

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

**DIVISION OF WATER
DIRECTOR'S OFFICE**

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February 14, 2011

Mr. Pete Dronkers
Clean Water & Mining Program Director
Northern Alaska Environmental Center
830 College Road
Fairbanks, AK 99701

Dear Mr. Dronkers:

Thank you for your letter to Deputy Commissioner Lynn Tomich Kent regarding your concerns about mercury at the proposed mine near Donlin Creek (Donlin Gold) that was received on December 5, 2011. Also, thank you for the technical study reports on non-point mercury releases from mine heap leach and waste rock. The Department's lead mining technical engineer has reviewed the reports.

Beyond the reports you provided, the available literature and scientific studies of mercury off gassing from tailings and waste rock is limited. I would expect significant differences in site conditions and mercury off gassing potential between the Nevada mines evaluated in the study and the proposed Donlin Gold mine. There may be several variables that can affect off gassing from tailings and waste rock that could include climate, mine design and operations, and mineralogical differences between the ore and host rock. Also, the design of the tailings storage and waste rock storage facilities may incorporate mitigation strategies for environmental concerns such as acid rock drainage/metals leaching, and these may also co-mitigate potential mercury off gassing concerns. The Department has not yet received the mine plans or permit applications, but has brought your concerns to the attention of the Donlin Gold company.



The Donlin Gold project appears to be very near the application phase of permitting and Donlin Gold is currently preparing their draft plan of operations for agency review. Given the scope and size of this project, an Environmental Impact Statement (EIS) under the National Environmental Policy Act will likely be required. DEC expects to receive several permit applications for activities regulated under the Air, Wastewater and Solid Waste programs. We expect to have a much clearer picture of the potential environmental and human health concerns for mercury as well as the other potential contaminants once the mine design and operation documents, EIS, and various permit applications and their supporting documents have been submitted.

Donlin Gold will be required to address mercury through a variety of permitting mechanisms. Potential mercury contaminants in the form of fugitive dust are regulated through the air quality regulations at 18 AAC 50; and mercury in groundwater, surface water, and solid waste are regulated through the water quality (18 AAC 70), wastewater (18 AAC 72 and 18 AAC 83), and solid waste regulations (18 AAC 60). The permits also require monitoring systems to ensure that not only mercury but also other constituents of concern are monitored, contained or controlled.

Additionally, the State's permitting process for mine facilities works through an inter-agency Large Mine Permit Team led by the Department of Natural Resources, Office of Project Management and Permitting (OPMP). OPMP is responsible for coordinating various state and federal agencies for mine-facility related permitting and oversight. The LMPT allows for inter-agency coordination of permitting activities, and agency permits are not issued without coordination and input from other agencies. The LMPT is robust and will address the permitting challenges of this project using agency expertise for multi-disciplinary permitting concerns. In situations where the state requires additional resources or specialized technical expertise, consultants may be contracted to provide additional resources that are shared between the agencies. DEC is in the process of developing a contract to retain consulting firms to provide technical expertise and assistance in reviewing submittal documents provided by the applicant.

Finally, it is important to note that the Red Devil Mine was a mercury mine, and the mining operations in the Tapahos River watershed in the Amazon were activities that used mercury in the gold extraction process. In both examples of mercury contamination affecting human health and the environment, the mining activities were essentially unregulated relative to modern-day environmental standards, regulations and permitting.

Thank you again for sharing your concerns and information. Please let me know if you have additional questions or concerns. For wastewater discharge permitting related questions, please contact Allan Nakanishi, our Mining and Technical Services Manager, at (907) 269-4028.

Sincerely,

A handwritten signature in blue ink that reads "Michelle Bonnet". The signature is written in a cursive, flowing style.

Michelle Bonnet
Director

cc: Tom Crafford, DNR
Brent Goodrum, DNR
Jeff Bruno, DNR
Allan Nakanishi, DEC