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EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
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December 13, 2006

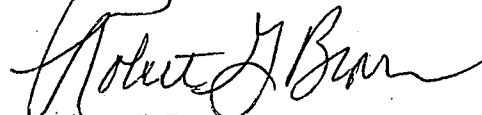
Anne Hartley, Docket Clerk
MassDEP
Office of Appeals and Dispute Resolution
One Winter Street
Boston, MA 02108

Re: Matter of Mirant Kendall, LLC, Docket No. 2006-156

Dear Ms. Hartley:

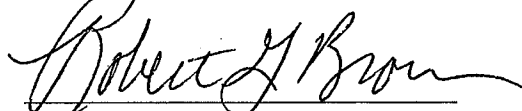
Enclosed please find for docketing MassDEP's Reply to Order to Show Cause.

Sincerely,


Robert G. Brown
Counsel for MassDEP

CERTIFICATE OF SERVICE

I, Robert G. Brown, Esq., hereby certify under the pains and penalties of perjury that on December 13, 2006, I served a copy of the foregoing Reply to Order to Show Cause upon Ralph A. Child, by first class mail, postage prepaid, at Mintz, Levin, One Financial Center, Boston, MA 02111.


Robert G. Brown
Counsel for MassDEP

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ADMINISTRATIVE APPEALS AND DISPUTE RESOLUTION

In the Matter of)
)
Mirant Kendall, LLC)
_____)

DEP Docket Nos. 2006-165
File No. MA0004898
Cambridge

In the Matter of)
)
Mirant Kendall, LLC)
_____)

DEP Docket Nos. 2006-156
WQC
Cambridge

MASSDEP'S RESPONSE TO ORDER TO SHOW CAUSE

In response to the Order to Show Cause issued in the above-captioned proceedings on November 30, 2006, the Massachusetts Department of Environmental Protection ("MassDEP") submits that the appeal by Mirant Kendall, LLC ("Petitioner") of the Water Quality Certification, dated September 13, 2006, issued by MassDEP for the final National Pollution Discharge Elimination System ("NPDES") permit decision issued jointly by MassDEP and United States Environmental Protection Agency ("EPA"), should be stayed pending final disposition of the pending parallel federal NPDES permit appeals to EPA's Environmental Appeals Board ("the EAB") filed by Petitioner and the Conservation Law Foundation/Charles River Watershed Association because (i) 310 C.M.R. 1.01(6)(h) was reasonably intended to include, in addition to the stay of the Surface Water Discharge Appeal, a stay of the associated state Water Quality Certification appeal issued for the federal NPDES permit that is pending review by the EAB, and (ii) for "good cause" pursuant to 310 C.M.R. 1.01(5)(a) in order to prevent an

unnecessary expenditure of MassDEP's limited administrative resources and in the interest of efficient coordination of the federal and state appeals, as explained below.

I. INTRODUCTION

Petitioner has appealed both the state Surface Water Discharge Permit contained in the final permit decision for Mirant Kendall Station ("MKS") issued jointly by EPA and MassDEP on September 26, 2006, and the state Water Quality Certification¹ issued by MassDEP for the federal NPDES permit pursuant to § 401 of the federal Clean Water Act ("the Federal CWA"), 33 U.S.C. §§1251 et seq., on September 13, 2006. The final permit decision consists of two separate and independent permit authorizations: (i) a federal NPDES permit issued by EPA pursuant to the Federal CWA; and (ii) an identical state Surface Water Discharge Permit issued by MassDEP pursuant to the Massachusetts Clean Water Act ("the Massachusetts CWA"), M.G.L. c. 21, §§ 26-53A, and 314 C.M.R. 3.00.² In addition to the two pending state appeals, Petitioner filed a Petition for Review³

¹ Under § 401(a)(1) of the Federal Clean Water Act, 33 U.S.C. § 1341, EPA may not issue a NPDES permit until the State (in this case Massachusetts) in which the facility is located either certifies that the permit complies with the State's water quality standards or waives certification.

² States that have received authorization from EPA under § 402(b) administer the NPDES permit program within their boundaries in lieu of the federal government. 33 U.S.C. § 1342(b), (c). To date, Massachusetts has not received such authorization. Although EPA issues NPDES permits in Massachusetts, the state maintains permitting authority under Massachusetts law. *See* M.G.L. c. 21, § 43; 314 C.M.R. 3.00. Generally, when EPA issues a NPDES permit in Massachusetts, MassDEP simultaneously issues a discharge permit under Massachusetts law, as it did in this case.

³ On appeal to the EAB, Petitioner challenges several conditions in the federal NPDES permit, including the thermal discharge limits and other discharge limits; the in-stream compliance regime; the monitoring and sampling program plan requirements; both the impingement-related and entrainment-related technology requirements; and EPA's and MassDEP's rejection of its proposal to install and operate a diffuser as part of its variance request. A copy of Petitioner's Petition for Review filed with the EAB is attached hereto as Exhibit A.

of the federal NPDES permit with the EAB on October 30, 2006. On the same day, the Conservation Law Foundation and the Charles River Watershed Association (together, "CLF/CRWA") also filed a Petition for Review⁴ of the federal NPDES permit with the EAB.⁵

The federal NPDES permit conditions are automatically stayed pursuant to 40 CFR § 124.16 by Petitioner's filing of its appeal with the EAB. Because the state discharge permit is not automatically stayed by Petitioner's filing of a Notice of Claim, MassDEP and Petitioner moved earlier pursuant to 314 C.M.R. 2.08 to stay the effective date of the state Surface Water Discharge Permit. On December 1, 2006, the Presiding Officer issued an Order not only staying the effective date of the state Surface Water Discharge Permit until final resolution of this appeal but also staying the appeal of the state Surface Water Discharge Permit pursuant to 310 C.M.R. 1.01(6)(h), and directing parties to show cause why Petitioner's appeal of the Water Quality Certification issued by MassDEP for the federal NPDES permit under § 401(a)(1) of the Federal CWA, 33

⁴ On appeal to the EAB, CLF/CRWA challenge the thermal discharge limits set out in the federal NPDES permit on the grounds that EPA erred legally and factually in determining that the permit limits would ensure a balanced indigenous population as required under section 316(a) of the Federal CWA; the Barrier Net Requirements (Part I.A.11) on the grounds that EPA erred legally and factually in determining that Petitioner has met the requirements of section 316(b) and that EPA has failed to meet its independent obligation to ensure compliance with state water quality standards under 33 U.S.C. § 1326(a); and the Monitoring Program determinations (Part I.V.14) on the grounds that EPA erred factually in certain determinations. A copy of CLF/CRWA's Petition for Review filed with the EAB is attached hereto as Exhibit B.

⁵ MassDEP notes for the record that Petitioner has also filed an appeal with the Secretary of Commerce, dated October 24, 2006, of the conditional consistency determination issued by the Massachusetts Office of Coastal Zone Management for the federal NPDES permit pursuant to the federal Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1456(c)(3)(A).

U.S.C. § 1341, should not be stayed, also, pursuant to 310 C.M.R. 1.01(5)(a)3, pending final disposition of the pending companion appeal to the EAB.⁶

II. STATUTORY AND REGULATORY BACKGROUND

The state and federal surface water discharge permit programs established by the Federal CWA and Massachusetts CWA are tightly interwoven. It is, therefore, essential to understand the role MassDEP's Water Quality Certification plays in the overall permitting context of federal NPDES permits and Massachusetts Surface Water Discharge Permits given that Massachusetts has not received authorization from EPA to administer the federal NPDES permit program and exercises independent permitting authority under the Massachusetts CWA and the MassDEP regulations promulgated thereunder to issue Surface Water Discharge Permits. As it did in this case, MassDEP issues its Surface Water Discharge Permits jointly with EPA's issuance of federal NPDES permits.

The Federal CWA is a comprehensive statute designed "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" through reduction and eventual elimination of the discharge of pollutants into those waters. Section 101(a), 33 U.S.C. § 1251(a). The Massachusetts CWA builds on the Federal CWA by requiring MassDEP to "take all action necessary or appropriate to secure to the commonwealth the

⁶ The Order to Show Cause directs "the parties to show cause why the Water Quality Certification appeal should not also be stayed," and provides that "[t]he petitioners may submit their positions, including any specific objections, on the issue by December 13, 2006." (Emphasis added). MassDEP reads the intent of the foregoing language in the Order as directing both MassDEP and Petitioner to submit their respective positions to the Presiding Officer. MassDEP requests, however, the opportunity to preserve its right to seek leave to file a surreply within seven days after Petitioner files its reply to the Order to Show Cause with the Presiding Officer to respond to Petitioner's position and any specific objections raised.

benefits of the [Federal CWA].” M.G.L. c. 21, § 27. As set forth below, the Federal CWA anticipates a partnership between the federal government and the States to achieve this fundamental goal.

The Administrator of EPA is responsible, with certain explicit exceptions not relevant here, for administering the Federal CWA. Section 101(d), 33 U.S.C. § 1251(d). A major responsibility of the Administrator under the Federal CWA is the development and promulgation of uniform national technology-based standards, known as “effluent limitation guidelines” (“ELGs”), for categories and classes of discharges. Sections 301 and 304, 33 U.S.C. §§1311 and 1314. *E.I. duPont de Nemours & Co. v. Train*, 430 U.S. 112, 126-136 (1977). An “effluent limitation” is a “restriction . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources . . .” Section 502(11), 33 U.S.C. § 1362(11).

A second major source of authority for reducing pollution is found in Section 303, which directs States, with federal approval and oversight, to institute a range of comprehensive requirements, potentially more stringent than the federally imposed limitations, to assure protection of the quality of all state waters. Section 303(a), (b), and (c)(1), 33 U.S.C. § 1313(a), (b), and (c)(1). These water quality standards are not technology-based standards; instead, they are based on the desired uses and condition of the particular waterway involved. Congress utilized water quality standards “as a supplementary (*sic*) basis . . . so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.” *EPA v. California ex rel. State Water Resources Control Bd.*, 426 U.S. 200, 205 n.12 (1976).

The primary means for achieving and enforcing ELGs and state water quality requirements on the federal level is the NPDES permit program under section 402 of the Federal CWA, 33 U.S.C. 1342. *State Water Resources Control Bd.*, 426 U.S. at 205. Under this section, EPA may “issue a permit for the discharge of any pollutant, or combination of pollutants,” in accordance with certain conditions. The Federal CWA prohibits the discharge of any pollutant into the waters of the United States except when authorized by either an NPDES permit or a section 404 permit. Section 301(a), 33 U.S.C. 1311(a). Thus, an NPDES permit transforms generally applicable ELGs and state water quality standards into obligations of the individual discharger. *See* 40 C.F.R. § 122.44(d)(1). Similarly, the primary means for achieving and enforcing effluent limitations and state water quality requirements on the state level is the parallel Surface Water Discharge Permit program under M.G.L. c. 21, § 43 and 314 C.M.R. 3.00.

Section 401(a) of the Federal CWA requires all NPDES permit applicants to obtain a certification from the appropriate state agency that the permit will comply with all applicable federal effluent limitations and state water quality standards. *See* CWA § 401(a)(1), 33 U.S.C. § 1341(a)(1). The regulations provide that EPA may not issue a permit until the state in which the discharge originates grants or waives certification. Where the state specifies in its certification that certain permit limitations and conditions are necessary in order to comply with state law and cannot be made less stringent and still comply with state law, the regulations provide that such limitations and conditions are considered “attributable to State certification.” *See* 40 C.F.R. § 124.53(e); *In re City of Fitchburg*, 5 E.A.D. 93, 98 (EAB 1994). The NPDES regulations expressly provide that “[r]eview and appeals of limitations and conditions attributable to state certification shall

be made through the applicable procedures of the State and may not be made through the procedures established in [40 CFR Part 124].” 40 C.F.R. § 124.55(e); *see Roosevelt Campobello Int’l v. U.S. EPA*, 684 F.2d 1041, 1056 (1st Cir. 1982). Accordingly, the EAB lacks authority to look behind a state certification issued pursuant to section 401 for the purposes of *relaxing* a requirement of state certification. *In re Gen. Elec. Co.*, 4 E.A.D. 468, 470-71 (EAB 1993)(emphasis added.).

Discharge limitations for federal NPDES permits are typically derived from standards issued under either section 301 or section 306, 33 U.S.C. §§ 1311, 1306. Standards established under section 301 generally apply to existing sources, such as MKS, whereas section 306 standards apply to new sources. *See, e.g., Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 185 (2d. Cir. 2004). Pursuant to section 301, EPA establishes effluent limitations for categories or classes of point sources based on either “the best available technology economically available” or “the best conventional pollutant control technology,” depending on the type of pollutant in question. 33 U.S.C. § 1311(b)(2)(A), (E); *see E.I. duPont de Nemours & Co. v. Train*, 430 U.S. 112, 126-129 (1977); *Riverkeeper*, 358 F.3d at 185 (2d. Cir. 2004); *Cronin v. Browner*, 898 F.Supp. 1052, 1056 (S.D.N.Y. 1995).

The term “pollutant” under the Federal CWA and Massachusetts CWA includes “heat;” thus, discharges of heated wastewater (i.e. thermal discharges) are regulated under each statute. “Heat” is considered a nonconventional and nontoxic pollutant under the Federal CWA. *See* 40 C.F.R. §§ 401.15 - 401.16. Consequently, the Federal CWA sections 301(b)(1)(C) and 301(b)(2)(A), which generally apply to such nonconventional and nontoxic pollutants, govern the establishment of the appropriate “baseline” effluent

standards for heat. 33 U.S.C. § 1311(b)(1)(C), (b)(2)(A). The latter of these provisions, section 301(b)(2)(A), contains the basic technology-based standard and requires application of “the best available technology economically available,” otherwise known as “BAT.” 33 U.S.C. § 1311(b)(2)(A); *see also* 40 C.F.R. § 125.3(a). The other provision, section 301(b)(1)(C), requires application of “any more stringent limitation, including those necessary to meet [water quality standards], treatment standards, or schedules of compliance, established pursuant to any State law or regulation . . . or required to implement any applicable [water quality standard] established pursuant to [the Federal CWA].” 33 U.S.C. § 1311(b)(1)(C). Courts have interpreted this provision to require application of state water quality standards or other state legal or regulatory requirements if these are more stringent than the technology-based limitations required by section 301(b)(2)(A). *U.S. Steel Corp. v. Train*, 556 F.2d 822, 838 (7th Cir. 1977); *In re City of Moscow, Idaho*, 10 E.A.D. 135, 168 (EAB 2001); *see also* 40 C.F.R. §§ 122.4(d), 122.44(d)(1), (3), (5) (all requiring NPDES permits to include conditions necessary to achieve state water quality standards more stringent than promulgated effluent limitations guidelines or standards).

EPA generally defers to all conditions imposed during the state certification process. *In re City of Jacksonville, Dist II Wastewater Treatment Plant*, 4 E.A.D. 150, 157-58 (EAB 1992)(“[EPA’s] duty under CWA § 401 to defer to considerations of State law is intended to prevent EPA from *relaxing* any requirements, limitations, or conditions imposed by State law.”)(Emphasis in original). However, where the conditions imposed during certification by the State are not sufficiently stringent to meet state Water Quality Standards, EPA must independently impose conditions to ensure that the permit complies

with state Water Quality Standards to satisfy its obligations under section 301(b)(1)(C) of the Federal CWA. *In re City of Moscow, Idaho*, 10 E.A.D. 135, 168 (EAB 2001); *In re City of Jacksonville, Dist II Wastewater Treatment Plant*, 4 E.A.D. 150, 157-58 (EAB 1992).

If, on the other hand, the State's certification leaves open the possibility that the permit condition could be made less stringent and still comply with the State water quality standards, the permit condition is not "attributable to state certification" and is subject to further challenge at the EAB pursuant to the procedures in 40 C.F.R. pt. 124. *In re District of Columbia, Department of Public Works*, 6 E.A.D. 470, 474 (EAB 1996) (citing *In re Boise Cascade Corporation*, 4 E.A.D. 474, 483 n. 7 (EAB 1993) (Because certification letters from Louisiana left open the possibility that the effluent limitations in the permit could be made less stringent and still comply with Louisiana's water quality standards, such limitations were not "attributable to State certification.") A certification letter stating only that a permit condition will comply with the State's water quality standards or only that it will not violate those standards leaves open the possibility that the permit condition could be made less stringent and still comply with the standards. 44 Fed. Reg. 32880 (June 7, 1979).

The Federal CWA also contains a provision, section 316, that specifically focuses on point sources with thermal discharges and their related cooling water intake structures ("CWISs"). 33 U.S.C. § 1326. Section 316(a) applies to the thermal discharges and allows EPA, for a specific point source discharger, to impose less stringent effluent limitations on the thermal discharges than might otherwise be required under section 301 or 306 when the owner or operator can demonstrate to the satisfaction of EPA "that any

effluent limitation proposed for the control of the thermal component of any discharge from such source will require effluent limitations more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water into which the discharge is to be made.”⁷ 33

U.S.C. § 1326(a). In such cases, EPA may grant a variance pursuant to section 316(a) for the thermal component of the discharge that “assure[s] the protection of [the BIP]. 33

U.S.C. § 1326(a). Massachusetts has a parallel standard for granting thermal variances in 314 C.M.R. 3.12.

EPA has promulgated regulations implementing section 316(a) of the Federal CWA that include provisions describing the criteria and standards that it uses to determine whether a section 316(a) variance may be imposed. 40 C.F.R. §§ 125.72 and 125.73. Not only do these regulations explicitly require that the permit applicant, to obtain such a variance, demonstrate that the otherwise applicable thermal discharge effluent limitations or standards are more stringent than necessary to assure the protection of the BIP, but they also specifically require the applicant to “show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, will assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made.” *Id.* at § 125.73(a). Thus, reading sections 301 and 316(a) together, the federal statute and regulations in effect establish a three- and sometimes four-step framework for obtaining a thermal variance: (1) EPA must determine what the applicable technology and water

⁷ The “balanced, indigenous population of fish, shellfish, and wildlife in and on the body of water” is often referred to as the “BIP.”

quality-based limitations should be for a given permit; (2) the applicant must demonstrate that these otherwise applicable effluent limitations are more stringent than necessary to assure the protection and propagation of the BIP; (3) the applicant must demonstrate that its proposed variance will assure the protection and propagation of the BIP; and (4) in those cases in which the applicant meets step 2 but not step 3, EPA may impose a variance it concludes does assure the protection and propagation of the BIP. *See Dominion Energy Brayton Point, LLC*, NPDES Appeal No. 03-12 (Remand Order)(EAB, Feb. 1, 2006) 12 E.A.D. __ (Slip Opinion at 14).

Section 316(b) governs CWISs at these point sources. 33 U.S.C. §§ 1326(b). It provides that standards established under sections 301 or 306 and applicable to a point source “shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.” *Id.* In addition to satisfying the technology-based limits, NPDES permit limits for CWISs must also satisfy any more stringent provisions of state water quality standards or other legal requirements that apply under § 301(b)(1)(C). The federal statute does not specify any particular technology to be used or what methods EPA should use to make section 316(b) determination. *See id.* At the time EPA issued its draft permit for MKS, EPA did not have regulations in effect for determining technology-based requirements under section 316(b), although such regulation became effective before the final permit decision was issued.⁸ In the absence of applicable

⁸ EPA’s Final CWA § 316(b) Phase II Rule for large, existing power plants, 69 Fed. Reg. 41576 (July 9, 2004)(regulations promulgated at 40 C.F.R. pt. 125, Subpart J) became effective September 7, 2004. Because the Phase II Rule was not in effect at the time the draft permit for MKS was issued, EPA’s general NPDES program regulations dictate that

regulations, EPA developed technology-based requirements in the final NPDES permit for MKS' CWISs on a Best Professional Judgment⁹ application of section 316(b). *See* 40 C.F.R. § 125.95(a)(2)(ii). *See also* 40 C.F.R. §§ 125.90(a) and (b).

Although Massachusetts does not have a parallel statute or regulation specific to CWISs, it still regulates CWISs in the context of permitting associated discharges by applying the Massachusetts Surface Water Quality Standards, 314 C.M.R. 4.00, as explained in MassDEP's Water Quality Certification at issue. In general, MassDEP will not issue a discharge permit unless the conditions of the permit contain limitations that are adequate to assure the attainment and maintenance of the water quality standards of the receiving water, as assigned in the Massachusetts Surface Water Quality Standards. 314 C.M.R. 3.11(3). Moreover, Massachusetts will not issue a discharge permit unless the conditions of the permit provide for compliance with all applicable requirements of the Massachusetts CWA and Federal CWA, including the NPDES regulations at 40 C.F.R. Part 122, and the applicant has obtained state Water Quality Certification. 314 C.M.R. 3.07(1) and (2). *See also* 314 C.M.R. 3.07(4) (prohibiting the issuance of a discharge permit unless the conditions imposed will ensure compliance with the water quality requirements of Massachusetts and all other affected states).

the Phase II Rule were not "applicable requirements" that governed development of the permit limits for MKS. *See* 40 C.F.R. §§ 122.43(a) and (b).

⁹ The determination of BAT for a source or category of sources is generally based on the effluent limitation guidelines ("ELGs") promulgated by EPA. Where there is no applicable ELG, as is the case here, the determination of BAT for a source is done on a case-by-case basis using Best Professional Judgment ("BPJ") under section 402(a)(1). *See* 33 U.S.C. § 1342(a)(1)(B); 40 C.F.R. § 125.3(c)(2).

III. FACTUAL BACKGROUND

The final permit decision authorizes MKS, which is a 256-megawatt power plant located in Cambridge, Massachusetts, to withdraw water from the Charles River for use by the facility for cooling purposes, and to discharge the then-heated water back to the Charles River. Its currently effective NPDES permit was issued by a renewal in 1988 and has remained in effect due to an administrative continuance resulting from a timely renewal application filed in 1992. In February 2001, Petitioner submitted a renewed application to EPA and MassDEP for issuance of a renewal permit with certain modifications to the existing permit. In its original 2001 NPDES permit application, and subsequent requests, Petitioner requested a section 316(a) thermal variance for its discharge. In Petitioner's permit application and supporting materials, Petitioner proposed barrier net technology to reduce both impingement mortality and entrainment.¹⁰ EPA and MassDEP issued a draft of the NPDES renewal permit in June 2004, which included non-binding performance goals for the reduction of impingement mortality and entrainment, amongst other things. After public comment closed on the draft permit, EPA and MassDEP jointly issued the final permit decision on September 26, 2006.

The final permit decision seeks to address potential adverse impacts to sustainable fish populations, aesthetics, and recreation due to heat, excessive algae growth, reduced water clarity and the intake of cooling water. This permit includes the following new protective requirements and conditions:

¹⁰ Impingement occurs when fish and other aquatic life are trapped against cooling water intake screens. Entrainment occurs when aquatic organisms, eggs and larvae are drawn into a cooling system, through the heat exchanger, and then pumped back out.

- **Zone of Passage and Habitat:** A seasonal safe “zone of passage and habitat,” which covers roughly fifty percent of the Lower Basin, has been created along the Boston side of the Charles River in order to protect fish populations and aquatic habitat. Two species of river herring, alewife and blueback herring, use the Lower Charles River Basin for their annual adult migration and spawning run.
- **In-stream Temperatures:** Maximum seasonal allowable in-stream river temperatures have been established within the zone of passage and habitat. Critical river temperature permit limits range from 50 degrees Fahrenheit during the winter for yellow perch, and up to 81 to 83 degrees Fahrenheit (depending on depth and time of day) during the summer for river herring. In addition, river temperatures in this safety zone cannot increase by more than 5 degrees Fahrenheit above upstream ambient river temperatures during a 24-hour average period. If real-time monitoring indicates that any of these temperature limits are exceeded, the power plant will need to modify its operations to reduce thermal discharges to the river.
- **Discharge Temperature and Location:** An annual average of 70 MGD of non-contact cooling water can be discharged at temperatures up to 105° F from the present discharge pipes as long as these in-stream temperatures are not exceeded.
- **Barrier Net:** A fine-mesh barrier net system or other similar protective device must be installed in front of the facility’s cooling water intake structure to limit the number of fish that are trapped or pulled into the power plant when river cooling water is pumped into the facility.

- Real-time Monitoring: Continuous water quality monitoring will be required in the Lower River Basin. This monitoring will provide real-time temperature measurements at eight strategic upstream and downstream river locations. The real-time discharge monitoring information will be made available to EPA and MassDEP via the Internet to ensure continued permit compliance and immediate protection of the Charles River.

MassDEP's Water Quality Certification for the final NPDES permit provides that the thermal discharge limits established by EPA in the final NPDES permit pursuant to Section 316(a) of the Federal CWA are sufficient to satisfy Massachusetts' Water Quality Standards. With respect to the permit conditions applicable to Petitioner's cooling water intake activity, MassDEP's Water Quality Certification provides that the technology-based impingement reduction requirements in the final NPDES permit are also sufficiently protective to satisfy Massachusetts' Water Quality Standards. However, MassDEP's Water Quality Certification goes on to note that EPA's proposed final NPDES permit did not include technology-based entrainment reduction requirements on Petitioner's CWISs¹¹ or mandate that Petitioner design the barrier net system to reduce the entrainment of larvae in addition to the impingement of fish, although EPA had included performance goals for the reduction of entrainment mortality in its draft permit. Instead, the final NPDES permit requires Petitioner to design the barrier nets, if practicable, to allow for any impinged larvae and eggs to be freed in a manner that would increase the probability of their survival. MassDEP concluded in its certification that the

¹¹ MassDEP notes that CLF/CRWA is challenging EPA's failure to impose technology-based entrainment reduction requirements through its Petition for Review to the EAB.

omission of technology-related entrainment reduction requirements and entrainment monitoring requirements in the final NPDES permit was inconsistent with maintaining the designated use of the receiving waters as a healthful fish habitat, as required by Massachusetts' Water Quality Standards. MassDEP, therefore, required that additional entrainment-related conditions (i.e. the design and installation of a barrier net system or alternative entrainment prevention system "*consistent with the impingement-related provisions of the final NPDES permit,*" the operation of the barrier net system in a manner to maximize the survival of and minimize the adverse impact to river herring and white perch larvae or eggs impinged on the barrier net "*consistent with the impingement-related provisions of the final NPDES permit,*" and an entrainment-related sampling and monitoring program plan), were necessary to assure compliance with Massachusetts' Water Quality Standards. (Emphasis added.) The final NPDES permit includes those conditions as water quality-based standards.¹²

IV. ARGUMENT

Petitioner's appeal of MassDEP's Water Quality Certification should be stayed because (i) 310 C.M.R. 1.01(6)(h) was reasonably intended to include a stay of the appeal of the state Water Quality Certification issued for the final NPDES permit that has been appealed to the EAB in addition to the stay on the state Surface Water Discharge Permit, and (ii) regardless of the availability of any 310 C.M.R. 1.01(6)(h) stay, "good cause" exists under 310 C.M.R. 1.01(5)(a)3 to stay Petitioner's appeal of MassDEP's Water Quality Certification in order to prevent unnecessary expenditure of MassDEP's limited administrative resources, and in the interest of efficient coordination of the federal and state appeals, until the issues raised in the federal appeals by Petitioner and CLF/CWRA have been resolved by the EAB.

¹² MassDEP notes that CLF/CRWA is challenging the water quality-based entrainment reduction requirements in the final NPDES permit for MKS as insufficient to satisfy Massachusetts Surface Water Quality Standards, as a matter of federal law, through its Petition for Review filed with the EAB.

1. 310 C.M.R. 1.01(6)(h) was reasonably intended to include a stay of appeal of the state Water Quality Certification issued for the final NPDES permit that has been appealed to the EAB in addition to the stay of the state Surface Water Discharge Permit appeal.

Pursuant to 310 C.M.R. 1.01(6)(h), MassDEP stays by rule all Surface Water Discharge Permit appeals when the NPDES permit issued by EPA for the same discharge has been appealed under the Federal CWA, and for good reason. This stay on Surface Water Discharge Permit appeals is intended to provide for the efficient coordination of the federal and state appeals and to prevent unnecessary expenditure of scarce agency resources by adjudicating the federal NPDES permit first. The 310 C.M.R. 1.01(6)(h) stay (“the 1.01(6)(h) stay”) on Surface Water Discharge Permit appeals is imposed regardless of whether or not the underlying permit includes any conditions solely attributable to State certification. *See* 310 C.M.R. 1.01(6)(h)(which includes *no* exceptions from the 1.01(6)(h) stay).

In the appeals of both the Surface Water Discharge Permit and Water Quality Certification filed with MassDEP, Petitioner raises similar objections to the thermal discharge limits and related conditions, the impingement-related technology requirements, the state-based entrainment-related conditions, and the temperature, water quality and biological monitoring programs required.¹³ Because any more stringent conditions imposed by MassDEP in its Water Quality Certification will always be included as conditions in the companion Surface Water Discharge Permit (and, as required by the Federal CWA, in the NPDES permit) it is reasonable to read the scope of

¹³ In addition, in both appeals, Petitioner is challenging MassDEP’s legal authority to set conditions for cooling water intake structures.

the 1.01(6)(h) stay as necessarily extending to the state Water Quality Certification. As discussed below, to conclude otherwise would be contrary to the core purpose of 1.01(6)(h) – to efficiently coordinate the federal and state appeals of these discharge permits and the closely related water quality certification, and to prevent the unnecessary expenditure of limited resources by MassDEP, including the Presiding Officer, and the Commonwealth’s Division of Administrative Law Appeals (“DALA”).

To go forward with a hearing on Petitioner’s appeal of the Water Quality Certification before the EAB rules on Petitioner’s parallel federal NPDES permit appeal would have the effect of bypassing the 1.01(6)(h) stay already imposed in Petitioner’s Surface Water Discharge Permit appeal. Given that the State certification was a condition precedent for the issuance of the NPDES permit and Surface Water Discharge Permit and its requirements are reflected in both permits, and that the issues raised in Petitioner’s Water Quality Certification appeal are redundant to the issues raised in Petitioner’s Surface Water Discharge Permit appeal, it makes sense to interpret the 1.01(6)(h) stay for Surface Water Discharge Permits to extend to any companion appeal of the Water Quality Certification to avoid evading the 1.01(6)(h) stay and defeating its intended purposes.

Interpreting the 1.01(6)(h) stay to extend to any redundant appeal of the Water Quality Certification associated with the final NPDES permit, moreover, may avoid the distinct possibility that MassDEP’s conduct of an administrative hearing on the Water Quality Certification before the EAB settles the final NPDES permit would prove meaningless with time. Notwithstanding the fact that the final NPDES permit currently includes conditions solely attributable to the State certification, which conditions may not

be relaxed upon review by the EAB, adjudicating the federal NPDES permit first may nonetheless render all of the issues raised in both collateral state appeal moot. *See Matter of New England Plating Company*, Docket No. 93-017, Ruling Granting Stay (August 31, 1993)(EPA's expected resolution of permit limit issues in the context of the appeal of the federal permit will render the state permit appeal moot). For instance, the EAB may disagree with EPA and determine that technology-based entrainment reduction requirements are BAT for Petitioner's CWISs. MassDEP may then decide to reissue the state certification to omit water-quality-based entrainment requirements and thereby render the Water Quality Certification appeal here moot. On the other hand, the EAB may determine that the water quality-based entrainment reduction requirements are not sufficiently stringent as a matter of federal law to ensure that the federal NPDES permit complies with state Water Quality Standards. The Federal CWA prohibits MassDEP from issuing a water quality certification or a Surface Water Discharge Permit that contains conditions that are less stringent than the federal NPDES permit. Consequently, if the resolution of the appeals before the EAB resulted in entrainment conditions that were more stringent than those contained in the MassDEP Water Quality Certification under appeal, the latter would need to be revised and reissued in response to the changes made to the NPDES permit.

Furthermore, any proposed changes to the federal NPDES permit as a result of the EAB review would necessitate MassDEP's reevaluation of the State certification in light of such changes to determine whether the revised requirements would still allow for the attainment of the designated uses of the receiving waters, as required by the state water quality standards. As a consequence, it is quite possible that the requirements included in

the State certification may be dropped out altogether or changed as a result of the EAB's adjudication of the federal NPDES permit. For instance, the EAB could decide that the technology-based impingement requirements in the federal NPDES permit are not BAT. MassDEP may then decide to reissue the State certification to include water quality-based impingement requirements. On the other hand, the EAB may decide that technology-based entrainment reduction requirements are BAT. MassDEP may then opt to reissue the State certification to confirm that such technology-based entrainment reduction requirements are sufficient to satisfy state Water Quality Standards. Therefore, to avoid the possibility of convening a hearing to adjudicate issues that eventually may be dropped out or change in the State certification after the NPDES permit is settled, the 1.01(6)(h) stay should be interpreted to extend to any companion appeal of the Water Quality Certification that raises issues redundant to those raised in any stayed Surface Water Discharge Permit appeal.

2. Regardless of the availability of any 310 C.M.R. 1.01(6)(h) stay, "good cause" exists under 310 C.M.R. 1.01(5)(a)3 to stay Petitioner's appeal of MassDEP's Water Quality Certification in order to prevent the unnecessary expenditure of MassDEP's limited administrative resources, and in the interest of efficient coordination of the federal and state appeals, until the issues raised in the federal appeals by Petitioner and CLF/CWRA have been resolved by the EAB.

310 C.M.R. 1.01(5)(a)3 of MassDEP's Adjudicatory Proceeding Rules grant the Presiding Officer the discretion to stay an appeal "where the failure to previously obtain a final decision required under another law would result in an unnecessary expenditure of the Department's administrative resources, or for other good cause." In the November 30, 2006 Order, the Presiding Officer, citing the above stay provision, stated:

As the federal discharge permit has been appealed, its terms may change as a result of the review by the US EPA. Massachusetts DEP would then

presumably consider any necessary changes to the state Water Quality Certification of that revised permit, and may revise or reissue the certification under appeal. Therefore, in order to conserve administrative resources by reserving review of the state's Water Quality Certification until after the federal permit is finalized, I order the parties to show cause why the Water Quality Certification should not also be stayed pursuant to 310 CMR 1.01(5)(a)3.

As discussed in Section IV.1. above, MassDEP believes that it is reasonable to interpret the scope of the automatic stay under 310 CMR 1.01(6)(h) as necessarily including related water quality certifications. Alternatively, for the reasons set forth herein and cited by the Presiding Officer in her Order, a stay of the appeal of the Water Quality Certification is also clearly justified under 310 CMR 1.01(5)(a)3.

In summary, MassDEP submits that "good cause" exists here to stay the appeal of MassDEP's Water Quality Certification in the interest of efficient coordination of the federal and state appeals until the issues raised in the federal appeals by Petitioner and CLF/CWRA have been adjudicated by the EAB and in order to prevent the unnecessary expenditure of MassDEP's scarce administrative resources adjudicating issues that arise out of a State certification that MassDEP may modify after the EAB adjudicates Petitioner's parallel appeal of the NPDES permit. Furthermore, MassDEP submits that this matter should be consolidated for hearing with Petitioner's Surface Water Discharge Permit appeal to avoid an unnecessary duplication of effort that otherwise might result from convening two separate appeals involving mirror issues and common questions of fact and law.

Initially, MassDEP notes, again, that the issues Petitioner raises in the Water Quality Certification appeal mirror those in the Surface Water Discharge Permit appeal, including objections to the thermal discharge limits and related conditions, the impingement-related technology requirements, the state-based entrainment-related

conditions, and the temperature, water quality and biological monitoring programs required. The only permit limitations and conditions in the final NPDES permit solely attributable to MassDEP's Water Quality Certification are those related to the water quality-based entrainment reduction requirements and entrainment-related monitoring that EPA had omitted from its proposed final permit. EPA concluded that Petitioner's proposed barrier net technology could yield reductions in both impingement mortality and entrainment. Yet, in its application of BPJ, EPA did not establish any technology-based requirements for entrainment in its proposed final NPDES permit.¹⁴

The water quality-based entrainment reduction requirements and entrainment-related monitoring comprise a relatively small subset of the core matters at issue in Petitioner's appeal of the Surface Water Discharge Permit and parallel appeal of the final NPDES Permit to the EAB. These matters involve highly technical factual questions. All of these matters, including not only the entrainment-related requirements but also the thermal discharge and other discharge limits, the in-stream compliance regime, the monitoring and sampling program plan requirements, the impingement-related technology requirements, and MassDEP's and EPA's rejection of Petitioner's proposal to install and operate a diffuser as part of its variance request, concern what is necessary to protect the designated uses of the lower Charles River Basin as a "healthful" habitat for fish and other aquatic life. This necessarily entails review of the biology of the lower Charles River Basin, including a review of the scientific studies, literature and data available. Accordingly, even if the hearing were to be limited to the entrainment-related

¹⁴ Without going into detail here, MassDEP notes that both Petitioner and CLF/CRWA have raised legal challenges to EPA's application of BPJ as it pertains to impingement and entrainment, amongst other matters, in their respective federal appeals to the EAB.

requirements attributable to the State certification, a significant amount of the testimony and exhibits that would be submitted in a separate hearing on the Water Quality Certification appeal to address entrainment as a water-quality based standard would likely be duplicated if a separate limited hearing were to be held on these issues.

For instance, the testimony in an evidentiary hearing on the entrainment-related requirements in the Water Quality Certification appeal will necessarily duplicate much of the testimony for an evidentiary hearing on the impingement-related technology requirements in the Surface Water Discharge Permit appeal. In both appeals, the use and design of barrier net systems as an appropriate technology for controlling impingement and entrainment will be at issue. It, therefore, would be virtually impossible to separate out the entrainment-related issues for hearing in the Water Quality Certification appeal from those in the Surface Water Discharge Permit appeal without significant duplication of testimony and exhibits.

Furthermore, the issues on appeal of the state Water Quality Certification and Surface Water Discharge Permit should be heard together because they involve mirror issues and common questions of law and fact. The entrainment-related conditions in the State certification and final permit determination, moreover, are closely interwoven with the impingement-related conditions, given that both sets of conditions are linked to the appropriate design, installation and operation of a barrier net system. In fact, the entrainment-related requirements for the design and installation of the barrier net system must be "*consistent with the impingement-related provisions of the final NPDES*

*permit.*¹⁵ See p. 14 of MassDEP's Water Quality Certification. It, therefore, is virtually impossible to determine in a vacuum whether the water quality-based entrainment requirements are appropriate without first adjudicating what, if any, technology-based impingement-related requirements for the federal NPDES permit are appropriate.

Moreover, the fact that the EAB will not review the water quality-based entrainment-related requirements contained in the federal NPDES permit for the purpose of *relaxing* the State's requirements does not mean that the EAB will not consider water quality-based entrainment-related issues in its review of the final NPDES permit. To the contrary, the EAB has a federal obligation under section 301(b)(1)(C) of the Federal CWA to not only independently impose conditions sufficiently stringent to ensure that the federal NPDES permit complies with state water quality standards but also must review EPA's BAT determination as it pertains to the omission of any technology-based entrainment-reduction requirements in the final NPDES permit. In fact, CLF/CRWA's Petition for Review includes federal challenges both to EPA's determination that the requirements contained in the federal NPDES permit are sufficiently stringent to ensure that the federal NPDES permit complies with state Water Quality Standards as well as EPA's BAT determination as it pertains to the omission of technology-based entrainment-reduction requirements. As mentioned, it is possible that, in adjudicating the federal NPDES permit, the EAB may require technology-based entrainment-related requirements or more stringent water-quality based entrainment-related requirements. If the EAB's adjudication results in any modification of the final NPDES permit, MassDEP, in turn, will need to reevaluate the State certification to ensure attainment of the

¹⁵ The description of the barrier net system in the final NPDES permit allows for, but does not require on a technology basis, a design to prevent the entrainment of larvae.

applicable water quality standards. Thus, there is no more need for the state to adjudicate the permit requirements attributable to State certification before the EAB completes its review of the federal NPDES permit than there is for a hearing on the Surface Water Discharge Permit before the EAB completes its review. Accordingly, as envisioned under both 310 C.M.R. 1.01(6)(h) and 1.01(5)(a)3., Petitioner's appeal of the Water Quality Certification should be stayed together with Petitioner's appeal of the Surface Water Discharge Permit in the interest of efficient coordination of the federal and state appeals and in order to prevent an unnecessary expenditure of MassDEP's scarce resources to adjudicate issues arising out of the State certification that eventually may drop out or change after the EAB adjudicates the NPDES permit appeal.

There is precedent, moreover, for staying administrative hearings on state Water Quality Certifications where there is pending a parallel appeal of the companion NPDES permit issued jointly by EPA and MassDEP. In *Matter of USGEN New England, Inc.*, Docket No. 2003-155; File No. MA0003654 WQ Cert., MassDEP's moved to stay the state proceedings in order to avoid an unnecessary duplication of effort. USGEN opposed. Administrative Magistrate Kristen M. Palace, in granting MassDEP's request for a stay, ruled that the state forum should defer to the federal body entrusted with making decisions on appeals brought under the Federal CWA, and rejected USGEN's argument that going forward would serve the purpose of creating a fuller record for the federal appeal. See also *Matter of City of Fitchburg and Fitchburg Wastewater Treatment Facilities Commission*, Docket No. 2002-184 (finding "good cause" to stay a Surface Water Discharge Permit appeal where "going forward would do little more than generate, issue for issue and filing for filing under the same applicable substantive law, a

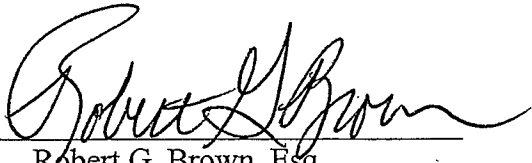
mirror image of the EPA appeal -- an entirely unnecessary indulgence[.]” (Citations omitted).

Finally, it is important to note that Petitioner is allowed to operate under the terms of its existing permit until the Final Permit is reviewed by the EAB and that a stay of the proceedings would in no way undermine Petitioner’s right to appeal the State certification after the EAB adjudicates the federal NPDES permit. Thus, even if the EAB ultimately decides not to impose technology-based entrainment requirements as a matter of federal law, or more stringent water-quality based entrainment requirements as a matter of federal law, Petitioner will suffer no cognizable harm by staying the Water Quality Certification appeal until the NPDES permit is settled. It, therefore, makes sense to wait and see what the final NPDES permit will look like, including the final conditions for any barrier net system required, before proceeding to adjudicate the State certification and Surface Water Discharge Permit.

V. CONCLUSION

For the reasons stated above, MassDEP requests that the pending Water Quality Certification be stayed pending final disposition of the two pending parallel appeals to EPA’s Environmental Appeals Board, and that the appeal be consolidated with Petitioner’s appeal of the Surface Water Discharge Permit, in the interest of efficient coordination of the federal and state appeals and in order to prevent unnecessary expenditure of MassDEP’s scarce administrative resources.

Respectfully submitted,

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