Response to Comments

Introduction

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's and the Massachusetts Department of Environmental Protection's (MassDEP) responses to comments received on the Draft NPDES Permit (MA0004898) for the Mirant Corporation's Kendall Station Power Plant (also referred to in this document as Mirant Kendall, Mirant, Mirant Kendall Station, MKS, the applicant, and the permittee). The responses to comments explain and support the EPA and MassDEP determinations that form the basis of the Final Permit. The Mirant Kendall Station (MKS) Draft Permit public comment period began June 14, 2004 and ended on October 15, 2004. This time period included two extensions of the comment period. Comments from the permittee and several other parties regarding the Draft Permit and Fact Sheet were received. Since the Fact Sheet and the Determination Document (DD) are final documents, no changes were made to these documents. Instead, Fact Sheet and DD comments were noted, and responses to them are included in this document.

Extensive comments were received by Mirant during the pubic comment period. Additional comments were received from the following parties. A cross reference for each party's specific comment and location is provided at the end of this introduction.

Massachusetts Division of Marine Fisheries
Massachusetts Division of Fish and Wildlife
Massachusetts Riverways Program
Conservation Law Foundation
City of Cambridge
Association of Cambridge Neighborhoods
Union Boat Club
Mark Jaquith
Dr. Stephen Kaiser
Jay Avin
National Marine Fisheries Service
Massachusetts Coastal Zone Management:
Charles River Watershed Association
Charles River Conservancy
East Cambridge Planning Team
Stash Horowitz
Rae Steining
Laura Donohue
Roger Frymire
Dr. Raymond Walther

After a review of the comments received, EPA and MassDEP have made a final decision to issue this permit authorizing this discharge. The Final Permit is substantially identical to the Draft Permit that was available for public comment with the addition of the conditions in Massachusetts' 401 Water Quality Certification (WQC). Although EPA's decision-making process has benefitted from the various comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit. EPA did, however, improve certain analyses and make certain clarifications in response to comments and these changes are consistent with Massachusetts' 401 WQC. These improvements and changes are detailed in this document and reflected in the Final Permit. A summary of the changes made in the

Final Permit are listed below. The analyses underlying these changes are explained in the responses to individual comments that follow.

The Final Permit and this response to public comments are available on EPA's web site at epa.gov/region01/npdes/mirantkendall/index.html. Copies of the Final Permit also may be obtained by writing or calling EPA's Industrial Permits Branch (CIP), Office of Ecosystem Protection, 1 Congress Street, Suite 1100, Boston, MA 02114-2023; Telephone: (617) 918-1579.
In this response to comments document, EPA has structured the responses using the outline of issues included in the comments from Mirant Kendall, dated October 14, 2004. EPA digested the significant comments received from Mirant Kendall according to this outline. EPA then grouped together supporting and opposing comments concerning each set of issues where EPA received comments in addition to those from Mirant Kendall. (There are a few topics where comments raised only one perspective.) EPA used the convention of starting with Mirant Kendall's comments on a topic and then identifying the other parties and digesting their comments on that topic.

In many cases, EPA has included original comments nearly verbatim for the convenience of the reader. In others, EPA included a brief digest of each comment as a reminder to the reader of the topics being discussed. The particular language used in the summary of each issue presented below may derive primarily from one set of comments, but this formulation does not mean that EPA has not read each of the comments noted under that issue. Many of the details presented in the original comments were not repeated in the digested comments. EPA did not limit its analysis of the comments submitted to the digest presented below, and EPA has reviewed each comment in its entirety. This outline and its digest of the comments are simply designed to structure EPA's responses and make them more accessible to the interested public. No significance should be attached to the form in which EPA cited or summarized the original comment in this response document.

This permit is being jointly issued by EPA and MassDEP. EPA will generally present responses to comments as EPA's, unless there are particular issues in which MassDEP plays a unique role beyond being a co-issuer of this permit. For most responses where EPA is the agency presenting the response, MassDEP's certification and joint issuance of the permit will establish that the Department agrees with EPA's response. This document may refer to Mirant Kendall, LLC variously as Mirant Kendall, Mirant, Mirant Kendall Station, MKS, the applicant, or the permittee.

The following changes have been made from the Draft Permit to the Final Permit. Where applicable, one or more sections of the response document where the following changes have been discussed have been included in parentheses.

1. In Part I.A.1., footnote 4, the acronym HRS has been corrected to HRSG. (J16)

2. A sentence has been added to footnote 5 in Part I.A.1 to note that the TRC limit of 0.1 mg/l does not apply to the TRC requirement at Outfall 009 in Part I.A.3. (J5)

3. In Part I.A.1, footnote 10 (previously footnote 11) has been revised to reflect a correction in the units of "Q". The units have been corrected to read "BTU/hour". (J14)

4. Marine whole effluent toxicity (WET) testing protocol has been included in the Final Permit as Attachment C2. Language has been added to footnote 11 in Part I.A.1 to require the measurement of salinity to determine whether WET testing will be conducted on freshwater or marine organisms. The freshwater WET testing protocol is now labeled Attachment C1. (I22)

5. In Part I.A.1, all references to "once through condenser cooling water", have been changed to "once through cooling water", because not all permitted cooling water discharges pass through the condenser. (J9)

6. In Parts I.A.1 and I.A.14.a.6.(a), the requirement to validate data for transmissivity has been removed. (I15)

7. The temperature monitoring for backwash water through Outfalls 005, 006 and 007 has been removed from Part I.A.2. (J11)

8. The words "or any barrier net" have been removed from Part I.A.2.e. Also in this Part, the words "fish, shellfish and other aquatic organisms" have been changed to "adult and juvenile fish". (H1)

9. The description of the types of discharges authorized from Outfall 009 at Part I.A.3 has been revised. (J3)

10. In Part I.A.3, footnote 1 has been corrected to read "See footnote 5 on Page 4". (J5)

11. There have been language changes in Part I.A.11 of the Final Permit to offer more flexibility to the permittee regarding where the barrier nets system (BNS) may be deployed, such as allowing the BNS to be placed outside of the Broad Canal. Also, language regarding specific maintenance activities associated with the BNS has been removed. (H33)

12. The Draft Permit's numeric entrainment performance goal of a minimum of 60% entrainment reduction as compared to the baseline condition and the requirement that the net shall be designed to meet this goal have been removed from Part I.A.11. Instead, in Parts I.A.11.b.(1) and (2) of the Final Permit, the permittee is required to minimize impacts associated with entrainment consistent with specific requirements in Part 11.b(1) and (2)

from the State's WQC. (H1, H24, H27,H28)

13. Part I.A.11.a.(4) has been clarified to indicate that the 0.5 feet per second (fps) through screen intake velocity requirement only applies when the BNS is in place. (H1)

14. Instead of requiring the BNS to be designed to allow for the maximum of survival of impinged eggs and larvae that are freed from the BNS, the revised language in Part I.A.11.a requires that if practicable, the nets shall be designed and operated to allow for impinged eggs and larvae to be freed in a manner that would increase the probability of their survival. (H23)

15. Language has been added to Part I.A.11.a. to make clear that any permit modifications will follow the process and satisfy the criteria of 40 C.F.R. §§ 122.62 and 122.63, whichever is applicable. (H39)

16. A language change has been made regarding the required deployment of the barrier nets in Part I.A.11.a. The permittee must design and install a barrier net system (BNS) consistent with the impingement and entrainment related conditions in the final permit. The BNS must be deployed year round, except when icing conditions in the river reasonably preclude their deployment. (H1, H32)

17. The language in Part I.A.11 of the Draft Permit that allowed the permittee to bypass the BNS for up to 10% of the time has been replaced by language in Part I.A.11.a.(6) of the Final Permit that requires the permittee to operate the BNS to preclude bypasses due to circumstances within the permittee's control, to the extent practicable (H34)

18. Regarding impingement mortality reduction, there has been a clarification that this standard shall apply to adult and juvenile fish only. See Part I.A.11.b of the Final Permit. (H1)

19. In Part I.A.11.b., the time frame for the permittee to implement the BNS has been modified to reflect a longer schedule and the State WQC requirements. (H32)

20. In Part I.A.12 of the final permit, the phrase "the area of the Charles River impacted by the thermal plume resulting from the discharge from the Facility" has been changed to "the Zone of Dilution". Also in Part I.A.12 a reference and description of the ZD has been added. (I8)

21. In Part I.A.12.a.2, the necropsy requirement has been removed. (I6)

22. In Part I.A.12.a.2, DMR has been changed to MassDEP, as originally intended. (J16)

23. At the end of Part I.A.13, the incorrect reference to Part 14.e.9 has been changed to the

correct reference to Part I.A.14.d.9. (J16)

24. Part I.A.13 now allows the permittee to use a statistical approach to define what constitutes an unusual impingement event (UIE). (I21)

25. Part I.A.14.a.5 has been modified to clarify requirements for analyzing, summarizing and/or describing monitoring data in the Annual Monitoring Report. (I14)

26. The former Part I.A.14.a.6.(b) of the Draft Permit has been removed. This had a provision for the permittee to address EPA and MassDEP comments in a QAPP or QA/QC plans. Reference to a QA/QC plan has also been removed or replaced with a reference to a QAPP (I15)

27. The Draft Permit's requirement for continuous dissolved oxygen (DO) monitoring has been replaced with the requirement for weekly grab sampling of DO to be used for compliance purposes for the next week. See Part I.A.14.b of the Final Permit. (I16)

28. In Part I.A.14.b.2., the language regarding the placement of Monitoring Station 9 has been changed to allow flexibility. (I18)

29. The requirement to monitoring sunlight penetration at Part I.A.14.b.10 has been removed. (I19)

30. The chlorophyll *a* monitoring requirement formerly in Part I.A.14.c. of the Draft Permit and referred to in footnote 10 in Part I.A.1 has been removed from the Final Permit. (I7)

31. Metals monitoring has been removed from Part I.A.14.c. (I2)

32. In Part I.A.14.c.3., footnote 5 instead of footnote 4 has been referred to.

33. Language has been added to Part I.A.14.d. to allow for the possibility that some of the studies which require the taking of fish may not be allowed to be consistent with the river herring moratorium announced by MA DMF in 2006 or other applicable restrictions. In such cases, the permittee shall implement alternative methods, if available, to obtain comparable information. (I28)

34. Push-net sampling has been added to the beach seine sampling requirement in Part I.A.14.d.1. (C3 and I3)

35. In Part I.A.14.d.7, the requirement for 13 sets of samples for the fine mesh barrier study has been changed to allow for fewer than 13 sets. In addition, specific sampling protocol has been removed. (H36)

36. In Part I.A.14.d.7. of the permit, the language has been changed to clarify that the permittee

shall calculate or measure the representative through screen velocity at the barrier nets when the BNS is in place and at the traveling screens when the BNS is not in place. (H1)

37. There has been a surveillance requirement added for Outfall 001 to address concerns about fish congregating in the area of this discharge. See Part I.A.14.d.8. (C7)

38. In Part I.A.14.d.10, the phytoplankton monitoring period has been extended to October 31st from September 30th. (I7)

39. The entrainment sampling formerly at Part I.A.14.d.8 in the Draft Permit has been removed. However, an alternative entrainment sampling program must be submitted by the permittee consistent with the requirement of the WQC, as found in Part I.A.14.d.11 of the Final Permit. (H37)

40. In Part I.A.16 of the final permit, EPA has established a schedule for the permittee to complete the evaluation and application process described in 40 C.F.R. §125.95 of the new Phase II rule. (H1)

41. Permit Attachment A has been revised to reflect a maximum 81 ^{0}F compliance at certain points in the ZPH. (C44)

In addition, formatting changes have been made in places throughout the Final Permit for consistency, as well as the requirement to consider or refer to more recent monitoring efforts. Examples include the use of MassDEP instead of MADEP or DEP; the use of Part rather than Section when referencing locations in the Final Permit; the use of BNS rather than barrier nets (in most cases); and the inclusion of 2004 and 2005 when listing previous years of monitoring data.

Cross Reference for Individual Commenter's Comment and Response Location:

National Marine Fisheries Service (NOAA): C33, H27, H31
Massachusetts Coastal Zone Management (MA CZM): B9(3), C37, C44, C45, E3, H: 26, 27,28, 31, 35, I29
Massachusetts Division of Marine Fisheries (**MA DMF**): C33, C51, D33, H24, H28, I13, I28, I30, J17
Massachusetts Division of Fish and Wildlife (MA DFW): D10, I24
Massachusetts Riverways Program: C29, C38, E1, H27, I1, J4, J5
City of Cambridge: E1, H31
Charles River Watershed Association(CRWA): C3,C16, C19, C47, D25, D32, E1, H17, H31, I5, J24
Conservation Law Foundation (CLF): B9(2), B9(3),C: 2, 3, 7, 13, 15, 16, 18, 19, 25, 26, 29, 35, 37, 42, 44, 45, 49, 52, D17, D18, E1, F3, F4, F6, H: 3, 10, 24, 31, 34, 40, I5, I6, I10, I13
Charles River Conservancy (CRC): D4, E21, H24
Association of Cambridge Neighborhoods (ACN): F6, J18

East Cambridge Planning Team (ECPT): F6, M1
Union Boat Club: D2
Mark Jaquith: B3, C3, D10, E24
Dr. Stephen Kaiser: B10, B11, E15, E19, M1
Jay Avin: J21, J22
Laura Donohue: D2, E1
Stash Horowitz: J19, J20
Rae Steining: B9(1), M1
Roger Frymire: C11, E3, E17, H26, H31
Dr. Raymond Walther: J23