Response to Comments

AK-005329-5

On June 21, 2001, EPA, Region 10 proposed issuance of an individual permit for a medium-size suction dredge. At the beginning of the comment period, this permit was erroneously numbered AK-005331-7. The number listed above is the correct permit number. The comment period ended July 23, 2001.

EPA received written comments from Nathan Spees.

EPA received a letter, dated May 22, 2001, from the National Marine Fisheries Service (NMFS) regarding Endangered Species and Essential Fish Habitat (EFH). NMFS stated that no endangered marine mammals are expected to occur in the vicinity and no critical habitat has been identified. NMFS has concurred with the EFH evaluation that EPA provided in the Fact Sheet for the draft permit and feels that additional EFH consultation is not necessary at this time.

In a letter dated August 3, 2001, the Alaska Department of Environmental Conservation provided a Certificate of Reasonable Assurance that project, as proposed, will comply with the applicable provisions of Section 401 of the Clean Water Act.

1. **Comment**: The commentor raises the concern of potential impacts to salmon spawning grounds and the impact of mining on local fish populations.

   Response: In a letter from the Alaska Department of Fish and Game (ADF&G) to David Likens, the President of the Fortymile Mining District, dated February 18, 1999, the ADF&G states that, dating back to the 1960s, only 16 juvenile and two adult chinook salmon, 16 adult chum salmon and one unidentified salmon have been observed by state, federal and private entities in the Alaskan portion of the Fortymile River. Their preliminary conclusion is that anadromous fish runs in the Fortymile River are at the upper limit of their natural distribution and may not successfully reproduce on an annual basis due to inadequate winter water flows to support a successful egg hatch. Because

of the available information, ADF&G delisted the Fortymile River and its tributaries from the Catalog and Atlas of Waters Important for the Spawning, Rearing or Migration of Anadromous Fish.

According to Mr. Mac McLean with the ADF&G (personal communication, September 7, 2001), there is viable spawning within the main stem from Clinton Creek on downstream. ADF&G currently postulates that the Alaska portion of the Fortymile River is marginal spawning habitat that may only support successful spawning during high stock years when salmon are displaced upstream to less desirable spawning habitats AND winter conditions those years happened to be conducive to a successful spawn.

2. **Comment**: The commentor requested that EPA take into consideration not only timing in regards to when mining takes place but also obstruction to fish passage (where the dredge is physically located) and how the dredging keep fish from swimming up stream beyond the mining site.

Response: In a 1998 US Geological Survey (USGS) study (USGS Open File Report 99-328), the USGS and Alaska Department of Natural Resources (ADNR) monitored the turbidity plumes behind an operating 10-inch suction dredge (larger than the proposed 6-inch dredge) working in fine sediments. The data indicate that this dredge created a narrow (few meters or less) plume of turbidity. The highest turbidity reading, 19 NTUs, was measured 30 meters downstream of the dredge. At 60 meters, the turbidity measured 3.7 NTUs which is below the water quality standard of 5 NTUs above background. The upstream turbidity measured less than 2 NTUs. Mr. McLean also stated that ADF&G starts to see anadromous fish avoid a corridor when the turbidity is above 100 NTUs. According to "Water Resources of the Fortymile National Wild & Scenic River, Alaska" (BLM-Alaska Open File Report 75, September 1999), the North Fork averages 180 feet in width just above the confluence with the South Fork. The area being permitted, shown in Appendix A, does not appear

to be narrower than the referenced confluence location. The size of a 6-inch suction dredge is approximately 10 feet long and 8 feet wide (keeneengineering.com) so the physical presence of this dredge is not expected to block fish passage in the North Fork of the Fortymile River.