

Section XIV**National Marine Fisheries Service Comments
Regarding Essential Fish Habitat****Comment XIV.A:**Letter Dated January 18, 2006:

The National Marine Fisheries Service (NMFS) has reviewed the draft National Pollutant Discharge Elimination System (NPDES) Permit (#MA0004928) and essential fish habitat (EFH) assessment for the Mirant Canal Station in Sandwich, Massachusetts. The applicant proposes to withdraw up to 518 million gallons of water per day (mgd), and to discharge heated non-contact cooling water into the receiving waters of the Cape Cod Canal. The proposed project includes a Clean Water Act Section 316(a) variance request to exceed Massachusetts Water Quality Standards for temperature.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act require federal agencies to consult with one another on projects such as this. Insofar as a project involves EFH, as this project does, this process is guided by the requirements of our EFH regulation at 50 C.F.R. 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in this consultation procedure.

NMFS is concerned with impingement and entrainment of fishery resources due to the operation of this facility. As noted within the draft NPDES permit, the permittee is required to submit a proposal for the information collection in support of a Comprehensive Demonstration Study (CDS). The purposes of the CDS is to characterize impingement and entrainment by the facility's cooling water intake structure (CWIS), describe the operation of the CWIS, and to confirm that the technologies and operational measures currently in place, or those proposed to be installed, will meet established performance standards. We acknowledge that until the CDS is submitted to EPA (deadline January 7, 2008), current Clean Water Act Section 316(b) regulations will permit the applicant to operate under Best Professional Judgment (BPJ). According to the fact sheet included with the draft NPDES permit, the EPA considers losses due to impingement and entrainment to be substantial, and that adverse effects could be avoided or reduced by technological and operational measures. NMFS anticipates that such measures will be addressed within the CDS.

With regard to the EFH consultation process, however, specific information to be included in the CDS is necessary for our agency to fully assess the anticipated impacts resulting from the operation of this facility. Because we consider this information necessary for comprehensive assessment of potential adverse impacts, and to provide relevant and specific comments regarding this project, we do not consider the EFH assessment complete at this time. As such, NMFS requests the EFH consultation for the reissuance of the Mirant Canal NPDES permit be held in abeyance until the CDS is developed and submitted to the EPA. Based on our review of the information contained

in the CDS, MNFS will provide EFH conservation recommendations, if necessary, at that time.

Letter Dated March 27, 2006:

NMFS is concerned with impingement and entrainment of fishery resources due to the operation of this facility. Section 5.2.2.c of the Fact Sheet notes that approximately 2.6-3.6 billion eggs and 187-318 million larvae per year are entrained, and over 71,000 juvenile fish and invertebrates per year are impinged in this facility. As such, the EPA considers losses due to impingement and entrainment to be substantial, and that adverse effects could be avoided or reduced by technological and operational measures. As noted within the draft NPDES permit, the new Clean Water Act 316(b), Phase II Regulations, requires the permittee to submit a proposal for information collection in support of a Comprehensive Demonstration Study (CDS). The purpose of the CDS is to characterize entrainment by the facility's cooling water intake structure (CWIS), describe the operation of the CWIS, and to confirm that the technologies and operational measures currently in place, or those proposed to be installed, will meet established performance standards. In our January 18, 2006 letter, NMFS requested that the EFH consultation be held in abeyance until the CDS was completed in order to utilize site specific information in providing EFH conservation recommendations. It is currently our understanding that due to the implementation period associated with the new Clean Water Act 316(b) Phase II regulations, the results of the CDS will not be available for the current draft permit review. Rather, the CDS will be utilized by EPA within the subsequent 5-year review permit cycle in order to determine the Best Technology Available (BTA) to reduce entrainment. NMFS supports efforts of EPA to reduce entrainment mortality associated with the operation of the Mirant Canal Station.

The re-evaluation of our earlier EFH conservation recommendations regarding the CDS has resulted in additional NMFS concerns regarding this project. Through discussions with federal and state resource agencies and additional review of the draft NPDES permit, Fact Sheet, and EFH assessment, it has come to our attention that the thermal discharges associated with the operation of this facility may result in unacceptable adverse impacts on NMFS trust resources. As noted previously, the proposed project includes a Clean Water Act 316(a) variance request to exceed Massachusetts Water Quality Standards for temperature. The draft permit includes an allowable temperature differential of 33 degrees F, and a maximum temperature limit of 90 degrees F within an established mixing zone (upper 15 feet of the water column). Figure 5.1 of the Fact Sheet depicts monitoring results for surface temperature resulting from the discharge, however, does not include information regarding anticipated temperatures near the bottom of the canal. Figure 5.3 of the Fact Sheet (Annual Estimates of Impingement Mortality) includes a number of species which utilize benthic habitats, including, but not limited to, winter flounder, Atlantic cod, windowpane flounder, American lobster, and cunner. An analysis of anticipated bottom temperatures as a result of the thermal plume, and the potential adverse impacts on benthic habitats and resources should be performed prior to granting the 316(b) variance request.

Within the EFH consultation process, this information regarding the thermal plume is necessary for our agency to fully assess the anticipated impacts resulting from the operation of this facility. Because we consider this information important for a comprehensive assessment of potential adverse impacts, and necessary for our agency to provide relevant and specific comments regarding this project, we consider the EFH assessment to be incomplete at this time. Based on the completion of the EFH assessment, NMFS will provide EFH conservation recommendations, if necessary, in order to avoid and minimize adverse effects to EFH.

Accordingly, NMFS seeks to extend the consultation process pursuant to 50 CFR 600.920(i)(5) in order to review the results of the thermal plume analysis described above, and assist us in the development of our EFH conservation recommendations. Should you have questions regarding these comments, please contact Christopher Boelke of my staff at 978-281-9131.

Response XIV.A:

The CWIS-related comments by NMFS are responded to in Chapter IX of these Responses to Comments.

EPA has determined that the thermal discharge from Canal Station will not adversely effect benthic EFH. The thermal plume from Canal Station has been delineated during past operation using fixed station thermistors and measurements from a boat survey. EPA did not attach these results to the Draft Permit's Fact Sheet. However, EPA has attached these results to this Responses to Comments document as Figures 1 through 3. The figures show that the thermal plume has limited contact with the sea floor. Since the thermal plume is positively buoyant, it is expected to have little contact with the bottom. EPA has explained its assessment of this issue to NMFS, which indicated it had no objections to EPA's conclusions.