

Kenny, Ann

From: Kmet, Peter
Sent: Monday, September 11, 2000 11:51 AM
To: Fitzpatrick, Kevin
Subject: RE: Clean Fill Criteria Language for the 401 Water Quality Certification on the Sea Tac Third Runway

Here are my comments. Make sure you open the attachment.



Clean Fill Criteria
for 401 Ce...

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Kmet 12-19-00

-----Original Message-----

From: Fitzpatrick, Kevin
Sent: Friday, September 08, 2000 12:52 PM
To: Kmet, Peter
Subject: Clean Fill Criteria Language for the 401 Water Quality Certification on the Sea Tac Third Runway

DELIBERATIVE DOCUMENT CURRENTLY EXEMPT FROM PUBLIC DISCLOSURE

Pete: The following are additions that have been made to the 401 Certification language which are not reflected in the attached Word document below.

E6. It sounds like we are allowing the Port to use problem fill as long as the Port notify Ecology. I think the second sentence should exclude the use of inappropriate fill that may result in any potential impacts to waters of the state.

E7c.2.(b) Should include appropriate EPA databases and the first list should read as "Confirmed & Suspected Contaminated Sites Report"

E7c.2.(e) "The fill material shall be analyzed for the potential contaminant(s) identified in the environmental site assessment. At a minimum, fill material from all sites shall be analyzed for TPH and Priority Pollutants metals for compliance with MTCA method A soil cleanup levels in WAC 173-340-740." In the absence of MTCA method A soil cleanup levels, the potential contaminants shall comply with MTCA method B "100 X Groundwater" soil cleanup levels." [There is more to Method B than the 100 X standard. Also, we are in the process of changing that to another model and so this is no longer valid.] The sampling frequency . .

[NOTE: there are two method A cleanup tables, unrestricted and industrial soils. I'm assuming you mean unrestricted soil cleanup levels, which is why I added the reference. However, there is a problem with this language in that Method A does not have standards for all contaminants AND they are in the process of being changed. I wonder if you should instead cite natural background as the standard.]

[The reference to Method B makes no sense because Method B does not specify specific substances to analyze for. If I had to say anything here, I would say "contaminants with the potential to be in the fill material based on historical site use, available records and previous test data. For these contaminants the standard would have to be based on Method B soil cleanup levels in WAC 173-340-740. Again, there is a bit of a problem because the standards are changing.]

See if you want to add E7c.2.(f) after the sampling requirement table. This is a repeat of a sort

since the term "environmental professional" is already used in couple of places.

(f) All work shall be performed by an environmental professional, with appropriate training, experience and expertise in environmental site assessment.

E7c.3. I don't think they know where the placement location yet. The location should be included in the as-builts to be submitted quarterly.

<< File: Clean Fill Criteria for 401 Certification.doc >>

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E6. Borrow sites:

The use of fill from Port of Seattle borrow sites or other sources may result in impacts to wetlands or other waters of the state requiring additional review and approval by Ecology. The Port shall notify Ecology when the use of borrow sites on their property or from other sources may result in any potential impacts to waters of the state.

E7. Clean Fill Criteria, Certification, and Monitoring: The Port shall ensure that fill placed for the proposed project does not contain toxic materials in toxic amounts. The Port of Seattle is prohibited from using any soils or fill materials on this project that are contaminated as defined under Washington State's Model Toxics Control Act (MTCOA) or any soils or fill materials which are being removed or have been treated as part of a site cleanup under MTCOA, federal superfund, water quality or local health district laws, were contaminated and then remediated to MTCOA cleanup standards.—The Port shall adhere to the following conditions for fill used for this project:

E7a. Fill material shall be derived from the following sources only:

- State-certified native soil borrow pits
- Contractor-certified construction sites
- ~~Port owned property~~

[I see no reason for distinguishing port property from any other. What does "state certified" mean? Certified by who for what purpose?]

E7b. Documentation: For materials derived from the three sources listed above, the Port and/or its contractors shall provide documentation to Ecology that a source has been certified to contain materials that are considered as clean fill. This documentation shall provide sufficient information to Ecology to evaluate whether or not the fill sources contain toxic materials in toxic amounts.

This documentation of a source's clean fill certification shall at a minimum contain the information described in E7c and shall be provided to Ecology's Water Quality Program at its Northwest Regional Office in Bellevue, WA no later than two business days prior to the acceptance of any of the source materials at a Sea-Tac International Airport construction site.

E7c. The information requirements on a source's certification shall contain at a minimum the following elements:

1. Site description with the site name and address, site plan indicating the extent of excavation, project schedule and estimated quantity of fill to be removed from the site.

2. Site investigation report which will contain at a minimum the following:
- (a) Observation of the source area and adjacent areas by an environmental professional which includes reports of any known probability of environmental impact from historical use on site or on adjacent areas.
 - (b) Due diligence review of whether the source locations or adjacent areas are listed on the most current editions of the following Ecology databases:
 - (1). ~~The confirmed of~~ Confirmed and suspected Contaminated Sites list;
 - (2). The Underground Storage Tank listings;
 - (3). The Leaking Underground Storage Tank listings.

There is at least one other list of suspected sites maintained by EPA, the name of which escapes me.

- (c) Due diligence review of source area geologic conditions and use or operational history of the site and adjacent areas sufficient to identify potential environmental contaminants.
- (d) If no existing documentation exists for review on the site's history, then a review of site aerial photos, person or persons familiar with the site and adjacent areas and other due diligence methods will be employed to provide a site history.
- (e) At a minimum, fill material from all sites shall be analyzed for TPH and priority pollutant metals and compared with MTCA Method A cleanup standards in WAC 173-340-740. [NOTE: there are two method A cleanup tables, unrestricted and industrial soils. I'm assuming you mean unrestricted soil cleanup levels, which is why I added the reference. However, there is a problem with this language in that Method A does not have standards for all contaminants AND they are in the process of being changed.]

Based on the site investigation and review of its operational history, an environmental professional will determine whether any additional analyses are appropriate, including but not limited to, analyses by MTCA Method B cleanup standards. [The reference to Method B makes no sense because Method B does not specify specific substances to analyze for. If I had to say anything here, I would say "contaminants with the potential to be in the fill material based on

historical site use, available records and previous test data. For these contaminants the standard would have to be based on Method B soil cleanup levels in WAC 173-340-740. Again, there is a bit of a problem because the standards are changing.]

The sampling frequency for sites where the investigation indicates no suspected contamination will be in accordance with Table 1. Sites with suspected contamination or with complex conditions will require consultation with the Department of Ecology, Water Quality Program, NWRO to determine the appropriate sampling frequency.

This sampling frequency is insufficient to determine compliance with the MTC A standards. To comply with the standards, a site must meet three requirements:

1. Upper 95% confidence limit on test results must meet standard.
2. No more than 10% of the samples can be above the standard.
3. No one sample can be more than twice the standard.

This first test requires statistical analyses. Typically, you need at least 10 samples to get the confidence limit narrow enough to pass. So, your proposed sampling schedule is not sufficient. Also, your sampling schedule is not likely to find contamination. I think the biggest problem is construction sites, not borrow pits. So the below comments reflect this.

I suggest you go with something more like the one in our petroleum contaminated soil guidance for construction sites and port owned property. This acknowledges:

VOLUME OF SOIL (cubic yards)	MINIMUM NUMBER OF SAMPLES
0-100	3
101-500	5
501-1000	7
1001-2000	10
>2000	10 plus 1 for each additional 500 cy.

For native soil borrow pits (which should be clean and also much bigger) I recommend you start with a minimum of 10 samples and go up from there, something like this:

VOLUME OF SOIL (cubic yards)	MINIMUM NUMBER OF SAMPLES
<50,000	10
50,001 - 500,000	15

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500,000	15 plus 1 for each additional 100,000 CY
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VOLUME OF SOIL (cubic yards)	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

3. Every source certification will list the initial placement of fill location and its grade elevation. The Port of Seattle will also provide quarterly summaries of each certified source of fill which lists the certified sources employed in that quarter, quantities of fill material from those sources, and the locations and elevation grades for the placement of those fill sources on Port of Seattle property.

Additional conditions or corrective actions may be required based on Ecology's review of the documentation.

- E7d. Any changes to the criteria or process described in the above conditions is subject to review and written approval by Ecology.

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