July 15, 2007

Tom Chapple
Director – Air Quality
Alaska Department of Environmental Conservation
Division of Air and Water Quality
555 Cordova St.
Anchorage Alaska 99501

RE: Red Dog Fugitive Dust Update No. 9 – 2nd Quarter 2007

Dear Mr. Chapple:

Please find enclosed Teck Cominco Alaska's (TCAK), Red Dog Mine Fugitive Dust Quarterly Update Report as described in Section 6 of the Memorandum of Understanding (MOU) between the Alaska Department of Environmental Conservation (ADEC) and TCAK. The report covers the period of April through June 2007.

1. Studies

Hi-Vol Sampling Study

The project plan for the comparison of Hi-Vol lead samples taken on the roof of the Personnel Accommodation Complex from 1992 to 1994 to current ambient concentrations is undergoing internal review. A draft of the document will be submitted to ADEC for review and approval in August 2007. Data collection using a Wedding Hi-Vol is scheduled to begin in October 2007 and end in October 2008. The results of the study are anticipated to be provided with the Fourth Quarter 2008 Update.

2. Ambient and Fugitive Monitoring

Total Suspended Particulate Ambient Air Monitoring

TCAK continues to monitor Total Suspended Particulates (TSP), airborne lead, and airborne zinc using Rupprecht & Patashnick 1400 AB TEOM ambient particulate monitors (TEOM) equipped with TSP Inlets and Automatic Cartridge Collection Units (ACCU). The monitoring results for lead, by quarter, are provided below.

Table-1 Red Dog Mine Quarterly TSP Lead Concentration*

(R&P 1440AB TEOM Data)

	PAC TEOM Site			Tailings Dam TEOM Site		
	Average (μg/m ³)	Minimum (μg/m³)	Maximum (μg/m³)	Average (µg/m³)	Minimum (μg/m³)	Maximum (μg/m³)
1 st Quarter 2005	1.7	0.17	5.8	0.7	0.17	1.9
2 nd Quarter 2005	1.4	0.05	5.8	0.5	0.05	1.2
3 rd Quarter 2005	0.7	0.02	4.8	0.2	0.02	1.4
4 th Quarter 2005	1.2	0.22	6.5	1.0	0.02	3.6
1 st Quarter 2006	2.2	0.14	14.6	1.0	0.02	3.1
2 nd Quarter 2006	1.0	0.12	4.3	0.2	< 0.01	2.6
3 rd Quarter 2006	0.5	0.07	1.1	0.1	< 0.01	0.8
4 th Quarter 2006	1.7	0.01	8.1	0.4	<0.01	3.4
1 st Quarter 2007	1.6	<0.01	4.6	0.9	0.1	3.8

^{*} The table values have been adjusted using the Hi-Vol correlation established in the March 2006 comparison study. (Hi-Vol=TEOM/0.42)

Vegetation Monitoring

The final report on Vegetation Impact Assessment and Monitoring Studies for the 2006 field season has been completed and a copy of the report is included with this update report.

Conclusions of the first year studies are that fugitive dust is involved with plant mortality observed very near the mine facilities based on the following:

- plant mortality is most severe directly downwind from potential dust sources,
- plants in impacted areas contain elevated levels of iron, lead, and zinc. These metals are also predominant in fugitive dust, and;
- upwind sites show very few signs of plant damage.

Field work for 2007 was initiated in late June.

3. Engineered Controls

Coarse Ore Stockpile Building (COSB) Baghouse

Material and component procurement for construction of the COSB baghouse system is complete. Arrival of the materials and components at Red Dog is expected by the end of July, and onsite construction is scheduled to begin thereafter.

Mine CSB/Truck Loading Facility Fugitive Dust Reduction Review

Based on test work results from operation of a prototype cartridge baghouse in the CSB during 2006, a preliminary design and scoping level cost estimate for a CSB dust collection system

baghouse was completed in May 2007. The proposed installation consists of a 65,000 cfm baghouse mounted at the concentrate feed conveyor within the CSB. The main component of the system would be a 270-cartridge jet pulse baghouse with clean filtered air exhausting through a 5-ft diameter, 66-ft high stack.

Test work has shown that the cartridge filters will operate effectively if the relative humidity of the inlet air is less than 99%. Higher relative humidity results in the cartridges becoming wet and blinding off. Several months of CSB monitoring indicate that higher than 99% humidity occurs approximately 3% of the time.

Once the preliminary design proposal has been reviewed internally, a decision will be made on whether or not to proceed with the detailed engineering and preparation of a final detailed cost estimate. This information would be used as the basis for an air permit application to ADEC.

Concurrently, a scope of work is being prepared for a conceptual design for alternative methods to load concentrate haulage trucks. This will form the basis for a Request for Proposal that will be sent out to qualified engineering firms. The selected consultant will then prepare a study of alternative truck load-out systems. The alternatives will then be evaluated on the basis of selected criteria such as expected reduction in fugitive dust, operability, load-out rates, and cost.

4. Source Apportionment and Particle Deposition Modeling

Source Contribution and Modeling Report

In late June a draft of the Emissions Summary Report of Fugitive Particulate Matter Sources of Lead and Zinc at Red Dog Mine Site was submitted to ADEC for review and comment. Following ADEC's review any necessary revisions will be made and the document will be finalized.

If you have any questions, concerns, or require any additional information regarding this report, please contact Mr. Jim Kulas at 907-426-9129 / jim.kulas@teckcominco.com or Mr. Wayne Hall at 907-426-9259 / wayne.hall@teckcominco.com.

Sincerely,

Teck Cominco Alaska Incorporated

for John Knapp

John B. Knapp

General Manager