

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 1 CONGRESS STREET, SUITE 1100 BOSTON, MASSACHUSETTS 02114-2023

Certified Mail Return Receipt Requested

April 30, 2003

Shawn V. Konary Director of Environmental Affairs Mirant Canal, L.L.C. 1099 Hingham Street Rockland MA 02370

Re:

Supplemental Information Requirements pursuant to Section 308 of the Clean Water Act for Mirant Canal L.L.C. NPDES Permit Reissuance - [NPDES Permit No: MA0004928]

Dear Mr. Konary:

Mirant Canal's National Pollutant Discharge Elimination System (NPDES) permit expired on June 23, 1994 and EPA-New England (EPA) is currently in the process of permit reissuance. It is EPA's understanding that Mirant Corporation no longer intends to proceed with plans for repowering Unit 2 at the Mirant Canal Station located in Sandwich, Massachusetts, as described in the Canal Redevelopment Project, Final Environmental Impact Report/ Development of Regional Impact, dated January 2000. Notwithstanding the cancellation of the project, EPA assumes that Mirant will continue with some plant upgrades, specifically those relating to the facility's cooling water intake structures (CWIS). During the permit renewal process, EPA reassesses all Clean Water Act (CWA) Section 316(a) and (b) related issues. To facilitate the NPDES permit process, Mirant is required, pursuant to Section 308 of the CWA, to provide the information requested in this letter by September 30, 2003. Section 308 of the Clean Water Act, 33 U.S.C. §1318(a), authorizes EPA to require any person to provide information needed to reissue a NPDES permit. As you are aware, this information was previously required by means of a letter with attachment dated April 21, 2000 and faxed to you on March 13, 2003. Please refer to this letter for a more detailed description of the submittal requirements, specifically the requirement to complete the attached Table and to provide the status of the proposed Unit 1 chlorination system. In addition, Mirant is encouraged to submit any additional information that it would like to have considered, however, information received after September 30, 2003 may not be considered in developing the draft NPDES permit.

As with all variances granted under the CWA, Section 316(a) thermal variances must be reconsidered for each permit reissuance. EPA regulations establish procedures for this reconsideration [see: 40 CFR§125.72(c) and the note after §125.72(f)]. Section 316(a) of the CWA provides that when thermal discharges would exceed technology-based or water qualitybased effluent limits, alternative effluent limits may be applied in response to a request for a variance. This variance must be based on a supported argument that the alternative limits will assure the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife in and on the receiving waterbody. In order to renew the Canal Station's variance from Massachusetts surface Water Quality Standards or best available technology (BAT) for the Stations's thermal discharge pursuant to 316(a) of the CWA. Mirant must submit an official variance request and Demonstration Document under 316(a) which provides the best information reasonably obtainable to quantify the direct and indirect impacts of the Station's thermal-effluent discharge on aquatic resources. The components of a "balanced indigenous population" are defined in EPA regulations at 40 CFR §125.71(c). The Demonstration Document should assess the discrete impact of the thermal discharge on the balanced indigenous population and the cumulative effect on this population of the thermal discharge combined with other significant adverse impacts. Other impacts for consideration include habitat modifications, the entrainment and impingement losses from the Station's CWIS's and additive effects from other thermal discharges.

In addition to addressing Section 316(a) of the CWA, Mirant must also provide information to EPA addressing Section 316(b) of the CWA. Section 316(b) of the CWA requires EPA to determine whether the location, design, construction, and capacity of the CWIS reflect "best technology available (BTA) for minimizing adverse environmental impacts." The purpose of Section 316(b) is to protect aquatic life in the waterbody from entrainment and impingement losses caused by the withdrawal of non-contact cooling water by the power plant. Therefore, as part of the NPDES permit reissuance process, Mirant must prepare and submit a 316(b) Demonstration/Study evaluating the effects of the existing CWIS's on the populations of aquatic organisms in the vicinity of the intake structures. The study shall identify these aquatic populations and communities and the historical impact the Station has had on them. The study shall include:(a) a quantification of the estimated mortalities due to impingement and entrainment by species and adult equivalents, (b) abundance and distribution data of the affected species in the water body with emphasis on primary target species [species selected for detailed evaluation; a.k.a. representative important species (RIS)], (c) the application of quantitative mathematical models to place plant losses into the perspective of relevant populations of important species and (d) an impact analysis for secondary target species. The indices for prediction of losses to target species should include conditional mortality rate [estimates of percent reduction in the population (year-class strength) in the study due to plant operations in the absence of all other sources of mortality] and the equivalent adult loss via the entrainment of larval and other early life stages.

Additionally, as part of its 316(b) Demonstration/Study, Mirant shall review the cost, feasibility, and effectiveness of various alternative intake structure technologies and screening devices which might further reduce entrainment and impingement mortalities at the Mirant Canal Station. This must include an assessment of flow reduction measures such as closed cycle cooling and variable speed pumps. The study shall make a quantitative comparison of estimated mortalities due to impingement and entrainment among the alternatives evaluated. Include in the study, Mirant's proposed BTA for minimizing adverse environmental impacts and the rational for this BTA.

Furthermore, EPA-New England requests the submittal of a Supplemental Information Report to the Station's 1994 NPDES Permit Application that includes: existing conditions at the plant

including narratives of process and equipment operations, volumetric flow rates and flow schematics of all water sources and waste streams, chemical inventory, and detailed description of the cooling water intake structures.

EPA requires that Mirant provide the above-described information, pursuant to Section 308(a) of the CWA, 33 U.S.C. §1318(a) by September 30, 2003. Section 308(a) of the CWA, 33 U.S.C. §1318(a), authorizes EPA to require the owner or operator of any point source discharge to make such reports and provide such information as may reasonably be required to "carry out the objectives of ... [the CWA,] including but not limited to: (1) developing or assisting in the development of any effluent limitation. or other limitation, prohibition ... or standard of performance under [the CWA] ...; (2) determining whether any person is in violation of any such effluent limitation ... or standard of performance; ... or (3) carrying out sections ... 1342 ... and 1364 of [the CWA]" Please be aware that failure to comply with this information request could, depending on the circumstances, subject Mirant to enforcement action pursuant to Section 309 of the CWA, 33 U.S.C. §1319.

Mirant may assert a business confidentiality claim with respect to part or all of the information submitted to EPA in the manner described at 40 CFR Part 2.203(b). Information covered by such a claim will be disclosed by EPA only to the extent, and by means, of the procedures set forth in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to Mirant. Please note that effluent information may not be regarded as confidential.

Please address your response to:

Sharon Zaya
Massachusetts Office of Ecosystem Protection
U.S. EPA Region 1
One Congress Street, Mail Code CMA
Boston, MA 02114-2023

If you have any questions concerning the required information requested above, please contact Sharon Zaya at (617) 918-1995. She is looking forward to speaking with you and arranging for a tour of the Station in the near future.

Sincerely,

Linda Murphy, Director

Office of Ecosystem Protection

cc. Philip Colarusso, EPA
Paul Hogan, MA DEP
David Webster, EPA
Sharon Zaya, EPA