# Response to Comments AK-005328-7

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-005330-9. The number listed above is the correct permit number. The comment period ended July 23, 2001.

EPA received written comments from Nathan Spees and Joanne Beck, First Chief of the Native Village of Eagle.

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 (ADEC) provided a Certificate of Reasonable Assurance that the project, as proposed, will comply with the applicable provisions of Section 401 of the Clean Water Act.

It has come to EPA's attention that the map included with the Fact Sheet and draft permit contained an area that is not a part of the "wild" area designated under the Wild & Scenic Rivers Act. Mr. Fitchelman, in a letter dated May 24, 2001, indicated that he did not wish to combine these areas. The correct area of permit coverage can be found in Appendix A of this document and of the final permit.

1. **Comment**: The commentors raise 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 that they 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), to his knowledge, there have never been any salmon documented in the Mosquito Fork. Mr. McLean stated that there was viable spawning in the main stem at Clinton Creek and further 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 commentors request 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 might affect 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 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. Also, Mr. McLean 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), Mosquito Fork averages 129 feet in width at the Taylor Highway Bridge. The area being permitted, shown in Appendix A, does not appear to be narrower than the referenced bridge location. The size of a 10-inch suction dredge is approximately 24 feet long and 8 feet wide (Keene Engineering 2000/2001 Full Line Catalog) so the physical presence of this dredge is not expected to block fish passage in the Mosquito Fork of the Fortymile River.

#### 3. **Comment**:

One commentor is concerned that diesel fuel, mercury and other chemicals are polluting the creeks.

# Response:

While accidents may happen while handling any fuel, the permit does contain a Management Practice in Permit Part II.G. which states that "Care shall be taken by the operator during refueling of the dredge to prevent spillage into public waters or to groundwater."

The application that has been submitted for this suction dredging operation does not indicate that mercury will be discharged in the effluent. The following language has been included in Permit Part I.A. to address this concern:

"During the effective period of this permit, the permittee is authorized to discharge, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams."

## 4. **Comment**:

One commentor states that natural fish habitat is destroyed by massive dredges moving hundreds of yards of dirt and rock from the creek beds.

#### Response:

A 10-inch suction dredge is not comparable to the large bucket dredges used in the past. These large bucket dredges could move more than 50,000 cubic yards annually and were extremely destructive to watersheds. The application states that the proposed dredging operation plans to move only 1800 cubic yards annually in the limited area shown in the Appendix A. The EPA Suction Dredge Study indicates dredge piles are generally unnoticeable in the stream within a year or two of the initial disturbance due to the intensity of spring breakup. The permit also prohibits dredging within 500 feet of spawning areas.