

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES REMEDIATION PROGRAM

1550 Cordova Street
Anchorage, AK 99501-2617
Phone: (907) 269-7527
Fax: (907) 269-7649
<http://www.state.ak.us/dec/>

February 15, 2000

Mike Alcorn
U.S. Department of the Interior
Bureau of Land Management
6881 Abbott Loop Road
Anchorage, AK 99507

FXED
TO: BLM
Mike Alcorn
2-15-00

Subject: **Red Top Retort Site, Aleknagik, Alaska**
Review comments for "1999 Site Characterization Report, Red Top Retort Site, Aleknagik, Alaska" dated December 21, 1999

Dear Mr. Alcorn,

The Contaminated Sites Remediation Program has reviewed the subject site characterization report, prepared by HLA/Wilder Construction Company Joint Venture (HLA/Wilder) and received on December 28, 1999. The report documents additional site characterization work requested by the Department in a June 3, 1999, letter.

The site characterization report recommends site closure provided institutional controls are attached to the property title. As we discussed today, characterization sampling appears to be adequate and further excavation of soil may not be necessary, depending on public input and the Department's review of information requested below. The Department has the following comments and requests additional information as noted:

1) Summary of site conditions and regulatory cleanup levels for mercury: BLM is seeking alternative cleanup levels and institutional control for this site. Method Two (18 AAC 75.341) cleanup levels for the site are 18 mg/kg for the inhalation pathway and 1.4 mg/kg for the groundwater migration pathway. Since mercury is relatively insoluble and not expected to migrate to groundwater in this case, this pathway does not appear to be applicable. However, BLM will need to demonstrate this in a proposed risk evaluation.

The highest mercury concentration documented during the 1999 sampling was 108 mg/kg, whereas the highest mercury concentration sample result for the 1998 sampling was 40.6 mg/kg. The majority of samples showed mercury concentrations below 1 mg/kg. It is apparent from

the sample results that the current distribution of mercury is not homogenous, and areas of contaminated soil may still be present below the liner and perhaps in the surrounding area.

It is the Department's understanding that the liner placed in 1994 over the excavated and leveled area of excavation is still in place, with some sections missing where it was selectively removed in 1998 to allow additional excavation of mercury contaminated soils. If alternative cleanup levels are approved for this site, the liner could be used as a 'flag' to notify future inhabitants or users of the site that soils below the liner may be contaminated.

It is also the Department's request that additional liner and fill material be added in the area to the southeast of the lined area, as only three samples were collected in that area, and one of them had total mercury levels of 12 mg/kg. Since the distribution of mercury contamination at the site is random, it is likely that some of the surface soil in this area has contaminant levels exceeding the inhalation pathway standard and should be covered. Note that this is also close to the area where mercury and petroleum hydrocarbon contaminated soils were stockpiled.

2) Statistical analysis—Regulatory status and development of guidance

The final reporting and site closure requirements outlined in 18 AAC 75.380 state that the applicable soil cleanup levels will be based on the maximum concentrations detected, unless the Department approves an appropriate statistical method, in which case compliance will be based on the mean soil concentration at the 95th percent upper confidence limit. The department is in the process of developing guidance for the use of statistical analysis, and will provide you with a copy when it becomes final.

HLA/Wilder's report includes a statistical analysis of 1998 and 1999 sample results which indicates that the upper 95 percent confidence level for total mercury is 10.81 mg/kg for those samples. Please explain why previous analytical samples taken by Quest following 1994 work were not incorporated into the statistical analysis of the site. This information should be considered before the Department reviews the statistical approach used.

3) Public participation, and site regulatory status if an alternative cleanup level is approved:

If public and future landowner concerns are adequately addressed, an alternative cleanup level may be approved for the site, and it could be designated as "No Further Remedial Action Planned, with Institutional Control"(NFRAP/IC). This status allows contamination exceeding default cleanup levels to remain in place given specified land use limitations, referred to as institutional controls. Institutional controls would need to be recorded in a Memorandum of Agreement that would include limitations on land use (including maintaining a liner and layer of fill over impacted soils), on the use of any excavated soil, and possibly on the use of groundwater at the site. Site closure requirements include a demonstration of compliance with the applicable institutional control requirements under 18 AAC 75.375.

Mike Alcorn/BLM
February 15, 2000
Page 2 of 3

4) Petroleum hydrocarbon contamination at the former drum storage area: The 1995 remedial action report for the sites documents diesel range organics (DRO) contamination in the excavation pit bottom at levels up to 5,800 mg/kg. The 1999 sample results did not detect BTEX or DRO in the area sampled by Quest in 1994. The report does not clearly document that the area sampled in 1999 was the same as that sampled in 1995. The Department requests field notes and other documentation which was the basis for determining both the 1999 sampling location and depths of samples taken.

5) Mercury in river sediments: BLM's final risk evaluation will need to include an assessment of mercury levels detected in river sediments.

I understand that you plan to schedule a public meeting in Aleknagik to discuss proposed site cleanup levels. Please keep me apprised of your schedule for a public meeting, and feel free to call me at (907) 269-7527 if you have questions or comments regarding this letter.

Sincerely,



Eileen Olson
Environmental Specialist

cc: Mayor, City of Aleknagik
Miriam Olson, Aleknagik Traditional Council
Tom Hawkins, Bristol Bay Native Corp.
Bobby Andrew, Fred Mishamura, ANLVC
Joe McElroy, P.E., HLA/Wilder JV