

March 24, 2003

Mr. Theodore Rockwell
U.S. Environmental Protection Agency
Alaska Operations Office
222 W. 7th Avenue #19
Anchorage, Alaska 99513-7588

Subject: Mine Site Diversion Structure (RFI Nos. 14 and 63)
ExxonMobil Development Company
Point Thomson Gas Cycling Project

Dear Mr. Rockwell:

ExxonMobil Development Company (ExxonMobil) is pleased to provide further description of the mine site diversion structure to the EPA and the EIS Contractor (CH2M Hill) in support of the proposed Point Thomson Gas Cycling Project. This letter presents the current information associated with the design of the mine site diversion structure as noted in the request for information (RFI) Nos. 14 and 63 provided in the CH2M Hill memorandum dated February 4, 2003

In addition to the attached hardcopy report, an electronic copy of the report will be provided to CH2M Hill.

Sincerely,

Larry D. Harms
Regulatory Manager

Attachment

cc: Al Maki, ExxonMobil
Randy Buckley, ExxonMobil
Gar Carothers, CH2M Hill
Dick LeFebvre, ADNR

**Point Thomson Gas Cycling Project
Response to EIS Data Information Needs**

Item 14: Clarification on ExxonMobil's intent/need to capture adjacent stream flow in gravel mine. If not intended, steps ExxonMobil will incorporate to ensure this does not happen.

Level of Detail: Estimate of fill and recharge rate without capturing stream flow. Sufficient design detail to show the unintended capture will not occur.

It is ExxonMobil's intent and need to divert/capture adjacent stream flow to the proposed new gravel mine site. Runoff without diversion from the adjacent stream would be inadequate to recharge the proposed new mine site that will be used as a source of freshwater.

See question number 63 for description of the criteria used for the diversion structure.

**Point Thomson Gas Cycling Project
Response to EIS Data Information Needs**

Item 63: What were the criteria used to design the connection between the creek and the mine site? Why not use just a pipe and pump? How will we ensure sufficient water remains in the stream for fish habitat?

Level of Detail: Request for verbal information on the criteria that drove the changes. What were the reasons for the changes in each instance?

The design basis of the diversion channel is to allow up to 80% of the water from the adjacent stream to flow to the mine to recharge it. The location for the diversion channel was chosen because it was the shortest distance from the center of stream channel to the mine site and the stream was flowing in a direction towards the mine site. The connection between the creek and the mine site is an open channel. The diversion channel has been designed such that the elevation will be set sufficiently to maintain stream flow during the summer to sustain habitat for fish in the stream. During peak flows at break up the water will flow into the mine site. Using this basis of design it could take up to two years to fill the mine reservoir.

The design of the diversion channel is being updated to reflect input received from ADF&G. The changes in the design of the diversion channel from what was shown in Project Description draft Rev. B are:

- No fish screen on the spillway (it will plug up immediately and be by-passed by the water);
- No stop log structure, but a spillway elevation that passively controls water flow into the mine site to a level above normal summer stream flow, with the possibility that additional water may be acquired by pumping from the stream or from the old mine site;
- Percentage diversion of water from the stream to the mine site during breakup up to 80% supported by demand calculations and the ability to fill the mine as much as possible the first year.

The use of pipe and a pump as the primary means of filling of the mine site instead of the open channel was neither practical nor economical for use during break up when the majority of the water needs to be diverted to the mine site. A pipe and pump may be used to assist in recharge of the mine site.