

**Department of Environmental Conservation  
Response to Comments**

**for**

**Fort Knox Mine  
APDES Permit No. AK0053643 – Modification #1**

**Public Noticed April 24, 2020 - May 26, 2020**

**May 29, 2020**



**Alaska Department of Environmental Conservation  
Wastewater Discharge Authorization Program  
555 Cordova Street  
Anchorage, AK 99501**

## **1 Facility and Modification Description**

Fort Knox is owned and operated by Fairbanks Gold Mining, Inc. (FGMI), a wholly-owned subsidiary of Kinross Gold Corporation. Fort Knox, originally permitted for construction and operation in 1994, is an open-pit gold mine located approximately 26 miles northeast of Fairbanks on the north flank of Gilmore Dome. The mine is located along a belt of lode and placer deposits that comprise one of the highest gold-producing areas in Alaska. The area in and around Fort Knox has a long history of gold exploration and mining activities, dating back almost 100 years; the drainages surrounding Fort Knox were first prospected in 1913 (USGS 2001). Fort Knox processes ore onsite at a carbon-in-pulp mill with a daily capacity of up to 45,000 tons and produces approximately 300,000 to 350,000 ounces of gold annually. Site facilities include the active open pit mine, mill, tailings storage facility (TSF), constructed wetlands complex, freshwater reservoir, Walter Creek Valley heap leach facility, and Barnes Creek heap leach facility, which is under development.

Water from mining, processing, mill operations, and pit dewatering is routed to the TSF for reuse in mine operations. Wastewater consisting of seepage beneath the TSF dam captured by seepage pump-back and interceptor systems, TSF decant, mine drainage, and dewatering water is treated and discharged through outfall 001 to the Old Fish Creek Channel and outfall 002 to the North Channel. The freshwater reservoir receives inflows through precipitation and runoff from surrounding drainages (i.e. Last Chance Creek and Solo Creek), as well as the Old Fish Creek Channel, which receives flow from the North Channel, upstream of the reservoir.

On April 14, 2020, FGMI submitted a request for revision to the annual flow limit in the APDES permit. Specifically, the request provided updated information from 2015 through 2019 for meteorological, hydrological, and pumping data that supported an increase in the limit from 3.164 to 4.798 billion gallons per year. The basis for the increase arises from heavy precipitation during recent years at the mine, which in turn has caused increased dewatering demands, seepage rates, mine drainage, and drainage and precipitation to the TSF.

## **2 Opportunities for Public Participation**

The Department of Environmental Conservation (DEC) proposed to modify the Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit modification for Jumbo Dome Mine. To ensure public, agency, and tribal notification and opportunities for participation, the Department:

- notified potentially affected tribes that the Department would be working on this permit modification via letter, fax and/or email,
- formally published public notice of the draft permit modification on April 25, 2020 in the Fairbanks Daily News Miner and posted the public notice on the Department's public notice web page, and

- sent email notifications via the APDES Program List Serve when the draft and final permit modification were available for review.

### 3 Comment Summary

The Department received comments from Bob Shavelson of the Cook Inlet Keeper, on the draft permit modification. Mr. Shavelson asserts that the Department, *“failed to provide any relevant information or analysis on the potential impacts to sediment quality or pollution loading, effects on water quality (including reasonable assurance of compliance with water quality standards), changes to mixing zones, etc.”*

#### Response

Under 18 AAC 83.135(b)(2), it states that when a permittee requests a permit modification, which is based on new information that would have justified different permit conditions in the current permit, cause for modifying the permit has been established. In a letter dated April 14, 2020, the permittee, FGMI, requested a permit modification to increase its permitted flow limit based the most recent evaluation of allowable discharges including updated meteorological data, seepage rates, dewatering well pumping rates, and the addition of the volume of mine drainage currently being stored in the pit. The Statement of Basis provides information on the APDES permit modification that is required for the analysis and justification of this permit action. Comments offered were outside of the scope of this permit modification. No change to the permit documents were made as a result of this comment.

### 4 Permit Modification

The permit modification was issued by the Department on May 29, 2020, and it becomes effective June 1, 2020. There were no changes from the public noticed permit modification.