CONSERVATION LAW FOUNDATION

December 14, 2006

Via Federal Express/Signature Required

U.S. Environmental Protection Agency
Eurika Durr
Clerk of the Board, Environmental Appeals Board
Colorado Building
1341 G Street, N.W., Suite 600
Washington, D.C. 20005

Re: **NPDES Appeal No. 06- 13**
In the Matter of Mirant Kendall, LLC
Mirant Kendall Station
Renewal of NPDES Permit No. MA0004898

Dear Ms. Durr:

On behalf of the Conservation Law Foundation and the Charles River Watershed Association, I am herewith submitting for docketing and review by the Environmental Appeals Board the original of each of the documents listed below:

1. Supplement to Petition for Review of NPDES Permit No. MA0004898 issued by Region I on September 26, 2006;

2. Certificate of Service.

In lieu of five additional hard copies, I have sent electronic pdf files of each document to the EAB via EPA's CDX electronic submission system.

Thank you for your attention to this matter.

Very truly yours,

MLR

Carol Lee Rawn

Enclosures

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ENVIRONMENTAL APPEALS BOARD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C.

In re: Mirant Kendall, LLC	)	
Mirant Kendall Station	)	NPDES Appeal No. 06- 13
NPDES Permit No. MA0004898	)	

SUPPLEMENT TO PETITION FOR REVIEW

I. Introduction

Pursuant to 40 C.F.R. § 124.19, the Conservation Law Foundation ("CLF") and the Charles River Watershed Association ("CRWA"), by and through their attorney, submit this Supplement to its Petition for Review of certain conditions of NPDES Permit No. MA0004898 ("Permit"), which was issued to Mirant Kendall, LLC ("Mirant") on September 26, 2006. CLF was served with notice of the Permit on September 29, 2006, and CRWA was served on October 2, 2006. CLF and CRWA timely filed their Petition

on October 27, 2006, pursuant to 40 C.F.R. § 124.19. Simultaneously with the October 27, 2006 Petition ("Petition"), Petitioners and the United States Environmental Protection Agency, Region I ("Region"), filed a joint motion seeking modification of the schedule for the submission of a Petition for Review that would allow Petitioners to file a Supplement to the Petition by December 15, 2006. This motion was granted on November 22, 2006.

In their Petition, CLF and CRWA challenged the thermal discharge limits set out in the Permit, including those in Attachment A of the Permit, on the grounds that the Region clearly erred legally and factually in determining that the permit limits would ensure a balanced indigenous population as required under section 316(a) of the Clean Water Act. 33 U.S.C. § 1326(a). Second, Petitioners further challenged the Barrier Net Requirements (Part I.A.11) on the grounds that the Region's determination that it has met the requirements of section 316(b) of the Clean Water Act is clearly in error, both legally and factually; and that the Region failed to meet its independent obligation to ensure compliance with water quality standards. 33 U.S.C. § 1326(a). Third, Petitioners also challenged the Monitoring Program determinations (Part I.A.14) on the grounds that certain determinations are based on findings of fact that are clearly erroneous. Finally, the Petition identified instances in which the Region failed to adequately explain its rationale for particular findings.

In this Supplement to our Petition, CLF and CRWA expand their earlier arguments regarding the erroneous section 316(b) determination; including the improper decision to apply the Phase II Rule and the Region's incorrect interpretation of that Rule. *National Pollutant Discharge Elimination System – Final Regulations to Establish Requirements*

for Cooling Water Intake Structures at Phase II Existing Facilities, 69 Fed. Reg. 41576, 41593 (July 9, 2004); 40 C.F.R. § 125.95(a)(2)(ii)("Phase II Rule."). Petitioners also address the Region's failure to meet section 316(b)'s requirement to identify Best Technology Available (BTA) and minimize adverse environmental harm by essentially abdicating its responsibility to adequately address entrainment and impingement. Petitioners also address the Region's failure to ensure compliance with water quality standards and to justify the increase in withdrawal limits. CLF and CRWA respectfully request that the Board review and assess both the Petition and this Supplement to the Petition.

II. EPA's Application and Interpretation of the Phase II Rule is Clearly Erroneous

In its Response to Comments, the Region selectively and improperly uses the Phase II Rule to justify its determinations. Its decision to apply the Rule is clearly erroneous, and its interpretation of the Rule is erroneous as well.

It is well established that where no effluent limitation guidelines are in place, permit writers must use best professional judgment ("BPJ"). 33 U.S.C. § 402(a)(1)(B); 40 C.F.R. §§ 122.44(a)(1), 125.3(c)(2), 125.90(b); *NRDC v. EPA*, 863 F.2d 1420, 1424-25 (9th Cir. 1988). When the permitting process for Mirant-Kendall's NPDES permit began, there were no effluent limitation guidelines for existing cooling water intake structures. Though effluent limitation guidelines have now been adopted, the CWA, its regulations, and a recent EAB decision mandate that EPA consider only Best Professional Judgment, and not the Phase II Rule, in this process.

In its comments, CLF argued that BPJ should be the operative standard, citing regulatory and statutory authority as well as the fact that the Phase II Rule is currently the subject of ongoing litigation, and clearly vulnerable to remand. CLF comments at 21-23. As EPA readily admits, its reliance "on BPJ in this case is consistent with the express terms of the Phase II Regulations, EPA's general NPDES regulations, and CWA § 402(a)." Response to Comments ("RTC") at H2. The "express terms" of the Phase II regulations state that "(e)xisting facilities that are not subject to requirements under this or another subpart of this part must meet requirements under section 316(b) of the CWA determined by the Director on a case-by-case, best professional judgment (BPJ) basis. 40 C.F.R. § 125.90(b). An existing facility is not "subject to" the new rule unless it either 1) submits a permit application after the rule takes effect, or 2) submits all required Phase II application materials and "an NPDES permit containing requirements consistent with this [new rule] is issued." *National Pollutant Discharge Elimination System – Final Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities,* 69 Fed. Reg. 41576, 41593 (July 9, 2004); 40 C.F.R. § 125.95(a)(2)(ii)("Phase II Rule.") Neither is the case here. Thus, BPJ, and only BPJ, is the applicable standard.

Earlier this year, the EAB relied on the express terms of the Phase II Rule to reject a claim that the Phase II Rule, and not BPJ, should apply to an existing facility's permit because its application had been submitted after the effective date of the Rule. *In Re: Dominion Energy Brayton Point, LLC,* NPDES Appeal No. 03-12 (Remand Order) (EAB, Feb. 1, 2006) E.A.D. ___, at 172-174. The EAB also cited the considerable delay in the permitting process, and the further delay that would result from conducting a Phase

II analysis, the litigation challenging the Rule, and the fact that it was unclear how the Phase II Rule would be applied. *Id.* In the present case, essentially the same factors are in play. First, the Mirant Kendall Station ("MKS") continues to degrade the Charles every day as it operates under a 1988 permit (Brayton Point was operating under a 1993 permit), and further delay caused by the application of the Rule would only cause further degradation. Second, the litigation challenging the Rule is still ongoing. We note that, in the Response to Comments, the Region did not address CLF's point about the vulnerability of the Rule to pending litigation in light of the success of the Riverkeeper suit challenging similar provisions in the Phase I Rule. *See Surfrider Foundation v. EPA*, No. 04-6692-ag(L) (2nd Cir. Mar. 3, 2005); *Riverkeeper, Inc., v. United States Environmental Protection Agency,* 358 F.3d 174, 183 (2nd Cir. 2004). Finally,without the requisite information to be provided by the permittee, the Rule cannot be applied.

While EPA acknowledges that the Phase II Rules are not applicable, it then goes on to effectively apply the Phase II Rule. The Region fails to provide any reference in the RTC to any regulations or guidance that supports the Region's decision to effectively apply the Rule. To justify its use of the Phase II Rule, EPA relies on *NRDC v. EPA,* 863 F.2d 1420 (9th Cir. 1988). *See* RTC at H13. That reliance is misplaced. That case involved a challenge to a general permit issued to offshore drillers in the Gulf of Mexico, not an individual permit to an individual permittee. Industry-wide guidelines for all offshore drillers had been proposed, but not finalized. In the general permit, EPA chose to delay decisions about BAT until the national standards were promulgated. The Court held that the delay was justified because the national standards might be less stringent, and it was unfair to the Gulf drillers to abide by more stringent standards. *Id.* at 1427.

That decision was largely based on the "large commitment of resources that would be necessary to begin retrofitting" all of the Gulf facilities covered by the general permit. *Id.* The Court conceded that it was an "unusual case" where there was a "justifiable concern on EPA's part to have th[e] permit conform to national standards based upon a broader economic data base." *Id.* at 1428. In the present case, there is but one facility at issue, as there was in the *Dominion Energy* case where BPJ was required, so changes at MKS are hardly analagous to the "large commitment" that would be required to retrofit all Gulf facilities. Further, in the present case, the Phase II Rule has been finalized, and it clearly requires that permit applications filed before the Final Rule are to be subject to the BPJ standard rather than the Phase II standard.

Although the Region professes to use the Rule only as a guide, it actually uses the Rule as justification for removing the entrainment reduction performance standards, and for rendering the impingement reduction standards virtually meaningless (by eliminating the provision requiring MKS to make changes if the performance goal is not achieved). RTC at H12, H16. In the Response to Comments, the Region states that "BPJ permits represent a case-specific application of the CWA's technology standards which is not generally limited or controlled by future rulemakings; BPJ determinations may lawfully end up imposing more stringent limits...than the Agency might later develop in an industry-wide guideline." RTC at H28. (emphasis added.) Nevertheless, the Region's actual decisionmaking process is inconsistent with this statement. With regard to both entrainment and impingement standards, it erroneously justifies weakening the Draft Permit provisions on the grounds that the Phase II Rule would dictate such a result. For example, it specifically chose to exclude entrainment reduction requirements from the

permit because the Phase II Rule does not require entrainment requirements for lakes; "this is because the Phase II Rule would not require such a facility to meet entrainment performance goals...Given that the rule is now in effect, EPA does not believe it would be reasonable in this case to impose technology-based compliance requirements that the Rule would not require." RTC at H29. (emphasis added.) Again, the Region later states that it "cannot reasonably impose on a BPJ basis entrainment reduction requirements...in light of the requirements set forth in the Phase II regulations..." RTC at H44. (emphasis added.)

With regard to impingement, the Region again impermissibly made its determinations based on the Phase II Rule, and then unjustifiably weakened the Rule's provisions significantly by applying impingement goals rather than standards as required under 40 C.F.R. 125.94(b). In the Final Permit, it further weakens the impingement provision by providing that there will be no consequences if the performance goal is not achieved. RTC at H16 ("(i)n response to Mirant's comments...EPA has eliminated the provision requiring Mirant to make changes if the performance goal is not met;") *see* RTC at H8-9; ("[under the Draft Permit], failing to meet the goals...would have consequences for MKS.") Its rationale for doing so is again the unjustified application of the Rule; "EPA agrees with Mirant's comment that it could be unfair to mandate changes to try to achieve the standard when the Phase II Rule might not ultimately require the same changes." RTC at H16. Yet again, the Region is selectively using the Rule to justify its changes, yet applying it inconsistently and incorrectly.

The Region's determination that the Charles is a lake is clearly erroneous. In writing the Draft Permit, the Region determined that the Charles Lower Basin would be a freshwater river under Phase II Regulations; stating that "EPA is proposing that performance standards for the reduction of impingement mortality and entrainment be applied to that technology to track the standards applicable to freshwater rivers in the Phase II Regulations." DD at 185. Therefore, consistent with the Phase II Rule, it required a minimum 60% entrainment reduction. However, in the Response to Comments, with no reference to its earlier determination, or explanation for its change, EPA later erroneously determined that the Basin met the definition of a lake. The significance of this change in interpretation was that MKS would no longer be subject to entrainment standards, as it would be if it had been determined to be a freshwater river or an estuary. We note that the Region made this critical change without allowing opportunity for public comment.

As stated in our Petition, the Charles does not meet the definition of a lake under the Phase II Rule, which states

> Lakes or reservoirs means any inland body of open water with some minimum surface area free of rooted vegetation and with an average hydraulic retention time of more than 7 days. Lakes or reservoirs might be natural water bodies or impounded streams, usually fresh, surrounded by land or by land and a man-make retainer (e.g. a dam). Lakes or reservoirs might be fed by rivers, streams, springs, and/or local precipitation. (emphasis added.)

40 CFR 125.93. First, the Region finds that the lower Charles meets the definition of "an inland body of open water..." RTC at H11. However, "(i)nland" is actually defined as "located in, or confined to the interior of a country or region; away from the coast..."(emphasis added) Webster's New World Dictionary 726 (2d ed. 1980).

The Region states that the "lower Basin is created by the downstream dams and locks that have been placed between the Charles River and its connection to Boston Harbor and the ocean beyond." RTC at H10 (emphasis added).) Accordingly, as the lower Charles is bounded on one side by Boston Harbor, it is clearly not an inland body of water. Second, the Region finds that the lower Charles is "surrounded by land or by land and a man-made retainer," because there is an upstream dam in Watertown, notwithstanding the fact that in the Determinations Document, the Region defined the lower Charles Basin as "that area bracketed by the New Charles River Dam at the mouth and the Boston University bridge upstream." DD at 11. The Watertown dam is six miles from the Boston University bridge, far beyond the area defined as the lower Charles Basin. Thus, the lower Charles River Basin cannot be characterized as being "surrounded by land and a man-made retainer." Third, the Region acknowledges that, "due to tidal effects and the periodic opening of the locks," salt water is present in the lower Charles, but states that the definition only says that it is "usually fresh." RTC at H11. Nevertheless, this is another factor arguing against the fitness of the Charles for lake definition. Fourth, the Region also cites that fact that "it is fed by a river (and an ocean)." RTC at H11. However, the definition makes no reference to being fed by an ocean. Finally, the Phase II Rule states that a lake has "an average retention time of more than 7 days." The Region decided to calculate retention time on an annual basis even though it concedes that "the average retention time would be less than seven days in some months." RTC at H11 (emphasis added). It then chooses to ignore the fact that the lower Charles would not meet the regulatory definition of a lake for several months of the year by citing the difficulty of having different permit conditions apply seasonally, although acknowledging

that permit do include seasonal limits in some instances. RTC at H11. There are two flaws in this argument; first the Basin does not meet the regulatory definition of a lake. Second, even if EPA's interpretation was correct, the claimed complexity of a permit with seasonal variations would not justify the decision to effectively not regulate entrainment. This is especially critical in the present case, where the months that the river retention time requirement would be met would be during spring and early summer; a time when preventing the entrainment of eggs and larvae would be especially important. Finally, in the Permit, EPA has imposed numerous seasonal limitations, both with regard to thermal discharge and withdrawal limits.

The Region then looks at the definitions of estuaries and freshwater rivers, which the Basin fits better than that of a lake. Under 40 C.F.R. 125.93, a freshwater river is defined as a "(l)otic (free flowing) system that does not receive significant inflows of water from ocean or bays due to tidal action. For purposes of this rule, a flow through reservoir with a retention time of 7 days to less will be considered a freshwater river or stream." (emphasis added.) In the RTC, the Region states that lower Charles is not free flowing because of the dams, yet acknowledges that it "does become a free flowing system to Boston Harbor every day when the tidal elevation in the harbor drops below the elevation of the inverts of the sluice gates and during storm events." RTC at H12. EPA also acknowledges that it does not receive significant inflows of water from the Harbor; "the percentage of flow entering the Charles from Boston Harbor is low [2%]." RTC at H12. Finally as discussed above, the retention rate is less than seven days during certain months. Clearly, the Charles better fits the definition of a river than a lake.

The Charles is closer to meeting the regulatory definition of estuary than that of lake as well. Estuary is defined as, "(a) semi-enclosed body of water that has a free connection with opern seas...the salinity of an estuary exceeds .5 parts per thousand (by mass)." 40 C.F.R. 125.93. The Region states that the salinity content of the lower Charles would meet this definition. The Region also states that at certain times the Charles is home to "free floating icthyoplankton, which is a key biological characteristic of an estuary." RTC at H12. However, it states that the dams prevent it from having a free connection with open seas, although further below it does acknowledge that it becomes a free flowing system to Boston Harbor every day, as cited above.

In sum, the lake definition is clearly less applicable to the Charles than the freshwater river or estuary definition. Given the fact that lakes are the only waterbodies that do not require entrainment standards, the Region's decision to reverse its position at the request of MKS and determine that the lower Charles is a lake is clearly inconsistent with its obligation to exercise BPJ and minimize adverse environmental impacts. The Region's determination is clearly erroneous, and the Region fails to provide an adequate rationale for its decision to regulate the lower Charles as a lake under Phase II, especially in light of the devastating implications its determination has for the widely acknowledged problem of entrainment associated with MKS.

III. The Region Has Failed to Meet Its Obligations to Minimize Adverse Environmental Impacts

By effectively declining to meaningfully regulate the significant problem of entrainment caused by MKS, the permit fails to minimize adverse impacts as required

under section 316(b). In the Final Permit, due to its erroneous interpretation of the Phase II Rule, the Region has removed the entrainment standard, leaving only a directive which is based "solely on state water quality requirements...to minimize entrainment... to the extent practicable." Final Permit, section 11B; RTC at H65. Even if it had adopted this provision as part of its BPJ analysis, it would still be inadequate. Such a narrative standard is obviously very difficult to enforce, and given the inability of the Barrier Net System (BNS) to control for entrainment, it is virtually meaningless. The Region acknowledges that "it is entirely reasonable to assume that if Mirant increases its intake flows, as it is proposing to do, it will result in increased impingement and entrainment," yet both the impingement and entrainment provisions are exceedingly weak, and virtually unenforceable. RTC at H51. It is difficult to square EPA's decision in the Final Permit to virtually abdicate the regulation of entrainment, and set weak and unenforceable impingement goals, with its statement that in developing its requirements for the cooling water intake structure ("CWIS"), it has "taken into account the potential for increased cooling water intake" resulting from its decision to allow MKS to adopt an annual rather than a monthly average of 70 MGD. RTC at H21, H36.

As explained in our Petition, in many instances, EPA improperly defers critical permitting CWIS decisions such as location[1] and design to the future "plan review process," to be conducted by DEP and the permittee. Further, this process does not appear to provide for any kind of public participation, which is at odds with the requirements of the Clean Water Act. *See* Permit Part I.A.14.d.11; RTC at H27; Petition

[1] For example, EPA has not set any requirement for the location of the BNS, stating that the BNS be placed either within the canal, at the entrance to the canal, or outside the canal. Permit, Part I.A.11(1). As stated in our Petition, and by several commenters, the location of the BNS has important implications for it efficacy in preventing impingement and entrainment. Petition at 13-14.

at 13-14. Congress was clear in its intention to guarantee the public a meaningful role in the implementation of the Clean Water Act. *See, e.g., Waterkeeper Alliance, Inc. v. EPA,* 399 F.3d 486, 503. (2d Cir. 2005). Specifically, Congress expressly provided for permitting under the Act to incorporate public participation. *Id.* (citing CWA § 1251(e) ("[p]ublic participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan or program established by the Administrator or any State under this chapter shall be provided for, encouraged and assisted by the Administrator and the States"). In the present case, the location, design, operation and implementation of the BNS has important implications for degree of protection actually provided by the Permit. By delegating these important conditions to DEP and the permittee, EPA failing to meet its obligations under the Act, and depriving the public of the public participation that federal law envisions and requires.

IV. The Region's Determination that the Barrier Net System is BTA is Clearly Erroneous

The Clean Water Act requires that every permit issued comply with all applicable standards. 33 U.S.C. § 1311 (a)-(b), 402(a). It "demands regulation in fact, not only in principle." *Waterkeeper Alliance, Inc. v. EPA,* 399 F.3d 486, 498 (2d Cir. 2005) (stating that "permits authorizing the discharge of pollutants may issue only where such permits *ensure* that every discharge of pollutants will comply with all applicable effluent limitations and standards"). This permit does not comply with the standard requiring the Best Technology Available for minimizing adverse environmental impact. CWA 316(b).

In the Determination Document, the Region states that "the primary adverse environmental impacts of concern from the operation of CWISs at MKS are the

entrainment of small organisms, such as fish eggs and larvae...(and impingement)." DD at 216. Further, EPA acknowledges that "by killing the larvae...entrainment contributes to the other adverse and cumulative impacts to the lower Basin, affecting the viability of this habitat as a fish spawning area and nursery." RTC at H55. However, by selecting BNS as BTA, which it acknowledges to be unproven and generally ineffective with regard to entrainment, it effectively abdicates its responsibility to control entrainment. In its Water Quality Certification (WQC), for the permit, DEP states that "both EPA and MassDEP have expressed serious concern regarding the permittee's entrainment" and cites to studies showing that the permittee's own studies showed that it entrained 23% of the river herring larvae (which translates to the loss of 4,490 adult river herring), and nearly 30% of the white perch larvae in 2000. WQC at 11. DEP then states that "those equivalent adult losses were substantially greater that the estimated losses associated with impingement, which indicates that preventing entrainment-related losses could have a more significant positive effect than impingement reductions." *Id.* (emphasis added). Despite the clear threat posed by entrainment, EPA has chosen a technology that absolutely fails to protect smaller larvae or eggs with no explanation of how this will mitigate the entrainment problems associated with the plant. Certainly the BTA standard would dictate that, where, as in the present case, there are documented problems associated with entrainment; as well as multiple stressors, such as impaired water quality (including thermal discharges associated with MKS); and the affected area serves as an important spawning ground and nursery, that EPA is obligated to require a technology that will ensure the meaningful reduction of entrainment mortality.

In their comments, both CLF and DMF stated that the BNS is not BTA, and recommended that an aquatic filter barrier (such as Gunderboom MLES), which unlike the BNS system, is the only way to effectively control for entrainment, be required as BTA. RTC at H59. MKS's own tests showed that the barrier net prototypes did not prevent entrainment and impingement, and that at times, more fish and larvae were found in front of the nets than behind them. CLF Comments at 23-24; RTC at H58. Nevertheless, EPA somehow concludes in the RTC that "the barrier nets also appear capable in some situations of significantly reducing entrainment (depending on the size of the organisms and the mesh)." RTC at H7 (emphasis added.) It then acknowledges that "most or all fish eggs are likely too small to be blocked by nets and would continue to be entrained." It is unclear how EPA has come to the conclusion that barrier nets will significantly reduce entrainment because there is no analysis of the expected impact of the BNS on entrainment.

The BNS's ability to control entrainment the permit is clearly inadequate. EPA acknowledges that not only would fish eggs and larvae continue to be entrained, but that to the extent they are blocked, they would likely die by impingement. RTC at H8. In response to comments expressing concern regarding the barrier net's performance, the Region simply says that the previous failure of the net may have been due to its failure to maintain a "tight seal," and that the permit will require that all water be filtered. Nevertheless, this does not address the very real problem that, as the Region acknowledges, this requirement will only prevent the entrainment of "some fish larvae." RTC at H71. Further, in justifying its decision to drop the 60% entrainment reduction goal, EPA refers to its erroneous interpretation of the Phase II Rule, the lack of

information regarding entrainment impacts, and the erroneous conclusion of the WQC that a narrative directive to minimize entrainment impacts "to the extent practicable," is consistent with the requirement "to protect the Basin's designated use as a healthful fish habitat." RTC at H55. None of these reasons are sufficient to render the Region's failure to regulate entrainment consistent with section 316(a)'s requirement that the Region identify the BTA that will minimize adverse environmental impacts, including entrainment.

The Region also fails to provide adequate justification for rejecting the aquatic filter barriers (e.g. Gunderboom Marine Life Exclusion System (MLES)) that DMF and CLF recommended. In the Determinations Document, the Region cited a report finding that the MLES installed at Mirant's Lovett plant had "significantly reduced entrainment" at that plant. DD at 226; citing E.P. Taft, "Fish Protection Technologies: A Status Report," Environmental Science and Policy 2000. Nevertheless, despite its acknowledgement of the "uncertainty regarding the exact performance levels" of the BNS (which it cites as a reason for failing to set a performance requirement), the Region rejects the MLES technology because its performance capability is "unclear," and because "modification and assessment has been necessary to overcome operational problems" at Mirant's Lovett Station power plant. RTC at H60; H62. It is unclear why the MLES technology, which would clearly have greater entrainment benefits, should be rejected in favor of BNS, which is acknowledged to be unproven, and will also be subject to modification and assessment in order to determine how it can best be operated. RTC at H60. In fact, the Region later appears to contradict its earlier objection to the MLES; it acknowledges that "when implementing a 'technology forcing' provision like

316(b)...the Agency will not be able to rely on well-proven systems." RTC at H63. EPA then goes on to state that new technologies for meeting these requirements may be necessary, specifically referring to the MLES system, where it states that Lovett's MLES "show promise, especially in environments like the Lower Basin of the Charles." Further, EPA appears to miss a crucial distinction between the BNS and the MLES; the MLES has been proven to be effective at preventing entrainment, while the BNS has not. Nevertheless, EPA characterizes the MLES as similar to the BNS. RTC at H63.

Finally, as discussed above, EPA's decision to delegate conditions such as location, design and operation, which have important implications for the BNS's ability to meet BTA is inconsistent with EPA's obligation to determine and require BTA at this plant.

V. EPA Has Failed to Meet Its Independent Obligation to Ensure Compliance with Water Quality Standards

As discussed in our Petition, EPA clearly has an independent obligation to ensure the permit's compliance with water quality standards (WQS). Petition at 14-15. This is especially apparent with regard to the cooling water intake requirements regarding entrainment. As discussed above, although both EPA and DEP have acknowledged that the plant is the cause of serious entrainment problems (which are projected to increase in the future), the Final Permit has no meaningful requirement for entrainment reductions. DEP's conditions requiring a BNS that minimizes entrainment "to the extent practicable," fall far short of protecting the designated use of the Lower Charles Basin as a healthful fish habitat. Similarly, the impingement goal, which is virtually unenforceable, is clearly

inadequate as well. Thus, EPA's determination that the Permit is consistent with WQS is clearly erroneous.

VI. The Permit's Increase in Withdrawal Limit Conditions is Not Justified and Inconsistent with Section 316(a).

EPA's response to CLF's comments re. the change in the terms of the original permit effectively increasing the withdrawal limit is clearly inadequate, and it fails to meet its burden of showing that the limits are consistent with assuring a BIP. RTC at B13. The Region acknowledges that "the weight of the evidence indicates that Mirant Kendall's thermal discharge has caused extensive habitat exclusion, and thus appreciable harm to the BIP, in the lower Basin." RTC at C9. Nevertheless, despite the fact that the station upgrade will allow "high flows, effluent temperatures and delta Ts for longer periods of time," and that in fact MKS summer heatload rates are steadily and significantly increasing, the Region has decided to make the withdrawal limit less stringent, stating that "while the prior permit imposed a 70 MGD monthly average 12 months of the year, the new permit only imposes this as a monthly average for three months [April, May and June], and for the other nine months, allows Mirant Kendall to achieve 70 MGD as a rolling annual average." RTC at B11, B6, Figure B1-3, B3. EPA further acknowledges that the new provision "may indeed result in an increased permitted heatload in certain months." RTC at B8. In fact, those summer months when MKS is not held to the monthly average are those "during which (EPA) expect(s) the greatest impacts due to temperature," which makes EPA decision all the more indefensible. RTC at B11.

In responding to CLF's and CZM's concern about the increase in the withdrawal limit, EPA first states that the spring months retain 70 MGD as a monthly average. However, this ignores its previous concern (stated above) about the heat impact of summer months; elsewhere EPA acknowledges that the revised permit "allows MKS to operate near its maximum flow for the majority of days" during summer months, which it later characterizes as "the most critical time as far as representing the greatest potential for impact on the BIP." RTC at B11, B14. This is clearly inconsistent with assuring a BIP. Second, EPA states that the effluent and temperature limits are more stringent than the prior permit and "thus will protect the BIP more than the prior permit." RTC at B13. Given EPA's repeated acknowledgement that the prior permit not only failed to protect the BIP, but allowed MKS to "cause appreciable harm" to the BIP, this offers little comfort. Finally, EPA also states that the barrier nets "will minimize the Station's impingement rate, and thus protect the BIP more than the prior permit." RTC at B13. The permit does not set any enforceable requirements for reducing entrainment rates, and given the questions surrounding the BNS's performance, it is unclear that the BNS "will minimize the impingement rate. " *Id.* Thus, this argument fails as well.

VII. Relief Sought

For all the foregoing reasons, and the reasons set forth in our Petition, CLF and CRWA request that the Board grant it the following relief:

1) A remand to Region I with directions to issue a permit that is consistent with the Board's findings as to issues appealed by CLF and CRWA, and

2) A remand to Region I requiring it address the clearly erroneous conclusions of law or fact identified in the Petition and Supplement to the Petition, and to provide an adequate justification for the determinations identified in our Petition and Supplement to the Petition.

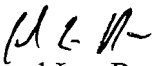
Respectfully submitted,

CONSERVATION LAW FOUNDATION,

and

CHARLES RIVER WATERSHED ASSOCIATION

By their attorney,



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Certificate of Service

I, Carol Lee Rawn, hereby certify that on December 15, 2006, I served copies of Conservation Law Foundation's and the Charles River Watershed Association's Supplement to Petition for Review of NPDES Permit No. MA0004898; NPDES Appeal No. 06-13, on the following parties by way of first class U.S. mail:

Ronald A. Fein
Timothy Williamson
Mark Stein
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Region I
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12/15/06
Date

Carol Lee Rawn