UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

November 12, 2002

Randall F. Smith
Director
Office of Water
U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

Re: AK-004345-1

Attn: Lisa Jacobsen

Dear Mr. Smith:

This letter is in response to the proposed reissuance of a National Pollutant Discharge Elimination System (NPDES) permit from the City of Unalaska (the City) for a municipal sewage treatment facility and collection system. The National Marine Fisheries Service (NMFS) has reviewed the above referenced Draft Permit and Fact Sheet and believes the proposed construction activities could have an adverse impact on the anadromous fishery resources of the project area, including Essential Fish Habitat (EFH).

Project Description

Unalaska Bay is an embayment that is open on the north into the Bering Sea and has an average depth of about 300 to 400 feet. The City is operating a municipal sewage treatment facility and collection system that serves a population of 4,300 in the City on Unalaska and Amaknak Islands.

The City discharges primary treated effluent into south Unalaska Bay. The primary treatment plant removes solids from domestic and industrial wastewater with a rotary sheer screen having one-millimeter diameter openings. Screened waste solids are collected on a conveyor belt and disposed of at the city landfill. The leachate from the municipal landfill is also disposed of through the wastewater treatment plant. The ocean outfall is 16 inches in diameter and discharges at a depth of approximately 100 feet in Unalaska Bay.

The plant's design flow is 0.8 million gallons per day. An ultraviolet (UV) disinfection system is used to remove fecal coliform from the effluent because the effluent discharge pipe is located near seafood harvesting and processing areas.

Background

The Unalaska Wastewater Facility is a publicly owned treatment works (POTW). As such, the facility is subject to the technology-based requirements for five-day biochemical oxygen demand (BOD_5) and Total Suspended Solids (TSS) of 40 CFR 133.102. However, the City is identified as a Native Alaska Village that discharges into marine waters and waiver requirements for secondary treatment were approved once the facility plan was accepted by the Environmental Protection Agency (EPA). This decision was based on the Federal Register, Vol. 44, No.175. Friday, September 7, 1979 "Modification of Secondary Treatment Requirements for Discharge into Marine Waters, Notice on Native Alaskan Villages". In summary, this notice delineates EPA's position on the applicability of 40 CFR Part 125 to Native Alaskan Villages and EPA's intention to consider other methods and alternative technologies for meeting the wastewater needs in these native villages.

In 1992 the Alaska Department of Environmental Conservation (ADEC) listed South Unalaska Bay as an impaired body of water requiring water-quality based controls (Section 303d list). Due to significant population growth, ADEC determined in the mid-1990s that the mixing zone merited re-evaluation. As a result of that review, ADEC determined that the City could no longer discharge non-disinfected wastewater into South Unalaska Bay. A mixing zone for non-disinfected discharge would be of such a large size as to be unacceptable to both the local community and ADEC. Presently the City uses UV treatment for disinfection of the effluent.

In 1997, leachate from the municipal landfill started to flow into the City's wastewater collection system. Flows from leachate contribute between 2.9 and 4.9 million gallons per year to the domestic wastewater. As the landfill expands, the flows are estimated to increase to 5.4 million gallons per year. Currently, no pretreatment requirements exist for leachate from this landfill.

Impacts

Reauthorization of the NPDES permit for this POTW would authorize the discharge of pollutants that affect the following Alaska Water Quality Standards: biochemical oxygen demand (BOD), TSS, fecal coliform bacteria (FC), nutrients, metals, dissolved oxygen, total aqueous hydrocarbon, total aromatic hydrocarbon, residues, and settleable solids. In addition, waste products from several seafood processing operations are discharged directly into the waters of Unalaska Bay. Such pollutants have the potential to adversely affect resources of our concern.

General Comments

The draft permit would require signs to be posted "near the mixing zone" stating that treated wastewater is being discharged. Because the POTW is a primary treatment plant, this may give the wrong impression and may allow individuals to become complacent as they believe that something treated is safe. The possibility of recreational and subsistence uses along the back side of Amaknak Island (scuba diving, fishing) and intakes for several seafood processors should also be considered.

Page 14 of the Fact Sheet for the draft permit states that the the permittee has informed EPA they have significant inflow and infiltration into their system. It does not say what is infiltrating the system; however, it gives the permittee four years to study the problem. What type of impacts are associated with this problem? Is this something that could affect living marine resources including EFH? Does something need to be done to correct the problem?

EFH Conservation Recommendations

EPA has made a determination that the project will not adversely affect EFH. NMFS disagrees with this determination. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires NMFS to make conservation recommendations to EPA if we believe the project would adversely affect EFH.

- The draft permit effluent limitations and monitoring requirements would allow for the use of chlorine to disinfect the effluent. While the condition also notes that limitations would apply, what type of concentrations would be used is unclear. Chlorine at higher concentrations is toxic to living marine resources. NMFS therefore recommends that the permit specify allowable concentrations of chlorine.

- NMFS recommends that EPA consider more stringent limits based on site specific water quality concerns in addition to the current technology based limits. EPA states this facility serves a population of 4,300. While this may be the official resident population, the transient population at the height of the fishing and processing season far exceeds this number, increasing the likelihood the limitations will be exceeded.

- NMFS recommends that EPA not separate the sewage sludge and wastewater permitting for this action. Page 14 of the Fact Sheet for the draft permit states that EPA has decided to separate wastewater and sewage sludge permitting. NMFS is concerned that by separating these permits, cumulative impacts of these two closely related issues on EFH and other living marine resources may not be properly considered.

Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA)

Potential impacts to marine mammals have not been addressed. In addition, EPA has concluded that the discharge of untreated domestic sewage is not likely to adversely affect Steller sea lions. At this time, NMFS has not concurred with the conclusion in the Fact Sheet that this action would not adversely affect endangered Steller sea lions. These animals are common to Unalaska Bay, and occur within the mixing zone proposed for this discharge. The Fact Sheet does not present a detailed analysis, which may have led EPA to this conclusion. How does the proposed level of treatment affect waterborne bacteriological or viral agents? How might this predispose sea lions to illness? Are sea lions attracted to this area by seafood processing waste outfalls, which are found on this side of Amaknak Island?

We request a more complete biological assessment regarding the potential affects of the proposed discharge on Steller sea lions. We will provide EPA with further comments relative to section 7 of the ESA pending receipt of this analysis.

Conclusion

We look forward to your response to our EFH Conservation Recommendations as required by Section 305(b)(4)(B) of the Magnuson-Stevens Act and further outlined in 50 CFR 600.920(k). If EPA does not make a decision within 30 days of receiving NMFS EFH Conservation Recommendations, EPA should provide NMFS with a letter to that effect and indicate when a full response will be provided. Should you have any questions concerning EFH please contact Ms. Jeanne L. Hanson in my Anchorage office at (907) 271-5006. Questions regarding ESA and MMPA issues should be addressed to Mr. Brad Smith at the same number.

Sincerely,

James W. Balsiger
For Administrator, Alaska Region

cc: USFWS, ADGC, ADFG, ADEC - Anchorage