

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE

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January 8, 1999

Bud Duke
Yukon Koyukuk School District
P.O. Box 80210
Fairbanks, AK 99708-0210

RE: Koyukuk School Soil Remediation

Dear Mr. Duke:

The Alaska Department of Environmental Conservation (the Department) has reviewed the issues associated with the treatment of contaminated soils excavated from the Koyukuk School site. This letter is intended to provide information related to the cleanup decisions employed at this site and establish an alternative cleanup level for diesel range organic (DRO) in soil of 760 mg/kg, based on Method 3 of the recently filed 18 AAC 75 regulations.

Background

During excavation of soils for the Koyukuk School addition project in 1992, a contractor detected strong hydrocarbon odors. Subsequently, an environmental consultant excavated approximately 300 cubic yards of contaminated soil and stockpiled it within a lined storage cell west of the tank farm. In 1992, the soil stockpile was sampled with DRO concentrations identified as high as 10,000 mg/kg. A soil cleanup level of 200 mg/kg DRO was established at that time based on the Department's cleanup matrix scoring process. However, the Department has since established new soil cleanup standards based on human health risk posed by hazardous materials. These new cleanup standards are considered appropriate for the Koyukuk project and will be employed as alternative cleanup levels.

The Department initiated corrective action at this site during 1997. Thermal treatment was selected as an appropriate treatment technique. The City Council was consulted on this matter and determined that the existing landfill was the preferred location for treatment to minimize any disturbance to the public and to use the treated material as solid waste cover material. The contaminated material was transported to the community's landfill for treatment. It was sampled again prior to treatment with sample results ranging between 245 to 1510 mg/kg. Following the treatment process, the material was segregated into two stockpiles according to its DRO concentrations: Stockpile 1 contained 165 cubic yards of material between 98 mg/kg and 159 mg/kg; and Stockpile 2 contained 118 cubic yards between 513 mg/kg and 613 mg/kg.

Since both stockpiles have achieved the matrix cleanup level of 200 mg/kg DRO or the alternative cleanup level of 760 mg/kg DRO, the Department will require no further remedial action and concurs with the proposed use as solid waste cover material. Please note that the stockpiled soil is currently located on a lined area (with no cover) in the community landfill.

Former Soil Stockpile Location

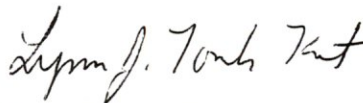
The original stockpile location (adjacent to the school) has been identified with DRO contamination ranging from 31 mg/kg to 3,970 mg/kg, exceeding the established cleanup levels. The extent of this contamination has not been fully defined, but will be addressed in the near future as a state lead action in order to ensure any remaining contamination does not pose a risk. The school district, the city and the Department should coordinate any assessment (and corrective action) activity to address this matter. Corrective action may be as simple as occasionally tilling the soil to ensure contaminant levels decrease to an acceptable level.

Conclusion

The contaminated soil from the Koyukuk School project has been excavated and treated to established cleanup levels. It currently is stockpiled at the community landfill to be used as solid waste cover material. Any proposed use of the material outside the boundaries of the landfill must be coordinated with the Department. Based on information referenced above, the Department requires no further remedial action for the soils excavated and treated under this project. However, if future information is presented that identifies contamination at levels that may pose a risk to human health or the environment, additional work may be necessary.

If you have any questions, please call Shah Alam at (907) 269-7530 or by facsimile at (907) 269-7649 at the Department's Anchorage office.

Sincerely,



Lynn J. Tomich Kent
Program Manager

cc: Laurie Lolnitz, the City of Koyukuk
Michael D. Morgan, ADOE
Kris McCumby, ADEC
Ron Klein, ADEC
Jim Frechione, ADEC
Shah Alam, ADEC