

Date: September 8, 2019

From: Sharon DeMeo, Danielle Gaito, Eric Nelson, Cayleigh Eckhardt and Mark Stein

To: Merrimack Station NPDES Permit File

Re: Memorandum Documenting August 27, 2019, Meetings Between EPA and Granite Shore Power Concerning the Merrimack Station NPDES Permit

A. Meeting Between Granite Shore Power, LLC, and the EPA Region 1 Team for the Merrimack Station NPDES Permit

On August 27, 2019, representatives of EPA Region 1 (EPA, Region 1 or the Agency) and Granite Shore Power LLC (GSP) met at EPA's offices in Boston to discuss the Merrimack Station (the Facility) permit. Region 1 staff prepared this memorandum to document the meeting for the Administrative Record for the permit.

I. Meeting Attended By:

See attendance sign-in sheet (attached).

For EPA Region 1, the meeting was attended by Thelma Murphy, Damien Houlihan, Sharon DeMeo, Danielle Gaito, and Eric Nelson from the Water Division, Mark Stein and Cayleigh Eckhardt from the Office of Regional Counsel (Michael Curley was unable to attend).

For GSP, the meeting was attended by Elizabeth (Lynn) Tillotson, Environmental Manager, GSP (previously in the same post with Merrimack Station's prior owner, Public Service of New Hampshire), James Andrews, President of GSP, and P. Stephen Gidiere, III, and Tom DeLawrence of GSP's outside law firm, Balch & Bingham.

II. Introduction

As an initial matter, representatives from both EPA and GSP expressed their continuing desire to try to resolve issues and finalize as soon as possible a renewal permit for Merrimack Station that satisfies the Clean Water Act (CWA).

III. Steam Electric Guidelines

EPA and GSP again discussed the current status of the 2015 Steam Electric Guidelines (ELGs) after the recent Fifth Circuit decision vacating and remanding to the Agency the ELGs' BAT limits for "legacy wastewater" (*i.e.*, wastewater generated before the dates by which the final (or long-term) effluent limitations in the ELGs must be complied with). *See Southwestern Elec. Power Co. v. EPA*, 920 F.3d 999 (5th Cir. 2019).

Merrimack Station generates bottom ash transport water (BATW) and flue gas desulfurization (FGD) wastewater. Under the 2015 ELGs, BATW and FGD wastewater generated by Merrimack Station prior to the compliance dates for the final BAT limits for such wastewater is legacy wastewater. Due to the Fifth Circuit's decision vacating the BAT limits for legacy wastewater from the 2015 ELGs, GSP asked if the Agency had determined whether it would (a) develop site-specific BAT limits based on its "best professional judgment" (BPJ) for the legacy wastewater, or (b) apply the prior, 1982 ELGs to provide limits for Merrimack's FGD and

BATW legacy wastewater. Region 1 explained that ORC it had discussed the issue with the EPA Headquarters (HQ) Office of General Counsel, and that HQ is currently evaluating how permitting authorities should proceed regarding technology-based limits for legacy wastewater. As a result, EPA and GSP discussed the possible implications of both approaches (*i.e.*, limits based on BPJ and limits based on application of the 1982 ELGs).

The group first discussed initial thoughts about the possibility of BPJ-based BAT limits for legacy FGD and BATW wastewater. EPA explained that with this approach, it would determine the BAT limits based on information in the administrative record, taking into account current wastewater treatment practices at the facility (*e.g.*, existing VCE treatment technology for FGD wastewater) and the time remaining before compliance with the final effluent limitations in the ELGs. The group also discussed whether any BPJ-based limits for legacy wastewater would apply only until the 2023 compliance date for the final BAT limits in the 2015 Rule. These BPJ limits would be legacy wastewater limits, whereas the limits to be applied after that date (*i.e.*, the long-term limits) could be made less stringent if future, revised ELGs imposed less stringent long-term effluent limits. EPA indicated that it held this view based on the terms of 40 C.F.R. § 122.62(a)(3). Second, the group agreed that if EPA decided to apply limits from the 1982 Steam Electric ELGs to FGD and BATW legacy wastewater, then the permit would solely include TSS and O&G limits.

Finally, GSP again questioned whether the Fifth Circuit decision affects the voluntary incentives program (VIP) from the 2015 ELGs at all (*see* 40 C.F.R. § 423.13(g)(3)), suggesting that the court decision did not address the VIP provisions. EPA explained that it was consulting with HQ on this issue. GSP also expressed the need for lead time to come into compliance with any limits imposed in the final permit.

III. Cooling Water Intake Structure Requirements

EPA noted that it has been working to review and consider public comments submitted during the various comment periods held in connection with the Merrimack Station permit. EPA indicated that, based on comments received during 2012 and 2017, in combination with the site-specific study in 2017 and the Facility's current operational profile (*i.e.*, the plant now runs on an intermittent basis rather than as a baseload facility), the Agency now believes that wedgewire screens are likely to be selected as the best technology available (BTA) at Merrimack Station. GSP indicated that it was likely amenable to a permit with wedgewire screen requirements but still wanted the opportunity to consider whether another compliance option might be preferable. GSP also indicated that it would likely need time to come into compliance with any new requirement. In response, EPA proposed that the conditions and compliance schedule in the Final Permit could perhaps be designed so that GSP would either comply with wedgewire screen requirements *or* another approach that achieves equivalent environmental improvements (namely, reduced entrainment and impingement). Thus, the schedule would give GSP an opportunity either to submit its final design for wedgewire screens or propose an equally effective alternative method of compliance with § 316(b) (*e.g.*, seasonal intake flow reductions). Under the Final Permit, if an appropriate alternative compliance method was proposed, EPA could propose modification of the permit to incorporate the new requirements. EPA noted that the § 316(b) requirements for the GE Aviation NPDES Permit in Lynn, MA, included a similar type of compliance schedule. GSP agreed that this could provide a mutually acceptable approach

to the permit's CWA § 316(b) conditions, after indicating that the compliance schedule should also allow the Permittee to recommend a specific slot-size for the screens in its final design.

IV. Thermal Effluent Limitations

The discussion of thermal limits addressed issues raised during the May 21, 2019, meeting concerning how to implement temperature limits within the NetDMR compliance reporting system. GSP expressed concern that people unfairly might “perceive” Merrimack Station to be violating its permit when river temperatures are reported as exceeding the in-river limits at Station S-4 even if the Facility was not operating at the time. EPA explained that the permit could be written so it would not be a violation by Merrimack Station if in-river temperatures exceed the applicable limit when the plant is not operating, and further explained that the facility's operating records will indicate when the plant is operating and when it is not.

The group also discussed what would constitute an appropriate time period following permit issuance for GSP to obtain and deploy the necessary equipment, and develop and implement the necessary operating procedures, to comply with the new thermal limits. GSP proposed 18 months in order to ensure enough time to obtain needed equipment and be able to evaluate and consider conditions during the critical winter and summer seasons. EPA indicated that it understood GSP's request and the reasons for it and would further consider this request.

The group discussed how acute temperature (T) limits would be applied, including what metric (namely, what period of time) would be used for setting compliance limits. Previously, EPA had proposed that Merrimack Station report its highest 3-hour average temperature each day to assess compliance with the applicable acute T limit. GSP later counter-proposed that the highest 6-hour average be used for assessing compliance. In this meeting, EPA suggested that it was wondering about using a one-hour average value that would trigger application of the acute, in-stream T limit while also providing some length of time (e.g., 4 hours) for the plant to power down sufficiently to meet the acute T limit. EPA understood GSP to indicate that this approach might be acceptable to the company.

GSP proposed that when monitoring compliance with chronic T limits, the delta T between N-10 and S-4 should always allow a difference of up to 4°F above the temperature at N-10 to allow for natural temperature variations recorded when the plant was not operating. EPA reviewed such inconsistencies in the temperature data and found that delta T typically remained within (2.7°F) but agreed that the type of provision suggested by the company was appropriate.

GSP had expressed concerns during the May 21, 2019, meeting that regulating T through limits on an established *seasonal* capacity factor (CF) would make compliance overly complicated and difficult to report in the existing reporting system. In response to these concerns, EPA offered a new proposal for operating under separate *monthly* CFs during the May 1 – September 30 period. These would be based on the plant's historic operating data and ensure that flexibility remains to allow Facility operations during summer months, while also ensuring the protection of the BIP by limiting overall operation to approximately 30%. GSP was concerned, however, that a monthly limit would overly limit its ability to respond to requests to operate during critical periods of energy demand. GSP preferred a longer-than-monthly time interval.

The group had discussed during the May 21, 2019, meeting how having multiple T limits within certain single months (e.g., May) could be very challenging to track and report for both the plant

and EPA due to the nature of the existing reporting systems and methods. In response, EPA suggested slight modifications to the time periods of certain T limits so that, in most cases, the limits are in effect for at least one full month. GSP seemed receptive to these modifications.

GSP questioned EPA on the basis for the acute temperature limits proposed in the draft permit designed to protect larval yellow perch and American shad and suggested that EPA was applying a 2°C safety factor twice. GSP expressed concern that the proposed acute limit of 29.3°C was, therefore, overly conservative and restrictive. The company proposed 30.9°C as a more appropriate limit. EPA responded that it did not think that it had applied the safety factor twice, but it would nevertheless re-review the bases for these proposed acute T limits, including reference data and documents used to develop them.

VI. Next Steps

EPA will continue to work on responding to comments related to thermal and § 316(b) requirements. Both parties will continue to evaluate the issues under discussion.

B. Meeting Between GSP and EPA Region 1 Management Regarding the Merrimack Station NPDES Permit

On August 27, 2019, following the meeting between GSP and EPA Region 1 staff, GSP's representatives met briefly (around 20 minutes) with EPA Region 1 senior management and attorneys to discuss the status of the Merrimack Station permit renewal effort. Region 1 staff prepared this memorandum to document the latter meeting for the Administrative Record for the permit.

I. Meeting Attended By:

For EPA, this meeting was attended by the following: Deb Szaro, Acting Regional Administrator; Carl Dierker, Regional Counsel; Damien Houlihan, Industrial Permits Section Chief; and Mark Stein and Cayleigh Eckhardt, Assistant Regional Counsels. The same group from the earlier meeting attended this meeting on behalf of GSP, including the following: James Andrews, President of GSP; Elizabeth (Lynn) Tillotson, Environmental Manager, GSP (previously in the same post with Merrimack Station's prior owner, Public Service of New Hampshire); and attorneys P. Stephen Gidiere, III, and Tom DeLawrence of GSP's outside law firm, Balch & Bingham.

II. Discussion During the Meeting:

1. The meeting began with introductions.
2. Deb Szaro then explained that a new Regional Administrator, Dennis Deziel, was shortly to begin his tenure at Region 1, but that she would stay involved so that time was not lost due to the transition new leadership.
3. Jim Andrews for GSP expressed the company's interest in getting a reasonable new NPDES permit for Merrimack Station as soon as possible. He expressed frustration at the length of time between our last meeting and the meeting that took place earlier today, only to have EPA raise new ideas at today's meeting. He also asked how long it would take EPA to finish the permit.
4. Mark Stein explained that staff had been working on Merrimack-related issues, but also had been tied up with some other high priority matters, including some court litigation. He also pointed out that staff was hoping to be able to put even greater focus on the Merrimack permit this fall. He also explained that when EPA proposed new ideas at today's earlier meeting, it was only in an effort to respond to issues raised by GSP at the previous discussion.
5. Damien Houlihan indicated that EPA estimated that it would take around 4 months to complete the final permit (and responses to comments), once the Agency had decided upon the permit conditions for the final permit so that staff can write the final permit conditions and responses to comments. Staff cannot finish this writing without knowing what the final permit conditions will be.
6. Region 1 reiterated that it would get in touch with EPA Headquarters again to try to sort out the questions created by the Fifth Circuit's decision vacating the 2015 Steam Electric ELGs for

“legacy wastewater.” EPA again noted that this affects the final permit’s limits for BATW and FGD wastewater.

7. EPA noted that discussions about the permit’s requirements for cooling water intake structures under CWA § 316(b) had made good progress.

8. Finally, EPA noted that there were a number of issues still under discussion related to thermal discharge limits but that the parties were engaged in constructive discussions and we were hopeful that we could narrow and bridge any differences.

9. The company indicated that it would try to provide additional response on various thermal discharge issues shortly, perhaps in a couple of weeks.

~~8/27/19~~ 8/27/19 Meeting EPA Region 2 & GSP re Merrimack Station NPDES

Attendee Sheet

<u>Name</u>	<u>For</u>	<u>Tel.</u>
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