writing request a meeting or telephone conference with Ecology's Project Manager to resolve the matter. Ecology's receipt of such written request will begin a twenty (20) calendar day informal dispute resolution period. The written request shall include a statement of the issue(s) OVSL wish to address.

The twenty (20) calendar day informal resolution period shall extend the due date for resubmittal. If agreement is reached within the informal resolution period, OVSL shall incorporate into a revised submittal the agreed-upon comments and/or modifications within thirty (30) calendar days after reaching agreement, unless a longer time is specified by Ecology. If agreement is not reached within the informal resolution period, Ecology shall send a written letter of disapproval to the OVSL. Within thirty (30) calendar days of receipt of the written disapproval letter, OVSL shall submit a revised, final draft submittal which incorporates all Ecology's comments or required modifications. In lieu of, or after this informal dispute

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resolution process, OVSL may also invoke the dispute resolution procedures in Section VII of this Agreed Order for all comments and/or required modifications OVSL wish to challenge.

H. Performance.

All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in hazardous waste site investigation and cleanup. OVSL shall notify Ecology as to the identity of such engineer(s) or hydrogeologist(s), and of any contractors and subcontractors to be used in carrying out the terms of this Order, in advance of their involvement at the Site. OVSL shall provide a copy of this Order to all agents, contractors and subcontractors retained to perform work required by this Order and shall ensure that all work undertaken by such agents, contractors and subcontractors will be in compliance with this Order.

Except where necessary to abate an emergency situation, OVSL shall not perform any remedial actions at the Site outside those required by this Order unless Ecology concurs, in writing, with such additional remedial actions.

I. Additional Work.

Ecology may determine or OVSL may propose that Additional Work is or may be necessary to implement this Agreed Order. If the Additional Work is proposed by OVSL, Ecology will respond to the proposal in writing within an appropriate time period, no longer than thirty (30) calendar days. If the Additional Work is required by Ecology, then Ecology will specify in writing the basis for its determination that the Additional Work is necessary. Within thirty (30) calendar days after the receipt of such written determination, OVSL shall notify Ecology of their willingness to perform the Additional Work or may request a meeting with Ecology to discuss the Additional Work. If OVSL is willing to perform the Additional Work, OVSL shall submit a Workplan for Ecology review incorporating the Additional Work within thirty (30) calendar days (or more, if approved by Ecology) after either submitting notice

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of their willingness to perform or the date of the meeting with Ecology, as applicable. The Workplan shall be subject to the procedures set forth in Section VII.4. Upon written approval of the Workplan, OVSL shall implement the Workplan in accordance with the schedule contained therein. If OVSL does not agree with the terms or conditions of the Workplan, then OVSL may request dispute resolution pursuant to Section VII (7) of this Agreed Order.

J. Access.

Ecology or any other Ecology authorized representative and Bremerton-Kitsap County Health District (BKCHD) shall have the authority to enter and freely move about the Site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the project coordinator may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by OVSL. By signing this Agreed Order, OVSL agrees that this Order constitutes reasonable notice of access, and agrees to allow access to the Site at all reasonable times for purposes of overseeing work performed under this Order.

Ecology shall allow split or replicate samples to be taken by OVSL during an inspection unless doing so interferes with Ecology's sampling. OVSL shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) calendar days notice before any sampling activity. Ecology and/or BKCHD shall give seven (7) calendar days notice to OVSL for any scheduled sampling events, and shall provide the opportunity for OVSL to take split or replicate samples during the sampling event.

K. Public Participation.

Ecology shall prepare and/or update a public participation plan for the Site. Ecology shall maintain the responsibility for public participation at the Site. OVSL shall help coordinate and implement public participation for the Site.

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L. Retention of Records.

OVSL shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of OVSL, then OVSL agrees to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph. At the conclusion of the document retention period, Ecology may request that OVSL deliver any such records or documents. OVSL may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by Washington law and refuse to produce those documents.

M. Dispute Resolution.

OVSL or Ecology's project manager may request Ecology to resolve disputes which may arise during the implementation of this Order. Ecology shall give written notice of any decision to invoke the dispute resolution procedure to Jeff Altman of OVSL. OVSL shall give written notice of any decision to invoke the dispute resolution procedure to Don Seeberger of Ecology. Either party may change the designated recipient of the written notice by providing written notification to the other party at least ten (10) days prior to the change. Any request to utilize the dispute resolution procedure shall be in writing and directed to the signatory, or his/her successor(s), to this Order who shall review the written request, any reply by the other party, and issue a written decision within 20 days. Either party may provide written comments to a request for dispute resolution prior to the issuance of the written decision. Ecology resolution of the dispute shall be binding and final. OVSL is not relieved of any requirement of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

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N. Reservation of Rights/No Settlement.

This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against OVSL to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against OVSL to require those remedial actions required by this Agreed Order, provided OVSL complies with this Agreed Order.

Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of hazardous substances from Olympic View Sanitary Landfill.

O. Endangerment.

In the event Ecology determines that conditions at the Site are creating or have the potential to create a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order OVSL to stop further implementation of this Order for such period of time as needed to abate the danger.

P. Transfer of Property.

No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by OVSL without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to transfer of any legal or equitable interest OVSL may have in the Site or any portions thereof, OVSL shall serve a copy of this Order upon any prospective purchaser, lessee,

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transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, OVSL shall notify Ecology of the contemplated transfer.

Q. Compliance with Other Applicable Laws.

1. All actions carried out by OVSL pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in paragraph 2 of this section.

2. Pursuant to RCW 70.105D.090(l), the substantive requirements of Chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals for the remedial action under this Order have been included in Exhibit A and are binding and enforceable requirements of the Order.

OVSL has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(l) would otherwise be required for the remedial action under this Order. In the event OVSL determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or OVSL shall be responsible to contact the appropriate federal, state and/or local agencies. If Ecology so requires, OVSL shall promptly consult with the appropriate federal, state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by OVSL and on how OVSL must meet those requirements. Ecology shall inform OVSL in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. OVSL shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

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Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies prior to establishing the substantive requirements under this section.

3. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply and OVSL shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

VIII. SATISFACTION OF THIS ORDER

The provisions of this Order shall be deemed satisfied upon OVSL's receipt of written notification from Ecology that OVSL has completed the remedial activity required by this Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with.

IX. ENFORCEMENT

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

1. The Attorney General may bring an action to enforce this Order in a state or federal court.

2. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

3. In the event OVSL refuses, without sufficient cause, to comply with any term of this Order, OVSL will be liable for:

a) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and

b) civil penalties of up to $25,000 per day for each day it refuses to comply.

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4. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under Section 6 of ch. 70.105D RCW.

Effective date of this Order: 31 January, 2000.

OLYMPIC VIEW SANITARY LANDFILL, INC.

By [signature], SITE MANAGER

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

By [signature], Regional Supervisor
George Sidles SW R EAP

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EXHIBIT A
Monitoring and Reporting

A. MONITORING

1. GENERAL

Groundwater, surface water, sediments and landfill soil gas monitoring shall, at a minimum, meet the requirements under Criteria for Municipal Solid Waste Landfills (WAC 173-351) unless otherwise specified. During the interval between the effective date of this order and the completion of the TASK 3, monitoring shall be conducted as follows:

Environmental monitoring analyses shall be performed by a laboratory accredited by the Washington State Department of Ecology. The methods of analysis shall be in accordance with SW-846, Test Methods for Evaluating Solid Waste-Physical/Chemical Methods. For each test method, the lowest achievable detection limit shall be obtained sufficient to the standards listed in the Ground Water Quality Standards (WAC 173-200), Surface Water Quality Standards (WAC 173-201A), or Model Toxics Control Act Cleanup Regulations (WAC 173-340). If metals are not quantifiable below listed standards using ICP, then graphite furnace AA shall be used.

2. GROUNDWATER

Each of the wells in the groundwater monitoring network is to have low-flow purging and sampling pumps installed. Subsequent to the installation of these pumps, specific ranges of parameters to determine stabilization and flow rates expected for each well must be developed on a well-by-well basis. This information is critical to developing reproducible and accurate results as discussed in the article by Barcelona et. al., 1996, "Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures."

Frequency

The groundwater monitoring program shall consist of no less than semi-annual upgradient monitoring and quarterly downgradient monitoring. Upgradient background monitoring locations are to be sampled at a minimum during the first and third quarter monitoring events. Ecology-NWRO shall be notified a minimum of seven (7) days in advance of groundwater sampling events.

Parameters

Field measurements for each sampled well shall include:

1. Temperature
2. Specific Conductivity
3. Redox
4. Turbidity (visual)
5. pH
6. Static Water Level (for all wells).

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Analytical results shall include:

1. Dissolved metals (antimony, arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel selenium, silver, thallium, vanadium, zinc, iron, manganese and nitrate)
2. Volatile Organic Compounds (VOCs) as listed in Chapter 173-351-990 WAC Appendix I; (EPA SW-846 Method 8260)
3. Geochemical indicator parameter (calcium, bicarbonate, magnesium, sulfate, potassium, alkalinity, iron, manganese)
4. Leachate indicator parameters (ammonia, total organic carbon, total dissolved solids); and
5. Vinyl chloride utilizing selective ion monitoring (SIM)

Locations

MW-13 (upgradient)	MW-13A (upgradient)	MW-13B (upgradient)
MW-35 (upgradient)	MW-15R	MW-23C
MW-23A	MW-23B	MW-2B1
MW-9	MW-19C	MW-19D
MW-20	MW-24	MW-29A
MW-29C	MW-30A	MW-32
MW-33A	MW-34A	MW-34B
MW-34C	MW-36	MW-37
MW-38	MW-39	

Additional Monitoring

1. Priority Pollutant SCAN for wells MW-2B1, MW-13A, MW-15R, MW-19A, MW-19D, MW-23A, MW-29A and MW-32 for four quarters (pending results of initial monitoring).

2. Radiological monitoring

   a) All new wells shall be analyzed for gross alpha, gross beta, and tritium for one full year on a quarterly basis. This requirement includes MW-36, MW-37, MW-38, MW-39, MW-15R, and any other new wells that may be drilled at the landfill site. Once four consecutive quarters of data have been compiled, Ecology will evaluate the need to continue analyzing for these radiochemical parameters and the sampling frequency. Leachate will continue to be analyzed on a quarterly basis for gross alpha, gross beta, and tritium.

   b) Groundwater monitoring wells MW-2B1, MW-19C, MW-20, MW-21, MW-23B, MW-32, MW-33A, MW-33C, and MW-34C shall be analyzed for gross alpha, gross beta, and tritium once per year during the fourth quarter sampling event. The fourth quarter sampling event was chosen because data indicate the highest concentrations of radiochemical parameters were noted in the December/January sampling event. In addition, all background monitoring wells shall be sampled at this time for gross alpha, gross beta, and tritium.

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3. SURFACE WATER

a) Completion of the surface water sampling activities described in Task 2 will also constitute compliance monitoring through December 2000.

b) Between January 1, 2001 and the cessation of waste disposal at the landfill on July 31, 2002, surface water compliance monitoring will be performed as follows:

- Locations: Stormwater ponds A and BC and other outfalls (as shown on attached drawing, Figure 2 from Stormwater Pollution Prevention Plan submitted to Bremerton Kitsap County Health District and Ecology on October 18, 2000.)
- Frequency: Semiannual surface water monitoring will be required at stormwater outfalls. Semiannual monitoring must be completed once in the wet season and once during the dry season. The ponds will be sampled quarterly from the inlet if water is flowing into the ponds, and from standing water in the pond if there is no inflow. If the pond(s) are dry, no sample will be taken for that quarter
- Parameters:

Field Parameters:

- Temperature
- Specific Conductivity
- Dissolved Oxygen
- Turbidity
- pH

Analytical Parameters:

- Dissolved iron, manganese and magnesium
- Alkalinity
- Hardness
- ammonia-N
- Nitrate-nitrite
- Sulfate
- TDS
- Dissolved metals (archived, not analyzed)
- TPH
- Total lead, copper and zinc

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4 LEACHATE

a. Frequency – quarterly

b Location - the inflow pipe at leachate lagoon 1

c. Parameters:

- All groundwater parameters and mercury
- COD,
- BOD,
- Cyanide,
- Nitrite
- Total coliform and radionuclides.

Note: the SIM method for vinyl chloride is not required for the leachate sample. In addition, leachate will be analyzed for semivolatile organic compounds once annually concurrent with the priority pollutant analysis currently performed.

~~In addition, leachate will be analyzed for semivolatile organic compounds once annually concurrent with the priority analysis currently performed.~~ duplicate

DW GRAM

B. REPORTING

1. GENERAL

Groundwater, surface water, leachate and landfill soil gas shall be submitted quarterly for the first, second, and third quarter sampling event. Results and summary of the fourth quarter sampling event shall be combined with the annual report. Groundwater and surface water monitoring data shall be submitted in hard copy and quarterly on a 3 ½ inch computer disk in a format approved by Ecology. The parameters shall be listed in the same order each quarter to facilitate merging of reports.

2. GROUNDWATER

A quarterly groundwater report shall be submitted to Ecology-NWRO no later than sixty days after the receipt of the quarterly analytical data and shall include all of the following:

1) all laboratory analyses (as copies of the original laboratory reporting data sheets, in tabulated data format) for which quality assurance procedures are completed during the three month period;
2) all field measurements;

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3) data tables showing specific location, sample collection data, and constituent concentration;
4) tabulated all organic and inorganic detections;
5) tabulated exceedances of all relevant and applicable regulations (ARAR) exceedances;
6) static water level readings and elevations for each monitoring well for each sampling event;
7) potentiometric surface elevation map depicting groundwater flow rate and direction;
8) cation-anion balances and trilinear diagram;
9) stiff diagrams for each groundwater sampling location;
10) isopleth maps for representative chemical constituents as described in Task A.1.1; and
11) leachate analyses

An annual report for groundwater shall be submitted by April 1 of each year and shall include the following:

1) a brief summary of groundwater flow rate and direction for the year, noting any trends or changes;
2) a photo copy of all potentiometric surface maps developed for each quarter or approved semi-annual period;
3) a summary geochemical evaluation noting any changes or trends in the cation-anion balances, trilinear diagrams, stiff diagrams and general water chemistry for each well;
4) time series plots for each sampling location that exceeds ARARs; and
5) revised hydrogeologic conceptual model as a letter report unless significant changes would require a resubmittal of a new hydrogeological conceptual model.

3. Surface Water

A table presenting the data in a format that allows for comparison with criteria in WAC 173-201A-040 shall be prepared for inclusion in the quarterly monitoring reports which shall be submitted to Ecology-NWRO no later than sixty days after the receipt of the quarterly analytical data. A similar table shall be prepared for the annual report, which shall be submitted by April 1 of each year. If the criteria require calculations based on hardness, these data shall also be provided along with all assumptions. The tables shall be organized to allow easy comparison of data associated with the upstream and downstream sampling sites.

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Exhibit B

Work Schedule

The following is the work schedule required by the Agreed Order:

1. Wetlands Sampling and Report.

The final round of sampling will be completed by December 20, 2000 with the final report submitted 60 days later, approximately 2/15/01.

2. Draft Remedial Investigation Report

Following completion of the wetlands report, the next two items to be submitted are the draft RI report and the new site monitoring plan. OVSL shall submit those documents no later than 6/30/01.

3. Final Remedial Investigations Report

Final RI report and site monitoring plan will be submitted to Ecology no later than 60 days after receipt of Ecology comments on them.

4. Draft Feasibility Study

The remaining document to be submitted is the draft feasibility study. A meeting of the parties to identity the scope of the feasibility study will be held within 30 days of submission of the final RI report and that the schedule for the FS be decided when we know how complex the FS will be.

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