

Case #	455
Date	2-26-02
Case Name	Lucia
Reporter	Lucia Court Reporter

writing by Ecology prior to implementation of any changes.

**E. Conditions for Acceptance of Fill to be used in Construction of the Third Runway and Associated Master Plan Update Improvements:**

The use of imported fill for the proposed Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements may result in impacts to wetlands or other waters of the state. To ensure compliance with measures designed to minimize potential impacts, the Port shall submit borrow site clean fill certification documentation described in the following sections to Ecology for review and written approval prior to fill placement.

**1. Fill Documentation/Fill Criteria/Fill Source**

The Port shall adhere to the following conditions to ensure that the fill placed for the proposed Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements does not contain toxic materials in toxic amounts, thereby preventing the introduction of toxic materials in toxic amounts into waters of the state which includes wetlands.

**a) Documentation**

No later than ten (10) business days prior to accepting any fill materials for use on the proposed Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements, the Port shall submit to Ecology's Federal Permit Manager, SeaTac Third Runway, documentation certifying that the proposed fill source meets the criteria of this Order. The documentation shall contain an environmental assessment of the fill source and shall verify that excavated soil from the proposed fill source complies with the fill criteria set forth below. Findings of the environmental assessment are subject to the review and written approval of Ecology. The environmental assessment shall be conducted by an environmental professional in general conformance with the American Society for Testing and Materials Standard (ASTM) E 1527-00 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and E 1903-97 Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process. At minimum, the document shall contain the following information:

- i) **Fill Source Description:** Provide a description/location of the fill source, general characteristics of the fill source and vicinity, current use, and a site plan identifying the extent of the excavation, project schedule and the estimated quantity of fill to be transported to the proposed Third Runway embankment and associated construction projects of the Port of Seattle Master Plan Update improvements.

#455

ii) **Records Review:** Obtain and review environmental records of the proposed fill source site and adjoining properties. In addition to the standard federal and local environmental record sources, the following Ecology environmental databases shall be reviewed:

- Confirmed & Suspected Contaminated Site Report
- No Further Action Site List
- Underground Storage Tank List
- Leaking Underground Storage Tank List
- Site Register.

Records review shall also contain historical use information of the fill source and the surrounding area to help identify the likelihood of environmental contamination.

iii) **Site Reconnaissance:** Documentation of visits to each site that identifies current site use and site conditions to assist in identifying the likelihood of environmental contamination and/or the potential migration of hazardous substances onto the site from adjoining properties.

iv) **Fill Source Sampling:** Collect and analyze fill materials for the potential contaminant(s) identified in the Phase I Environmental Site Assessment. At a minimum, fill materials from each fill source shall be analyzed for the following hazardous substances

- Total Antimony
- Total Arsenic
- Total Beryllium
- Total Cadmium
- Total Chromium<sup>1</sup>
- Total Copper
- Total Lead
- Total Mercury
- Total Nickel
- Total Selenium
- Total Silver
- Total Thallium
- Total Zinc
- NWTPH-HCID

<sup>1</sup> Chromium (VI) shall be analyzed if the results of the Phase I Environmental Site Assessment show a likelihood of Chromium (VI) contamination.

For fill source characterization, the following table presents the minimum sampling schedule for fill sources with no likelihood of environmental contamination..

Cubic Yards of Soil	Minimum Number of Samples
<1,000	2
1,000 - 10,000	3
10,000 - 50,000	4
50,000 - 100,000	5
>100,000	6

Samples shall be collected at locations that are representative of the fill destined for the proposed Third Roadway embankment and associated construction projects of the Port's Master Plan Update Improvements.

For fill sources with suspected contamination identified by the Phase I Environmental Site Assessment or with complex site conditions, please consult with Ecology's Federal Permit Manager, SeaTac Third Runway for the appropriate sampling requirements.

b) Fill Criteria

The results of the Phase II Environmental Site Assessment sampling and testing shall be compared to the fill criteria to determine the suitability of the fill source for the proposed Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements.

The following table establishes the fill criteria limitations for the hazardous substances identified in Section E1(a)(iv) of this Order.

Hazardous Substances	Fill Criteria mg/kg <sup>2</sup>
Antimony	16
Arsenic	20
Beryllium	0.6
Cadmium	2
Chromium <sup>3</sup>	42/2000
Copper	36
Lead <sup>4</sup>	220/250
Mercury	2
Nickel <sup>5</sup>	100/110
Selenium	5

Silver	5
Thallium	2
Zinc	85
Gasoline	30
Diesel <sup>6</sup>	460/2000
Heavy Oils	2000

- <sup>2</sup> mg/kg = milligrams per kilogram
- <sup>3</sup> Fill with total chromium concentrations greater than 42 mg/kg and less than 2000 mg/kg may be placed to within six feet of the ground surface. No fill with total chromium concentrations greater than 42 mg/kg may be placed within the first six feet of the embankment. No fill with chromium (VI) concentrations greater than 19 mg/kg may be placed within the embankment.
- <sup>4</sup> Fill with total lead concentrations greater than 220 mg/kg and less than 250 mg/kg may be placed to within six feet of the ground surface. No fill with total lead concentrations greater than 220 mg/kg may be placed within the first six feet of the embankment.
- <sup>5</sup> Fill with total nickel concentrations greater than 100 mg/kg and less than 110 mg/kg may be placed to within six feet of the ground surface. No fill with total nickel concentrations greater than 100 mg/kg may be placed within the first six feet of the embankment.
- <sup>6</sup> Fill with diesel range organics concentrations greater than 460 mg/kg and less than 2000 mg/kg may be placed to within six feet of the ground surface. No fill with diesel range organics concentrations greater than 460 mg/kg may be placed within the first six feet of the embankment.

For hazardous substances other than those identified in the above fill criteria table that have been identified in the Phase II Environmental Site Assessment, the Port shall consult with Ecology's Federal Permit Manager, SeaTac Third Runway for the applicable fill criteria.

c) Fill Sources

Fill materials for the proposed Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements shall be limited to the following three sources:

- i) State-certified borrow pits
- ii) Contractor-certified construction sites
- iii) Port of Seattle-owned properties.

d) Prohibited Fill Sources

The following fill sources are prohibited for use on the proposed Third Runway embankment and associated construction projects of the Port of Seattle Master Plan Update improvements:

- Fill which consists in whole or in part of soils or materials that are determined to

be contaminated following a Phase I or Phase II site assessment.

- Fill which consists in whole or in part of soils or materials that were previously determined to be contaminated by a Phase I or Phase II site assessment and have been treated in some manner so to be considered re-mediated soils or fill material.

2. As-Built Documentation

The Port shall provide to Ecology for review quarterly summaries of:

- Names and locations of fill sources placed for the previous quarter
- Quantities of fill materials from these fill sources
- Locations and elevations of fill source materials placed within the Third Runway embankment and associated construction projects of the Port's Master Plan Update Improvements.

Ecology may require additional compliance conditions and/or corrective actions upon Ecology's review of the as-built documents. The quarterly summaries shall be provided to Ecology no later than thirty (30) days following the last day of the quarter.

3. Post Construction Monitoring

The Port shall monitor runoff and seepage from the Third Runway embankment area and other associated Port Master Plan Update Improvements where fill is placed for compliance with applicable Washington State surface water criteria. Ground water down-gradient from the fill area shall be monitored for compliance with applicable ground water criteria.

Within 60 days after the issuance of the 401 Water Quality Certification for the Master Plan Update Improvements, the Port shall submit to Ecology for review and written approval a Surface Water and Ground Water Monitoring Plan. The monitoring plan shall be designed to detect impacts of the fill embankment to the receiving water and to the ground water during fill placement and post fill placement. In the event monitoring detects exceedances of the water quality criteria in either surface or ground water; Ecology may revise the fill criteria and/or require corrective action.

**F. Conditions to Prevent Transport of Contaminants:**

1. All Master Plan Update Improvements and all associated utility corridors shall be constructed in a manner that will prevent the possible interception of contaminated groundwater originating from the Airport Maintenance and Operations Area or other potentially contaminated Seattle-Tacoma International Airport (STIA) areas. The Port shall submit to Ecology proposed construction BMPs to prevent interception of contaminated groundwater by utility corridors and a plan to monitor potential

contaminant transport to soil and groundwater via subsurface utility lines at the STIA and submit it to Ecology for review and written approval no later than September 30, 2001. The plan shall be submitted to Ecology's Federal Permit Manager, SeaTac Third Runway.

2. The Port shall have staff trained in the detection of hazardous materials and contaminated soils or water inspect on a regular basis all areas where there is clearing and grading, or construction under way by Port contractors or employees. If hazardous materials or contaminated soils or other indications of contamination are discovered the Port shall immediately cease construction in the suspect area, secure the site and clean up the area in accordance with the Model Toxics Control Act (MTCA), Chapter 70.105d RCW, the Hazardous Waste Management Act, Chapter 70.105 RCW, and with generally accepted best management practices.
3. The Port shall administer and periodically update the contaminant database and contaminant maps and figures for the STIA. The database shall be updated as new information is received. The maps and figures shall be updated annually and delivered to Ecology's Federal Permit Manager, SeaTac Third Runway in a report of findings for review. Maps and figures shall be similar to the maps and figures shown in the Port's "Analysis of Preferential Ground Water Flow Paths Relative to Proposed Third Runway," dated June 21, 2001.
4. The Port shall collect all new environmental data generated by construction activities, cleanup actions, or any other environmental investigations of soil and groundwater throughout the STIA. The information shall be used to update the contaminant database. The Port, airport tenants, and other entities conducting environmental investigations shall continue to provide reports of ongoing cleanup actions and any new contamination discovered to Ecology as required by the MTCA.

**G. Dam Safety Requirements:**

1. All facilities identified in Table 3-1 of the Comprehensive Stormwater Management Plan (CSMP) that meet the requirements of Chapter 173-175 WAC (Dam Safety Regulations) shall obtain a Dam Safety Permit from Ecology prior to commencement of construction. If any stormwater facilities identified in the CSMP change during final design such that they meet the requirements of Chapter 173-175 WAC, those facilities shall obtain a Dam Safety Permit from Ecology prior to commencement of construction.

**H. Conditions for Upland Construction Activities:**

1. During construction the Port shall comply with all stormwater requirements within the National Pollutant Discharge Elimination System (NPDES) Permit No. WA-