IN RE SPRINGFIELD WATER AND SEWER COMMISSION

NPDES Appeal No. 20-07

ORDER DENYING REVIEW

Decided May 27, 2021

Syllabus

The Springfield Water and Sewer Commission ("Commission") owns and operates the Springfield Regional Wastewater Treatment Facility ("Facility") and combined sewer collection system in and around Agawam, Massachusetts. On September 30, 2020, Region 1 ("Region") of the U.S. Environmental Protection Agency ("EPA" or "Agency") issued a final National Pollutant Discharge Elimination System ("NPDES") permit to the Commission and six co-permittees, pursuant to Clean Water Act § 402, 33 U.S.C. § 1342, authorizing discharges from the Facility and combined sewer overflow ("CSO") outfalls to the Connecticut River. The River flows into Long Island Sound, for which there is an existing Total Maximum Daily Load ("TMDL") developed by Connecticut and New York, and approved by EPA, to address nitrogen-driven impacts in the Sound.

The Commission challenges multiple provisions of the permit, including the total nitrogen ("TN") water quality-based effluent limit, CSO terms and conditions, the inclusion of co-permittees and related requirements, and various other monitoring and technical provisions.

Held: The Board concludes, based on the administrative record, that the Commission has not demonstrated that review of the final permit is warranted on any of the grounds presented. As such, the Board denies the petition for review in all respects.

(1) With respect to the Commission's many arguments challenging the nitrogen effluent limit, the Board holds that the Region did not clearly err in declining to reopen the public comment period for a third round of comments on that limit. The relevant regulation and factors considered by the Region support its decision not to reopen the comment period in this case. The record also demonstrates that a change in the limit reasonably could be anticipated, for a number of reasons, including public comments seeking a change based on facility design flow, and so the Board holds the limit to be a "logical outgrowth" of those comments.

The Board also rejects the Commission's assertions that the Region made arbitrary and clearly erroneous decisions in developing and imposing the nitrogen limits in the permit. The Region used a tiering approach based on facility size, assessed using facility design flow, and the Board finds that the Region thoroughly explained its decisionmaking processes and responded to public comments questioning its choices. Among other things, the Region explained that it used its best professional judgment and information available at the time of permit issuance to cap nitrogen loads to prevent further contributions to nitrogen impairment of Long Island Sound. The Board holds that the Commission failed to confront the Region's explanation of its allocation of nitrogen loads to the Facility based on design flow, as required under 40 C.F.R. § 124.19(a)(4)(ii), and failed to demonstrate that the Region's allocation was clearly erroneous in light of the record. *Id.* § 124.19(a)(4)(i)-(ii). Additionally, the Board rejects the Commission's contention that the Region clearly erred by removing allowances for increased nitrogen loadings for future activities, noting that the Commission did not present any substantiated reason to question the Region's considered judgment on the technical considerations of incremental flow increases.

On the Region's derivation of the nitrogen water quality-based effluent limit, the Board holds that, contrary to the Commission's view, the Region derived the TN limit consistent with 40 C.F.R. § 124.44(d). This includes a holding that the NPDES regulations and guidance do not require EPA to use any particular methodology in determining whether the "reasonable potential" standard is met, but rather significant flexibility is accorded when making this technical determination. Further, the Board holds that the Commission failed to demonstrate that the nitrogen limit is not consistent with the assumptions and requirements of the wasteload allocations established in the Long Island Sound TMDL and misapprehends the Clean Water Act and EPA regulations, which require the Region to issue a permit that will ensure compliance with the antidegradation policy of Connecticut as a downstream affected state. The Board also holds that the Commission failed to demonstrate that the Region clearly erred in declining to include a nitrogen compliance schedule and by imposing a narrative nitrogen optimization standard.

- (2) With respect to the Commission's many arguments related to the permit terms for CSOs, the Board holds that the Commission failed to confront the Region's explanation for its decisions and did not demonstrate clear error by the Region. Specifically, the Board holds that the Commission failed to confront the Region's explanation and has not shown that the Region clearly erred when it classified Outfall 042 as a CSO in the permit. The Region demonstrated that Outfall 042 meets the definition of a CSO and that it reasonably applied the CSO Control Policy as incorporated into the CWA. The Region acknowledged that it has not consistently treated Outfall 042 as a CSO in previous permits and explained that, among other things, it now has more information regarding the Facility and its operations that helped inform the Region's classification of Outfall 042 as a CSO. The Board holds that the Region is not forever barred from changing the classification of the outfall and that it provided a reasoned explanation for its decision.
- (3) The Board holds that, for several other CSO-related issues raised in the petition, the Commission failed to demonstrate that the Region clearly erred when it: (i) determined that the Commission failed to supply the information and analysis that the Region would

need to determine whether a permit condition allowing for CSO-related bypasses is warranted; (ii) included in the Public Notification Plan specific requirements for notification about CSO occurrences and impacts; (iii) included in the permit a prohibition against the discharge of septage to the combined collection system during wet weather; (iv) established monitoring requirements in the permit for CSO discharge events that require the Commission to measure and later report the duration and volume of the discharge, and to quantify that data through direct measurement; (v) included references to "dry weather" in the permit; (vi) decided not to modify the timeframes in the final permit for the description and subsequent development and implementation of the collection system operation and maintenance plan; and (vii) included in the permit the requirement that the Commission evaluate the need to revise the Facility's pretreatment requirements within one hundred and twenty days after the permit becomes effective.

(4) Finally, with respect to other issues, the Board holds that the Commission failed to satisfy the threshold requirements for Board review because the Commission failed to confront the Region's responses to comments and failed to demonstrate that the Region clearly erred regarding inclusion of satellite sewage collection facilities as co-permittees. 40 C.F.R. § 124.19(a)(4)(a)(i)-(ii). The Commission also failed to confront the Region's response to comments regarding selection of a twelve-month compliance schedule for new *Escherichia coli* limits, and failed to demonstrate that the Region clearly erred when it declined to reopen the comment period to allow for public input on monitoring requirements for total phosphorus. *Id*.

Before Environmental Appeals Judges Aaron P. Avila, Mary Kay Lynch, and Kathie A. Stein.

Opinion of the Board by Judge Lynch:

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I. STATEMENT OF THE CASE

The Springfield Water and Sewer Commission ("Commission" or "SWSC") owns and operates the Springfield Regional Wastewater Treatment Facility ("Facility") and combined sewer collection system in and around Agawam, Massachusetts. On September 30, 2020, Region 1 ("Region") of the U.S. Environmental Protection Agency ("EPA" or "Agency") issued a National Pollutant Discharge Elimination System ("NPDES") permit to the Commission and six co-permittees, pursuant to Clean Water Act ("CWA" or "Act") § 402, 33 U.S.C. § 1342, authorizing discharges from the Facility and combined sewer overflow ("CSO") outfalls to the Connecticut River. ¹ The River flows southwards from

¹ The Region issued the permit jointly with the Massachusetts Department of Environmental Protection ("MassDEP"). In issuing the permit, MassDEP acted pursuant

Agawam for approximately fifty-five miles, where it reaches and flows into Long Island Sound. The Connecticut River segment into which the facility outfall and CSOs discharge is impaired for, among other things, *Escherichia coli* and total suspended solids. Connecticut and New York developed, and EPA approved, a Total Maximum Daily Load to address nitrogen-driven impacts in Long Island Sound.

The Commission seeks Environmental Appeals Board ("Board") review of multiple permit provisions, including the total nitrogen water quality-based effluent limit and provisions addressing secondary treatment bypass and combined sewer overflows, co-permittee requirements, and various other issues. The six co-permittees have not appealed or filed an amicus brief. The Region filed a response brief opposing the petition for review, while three other entities—the Connecticut Department of Energy and Environmental Protection ("CT DEEP"), Save the Sound, Inc., and the Connecticut River Conservancy—filed amicus curiae briefs opposing the petition. Following briefing and requested extensions, the Board held oral argument on March 31, 2021. For the reasons set forth below, the Board denies the petition for review.

II. SUMMARY OF ISSUES ON APPEAL AND OUTCOME

The Commission's challenge to the permit raises the following issues on appeal:

- 1. Did the Region clearly err by declining to reopen the public comment period to accept additional comment on the Facility's effluent limit for discharges of total nitrogen?
- 2. A. Did the Region clearly err by assigning the Facility a nitrogen concentration based on facility size, assessed using facility design flow, to determine its mass-based effluent limit for nitrogen?

to the Massachusetts Clean Waters Act. See Region 1, U.S. EPA, & MassDEP, Final NPDES Permit No. MA0101613 for Springfield Regional Wastewater Facility and CSOs 1-2 (Sept. 30, 2020) (A.R. A.1). The Commission is concurrently petitioning MassDEP's Office of Appeals and Dispute Resolution for review of the final permit. Petition for Review of the Springfield Water and Sewer Commission's NPDES Permit at 5 (Oct. 30, 2020).

- B. Did the Region assume, as claimed in the petition, that the Facility could consistently meet the mass-based limit without substantial investment by the Commission, and did it clearly err?
- 3. Did the Region clearly err by removing allowances for increased nitrogen loadings for future activities?
- 4. Did the Region clearly err in deriving a water quality-based effluent limit for nitrogen?
- 5. Did the Region clearly err by declining to include a nitrogen compliance schedule in the permit?
- 6. Did the Region clearly err by imposing a narrative nitrogen optimization standard in addition to the effluent limit?
- 7. Did the Region clearly err by including permit terms that prohibit the bypass of secondary treatment during peak wet weather conditions, requiring the Commission to measure bypass flows, to the extent they occur, on a case-by-case basis, and by declining to provide the Commission with a compliance schedule to monitor commingled flow at the point of final discharge?
- 8. Did the Region clearly err when it classified Outfall 042 as a combined sewer overflow, and by not including a three-year compliance schedule for the Commission to control solids and floatable materials at Outfall 042?
- 9. Did the Region clearly err when it included in the permit certain requirements for the CSO Public Notification Plan?
- 10. Did the Region clearly err when it included a permit term that prohibits septage discharges to the combined sewer collection system during wet weather?
- 11. Did the Region clearly err when it established monitoring requirements pursuant to the Nine Minimum Controls that require the Commission to collect data on the duration and volume of each CSO discharge?

- 12. Did the Region clearly err by including the definition of dry weather in the permit?
- 13. Did the Region clearly err by issuing the permit to the Commission and six municipalities jointly as co-permittees, and by imposing certain permit obligations on those six municipalities?
- 14-17. Did the Region clearly err by including in the permit various other monitoring and technical permit conditions?

The Board denies review on all issues. The Commission failed to confront the Region's responses to comments, impermissibly raised new issues on appeal, and/or failed to carry its burden to demonstrate clear error by the Region. As discussed below, Board review of permit decisions is based on the administrative record, and the Commission's petition also fails based on the applicable principles that govern Board review.

III. PRINCIPLES GOVERNING BOARD REVIEW

Section 124.19 of Title 40 of the Code of Federal Regulations governs Board review of NPDES permitting decisions. EPA's intent in promulgating these regulations was that "review should be only sparingly exercised" and that "most permit conditions should be finally determined at the [permit issuer's] level." Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980); accord In re Gen. Elec. Co., 17 E.A.D. 434, 446 (EAB 2018).

In considering a petition filed under 40 C.F.R. § 124.19, the Board evaluates whether a petitioner has met threshold procedural requirements, including whether each issue raised has been preserved for Board review. 40 C.F.R. § 124.19(a)(2)-(4). A petitioner satisfies the preservation requirement by demonstrating that the issues and arguments it raises on appeal were raised previously—either in comments submitted on the draft permit during the public comment period or at a public hearing. *Gen. Elec.*, 17 E.A.D. at 445. If the Board concludes that a petitioner has satisfied the threshold requirements, the Board evaluates the merits of the petition for review. *Id.*

Under 40 C.F.R. § 124.19(a), the burden of demonstrating that review of a permit decision is warranted rests with the petitioner, and the Board has the discretion to grant or deny review. *Gen. Elec.*, 17 E.A.D. at 445-46. The Board ordinarily will deny review of a permit decision, and thus not remand it, unless the decision is based on a clearly erroneous finding of fact or conclusion of law.

40 C.F.R. § 124.19(a)(4)(i); see, e.g., Gen. Elec., 17 E.A.D. at 446; In re ESSROC Cement Co., 16 E.A.D. 433, 435 (EAB 2014). To meet that standard, it is not enough for a petitioner to simply repeat comments previously submitted on the draft permit. The Board consistently has denied review of petitions that merely cite, attach, incorporate, or reiterate comments previously submitted on the draft permit. In re City of Taunton Dep't of Pub. Works, 17 E.A.D. 105, 111 (EAB 2016), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019); see, e.g., In re City of Pittsfield, NPDES Appeal No. 08-19, at 7 (EAB Mar. 4, 2009) (Order Denying Review), pet. for review denied, 614 F.3d 7 (1st Cir. 2010); In re Knauf Fiber Glass, GmbH, 9 E.A.D. 1, 5 (EAB 2000). The petitioner must demonstrate, with factual and legal support, why the Region's response to comments on the issue raised is clearly erroneous. 40 C.F.R. § 124.19(a)(4)(ii).

When evaluating a permit decision for clear error, the Board examines the administrative record that serves as the basis for the permit decision to determine whether the permit issuer exercised "considered judgment" in rendering its decision. *Gen. Elec.*, 17 E.A.D. at 446. The Board does not find clear error simply because the petitioner presents a difference of opinion or alternative theory regarding a technical matter. *Id.* at 446-47. On matters that are fundamentally technical or scientific in nature, the Board typically defers to a permit issuer's technical expertise and experience, as long as the permit issuer has adequately explained its rationale and supported its reasoning in the administrative record. *Id.* at 514-15.

IV. STATUTORY AND REGULATORY FRAMEWORK

A. Relevant CWA Provisions and Implementing Regulations

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA § 101(a), 33 U.S.C. § 1251(a). To help achieve this objective, the Act prohibits the discharge of pollutants into the waters of the United States, unless authorized by an NPDES permit or other specified provision of the Act. See CWA §§ 301(a), 402, 33 U.S.C. §§ 1311(a), 1342. Section 402 of the CWA authorizes EPA (or the state or tribe, in approved state or tribal programs) to issue permits for the discharge of pollutants, provided that certain statutory requirements are satisfied. CWA § 402, 33 U.S.C. § 1342. A "discharge of a pollutant" is defined as "any addition of any pollutant to navigable waters from any point source." CWA § 502(12), 33 U.S.C. § 1362(12).

² A "point source" is defined as "any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well,

"Navigable waters" are "the waters of the United States." CWA § 502(7), 33 U.S.C. § 1362(7).

B. NPDES Permits, Water Quality Standards, and Effluent Limitations

The CWA prohibits EPA from issuing a permit that does not "insure" compliance with the water quality standards of both the state where the discharge originates and all affected states.³ See CWA §§ 301(b)(1)(C), 401(a)(1)-(2), 33 U.S.C. §§ 1311(b)(1)(C), 1341(a)(1)-(2). EPA regulations implementing the statutory requirements specifically prohibit the permitting authority from issuing a permit "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states." 40 C.F.R. § 122.4(d). The regulations also require that the permit must include conditions "necessary" to "[a]chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." Id. § 122.44(d)(1). They further require that "[1]imitations must control all pollutants or pollutant parameters * * * which the [permit issuer] determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Id. § 122.44(d)(1)(i).

All permits must include effluent limits that impose restrictions on pollutants that a permitted entity may lawfully discharge. *See generally* CWA §§ 301, 303, 304(b), 33 U.S.C. §§ 1311, 1313, 1314(b); 40 C.F.R. pts. 122, 125, 131. The CWA provides for two different kinds of permit effluent limits: those based on the technology available to control or treat a pollutant and those necessary to attain and maintain applicable water quality standards. EPA generally develops technology-based effluent limitations—denoted as "effluent limitation guidelines" in the CWA—on an industry-by-industry basis, establishing in each instance a

discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." CWA § 502(14), 33 U.S.C. § 1362(14).

³ Water quality standards are promulgated by states or tribes and approved by EPA. See CWA § 303(c)(2)(A), 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 131.10-.12. Water quality standards include the following three components: (1) the "designated uses" of a waterbody, such as public drinking supply, recreation, or wildlife habitat; (2) "water quality criteria," expressed in numeric or narrative form, specifying the amount of various pollutants that may be present in the waterbody without impairing the designated uses; and (3) an "antidegradation" provision that protects existing uses and high quality waters. See CWA § 303(c)(2)(A), 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 131.10-.12.

minimum level of control or treatment that the Agency deems technologically available and economically achievable for facilities within that specific industry. See CWA §§ 301(b), 304(b), 33 U.S.C. §§ 1311(b), 1314(b); 40 C.F.R. pt. 125, subpt. A; see also 40 C.F.R. pts. 405-471 (establishing effluent limitations guidelines for various point source categories). If EPA has not developed industry-wide limits, the NPDES permit writer is authorized to develop technology-based limits on a case-by-case basis using his or her best professional judgment. See CWA § 402(a)(1)(B), 33 U.S.C. § 1342(a)(1)(B); 40 C.F.R. § 125.3(c)(2). Effluent limits to attain and maintain applicable water quality standards (called "water quality-based effluent limits," or "WQBELs") are more stringent permit limits used where technology-based standards are not sufficient to ensure that water quality standards will be met. In re Town of Concord Dep't of Pub. Works, 16 E.A.D. 514, 518-19 (EAB 2016); In re Wash. Aqueduct Water Supply Sys., 11 E.A.D. 565, 568-69 (EAB 2004).

C. Impaired Waters and Total Maximum Daily Loads

In addition to regulating discharges by requiring effluent limits in NPDES permits, CWA section 303(d) requires states to undertake separately a process to identify waters where the technology-based effluent limitations and other CWA pollution controls are not stringent enough to achieve applicable water quality standards. CWA § 303(d), 33 U.S.C. § 1313(d). The identified waters are commonly referred to as "impaired" waters and are prioritized on a list that is commonly referred to as a "303(d) list." The CWA and its implementing regulations require states to submit an updated 303(d) list to EPA for approval every two years and require EPA to approve or disapprove that list. CWA § 303(d)(2), 33 U.S.C. § 1313(d)(2); 40 C.F.R. § 130.7(d).

Once a water is identified on the 303(d) list, the state begins a planning process for bringing those waters into compliance with water quality standards. This process includes setting priorities for establishing total maximum daily loads ("TMDLs") for individual pollutants in the impaired waters. CWA § 303(d)(1)(C)-(D), 33 U.S.C. § 1313(d)(1)(C)-(D). Individual wasteload allocations ("WLAs") are then determined based on the TMDL to limit and allocate pollutant loads among facilities discharging to impaired water bodies. 40 C.F.R. §§ 130.2(h) (defining wasteload allocation), .7(c) (establishing TMDL requirements).

Where TMDLs have been established, NPDES permit limits must ensure consistency with the assumptions and requirements of the wasteload allocations established by those TMDLs. 40 C.F.R. § 122.44(d)(1)(vii)(B); see In re City of

Homedale Wastewater Treatment Plant, 16 E.A.D. 421, 426 (EAB 2014) (explaining that "consistent with" in this context does not mean that permit limits must be identical to wasteload allocations established by TMDLs).

Where TMDLs have not been established, water quality-based effluent limitations in NPDES permits nonetheless must comply with applicable water quality standards. In discussing the relationship between NPDES permitting and TMDLs, EPA has explained that the applicable NPDES rules require the permitting authority to establish necessary effluent limits, even if 303(d) listing determinations and subsequent TMDLs lag behind. NPDES: Surface Water Toxics Control Program, 54 Fed. Reg. 23,868, 23,878-79 (June 2, 1989); see City of Taunton, 17 E.A.D. at 115; In re Upper Blackstone Water Pollution Abatement Dist., 14 E.A.D. 577, 604-05 (EAB 2010) (expressly rejecting idea that permitting authority cannot proceed to determine permit effluent limits where TMDL has yet to be established), pet. for review denied, 690 F.3d 9 (1st Cir. 2012), cert. denied, 569 U.S. 972 (2013).

D. Combined Sewer Overflows

Combined sewer systems convey sanitary wastewater (domestic, commercial, and industrial wastewaters) and storm water through a single pipe system to a wastewater treatment facility. *See* Combined Sewer Overflow (CSO) Control Policy § I.A, 59 Fed. Reg. 18,688, 18,689 (Apr. 19, 1994) (A.R. H.9) ("CSO Control Policy"); CWA § 402(q), 33 U.S.C. § 1342(q) (discharge permits for municipal combined storm and sanitary sewer systems "shall conform" to CSO Control Policy). A combined sewer overflow ("CSO") is a discharge from a combined sewer system at a point prior to the treatment facility that occurs as a result of a wet weather event. CSO Control Policy § I.A, 59 Fed. Reg. at 18,689.

⁴ The Region filed a revised Certified Index to the Administrative Record and confirmed that the CSO Control Policy is properly identified as item H.9. *See* Order Requiring Documents to Be Included in the Administrative Record 2 (Mar. 5, 2021) (explaining that precursor document to CSO Control Policy, "National Combined Sewer Overflow Control Strategy," 54 Fed. Reg. 37,371 (Sept. 8, 1989), was previously listed as item H.9 in the initial Certified Index, and instructing the Region "to verify that it contains all required record documents and to file an updated Certified Index with all necessary corrections"). Documents that are "generally available" and "which are included in the administrative record" under the standards of 40 C.F.R. §§ 124.17 and 124.18 need not be "physically included" with the rest of the administrative record. 40 C.F.R. § 124.18(e). Nonetheless, all documents in the administrative record should be included in the certified index to the administrative record so that the certified index accurately reflects the complete administrative record for any final permit.

Dry weather CSOs are prohibited by the CWA. *Id.* § I.B, 59 Fed. Reg. at 18,689. Combined sewer systems anticipate significant storm water events and are designed to overflow directly from CSO outfalls to surface water bodies.

CSOs often contain high levels of suspended solids, pathogenic microorganisms, toxic pollutants, floatables, nutrients, oxygen-demanding organic compounds, oil and grease, and other pollutants. *Id.* § I.A, 59 Fed. Reg. at 18,689. CSOs can cause exceedances of water quality standards and such exceedances may pose risks to human health, threaten aquatic life and its habitat, and impair the use and enjoyment of the nation's waterways. *Id.* Discharges from CSOs are point source discharges subject to the CWA, including its NPDES permit requirements. *Id.*

The NPDES permit requirements prohibit bypass, which is the intentional diversion of waste streams from any portion of a facility. 40 C.F.R. § 122.41(m)(1)(i) (defining bypass); *id.* § 122.41(m)(4) (prohibiting bypass). A permittee may not bypass a wastewater treatment facility's treatment apparatus and process except under specified limited circumstances. *See id.* § 122.41(m)(4). The permitting authority may, after considering its adverse effects, approve an anticipated bypass if it meets the conditions listed in 40 C.F.R. § 122.41(m)(4)(i). *Id.* § 122.41(m)(4)(ii). The CSO Control Policy explains that a permittee can meet the requirements of 40 C.F.R. § 122.41(m) for a bypass allowance by demonstrating there are "no feasible alternatives" to bypass and providing further information and analysis in the long-term control plan. CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693-94. The permit must specify the conditions under which bypasses are permitted and the requirements that apply to bypass flows. *See id.*

EPA issued the CSO Control Policy in 1994 to implement a "comprehensive national strategy" for CSO control to "meet appropriate health and environmental objectives." *Id.*, 59 Fed. Reg. at 18,688. In 2000, Congress codified the CSO Control Policy at section 402(q) of the CWA, 33 U.S.C. § 1342(q), thus making the provisions of the CSO Control Policy part of NPDES permitting law. The CSO Control Policy is intended to facilitate and coordinate the planning, selection, design, and implementation of CSO management practices and controls to meet the requirements of the CWA and to involve the public fully during the decisionmaking process. *Id.* § I.A, 59 Fed. Reg. at 18,689. The major requirements of the CSO Control Policy are that permittees (1) undertake characterization of their combined sewer systems and CSO discharges, (2) "demonstrate implementation of minimum technology-based controls identified in the Policy," and (3) develop and implement long-term control plans that ensure that the combined sewer systems

comply with the Clean Water Act, including applicable water quality standards. *Id.*, 59 Fed. Reg. at 18,688. The Policy lists nine minimum technology-based controls including, among other things, proper operation and maintenance, maximizing storage in the collection system, maximizing flow to wastewater treatment facility, prohibiting CSOs during dry weather, and public notification of CSO occurrences. *Id.* § II.B, 59 Fed. Reg. at 18,691.

As to the long-term control plan for attaining compliance with the CWA, the CSO Control Policy states that the plan "should consider the site-specific nature of CSOs and evaluate the cost effectiveness of a range of control options/strategies." *Id.* § II.C, 59 Fed. Reg. at 18,691. The section of the CSO Control Policy that addresses "Implementation Responsibilities" explains that the NPDES authorities (i.e., authorized states or EPA regional offices) should "determine the appropriate vehicle (i.e., permit reissuance, information request under CWA section 308, or State equivalent or enforcement action) to ensure that compliance with the CWA is achieved as soon as practicable." *Id.* § I.E, 59 Fed. Reg. at 18,690.

V. FACTUAL AND PROCEDURAL SUMMARY

A. Springfield Regional Water Treatment Facility and Combined Sewer System

The Springfield Water and Sewer Commission owns and operates the Springfield Regional Wastewater Treatment Facility on Bondi Island, in Agawam, Massachusetts, just north of the Connecticut border. Region 1, U.S. EPA, *Fact Sheet for Draft NPDES Permit No. MA0101613, Springfield Regional Wastewater Treatment Facility and CSOs* 2, 8 & attach. A (Nov. 15, 2017) (A.R. B.6) ("Fact Sheet"). The facility is a major publicly owned treatment works ("POTW") with an annual average design flow of 67 million gallons per day ("MGD"). *Id.* at 8.

Wastewater from the City of Springfield and surrounding municipalities is collected and transported to the Facility using (1) sanitary sewers, which convey domestic, industrial, and commercial wastewater, and (2) combined sewers, which convey domestic, industrial, and commercial wastewater plus storm water. *Id.* Under normal circumstances, influent flows are commingled and treated using mechanical screening, primary clarification, aerated biological treatment, secondary clarification, chlorine disinfection, dechlorination, sludge thickening, and sludge dewatering. *Id.* At the end of this process, the treated effluent is discharged through Outfall 001 to the Connecticut River. *Id.* When combined influent flows exceed the hydraulic capacity of the interceptor sewers and/or the wastewater treatment plant, discharges of untreated combined sanitary wastewater

and storm water occur from combined sewer overflow ("CSO") outfalls to the Connecticut, Mill, and Chicopee Rivers. *Id*.

B. The Receiving Water and Long Island Sound TMDL

The Connecticut, Mill, and Chicopee Rivers are freshwater tributaries to Long Island Sound. The Connecticut River, flowing south from Canada, is the largest source of fresh water to the Sound, contributing approximately seventy percent of the more than six trillion gallons of fresh water that enter the Sound each year. See Letter from Ira W. Leighton, Acting Reg'l Adm'r, U.S. EPA New Eng. & William J. Muszynski, Acting Reg'l Adm'r, U.S. EPA Region 2, to Arthur J. Rocque, Jr., Comm'r, Conn. Dep't of Envtl. Prot. & Erin Crotty, Comm'r, New York Dep't of Envtl. Conserv., encl. at 3 (Apr. 3, 2001) (A.R. G.3) ("TMDL Approval Letter"). Each river is classified as a "Class B" water under Massachusetts water quality standards, with designated uses including wildlife and aquatic life habitat and primary and secondary contact recreation. 314 Mass. Code Regs. §§ 4.05(3)(b), 4.06 figs.6, 8 & tbls.6, 8 (2021). Massachusetts has identified the segment of the Connecticut River into which the Facility's Outfall 001 and CSO outfalls discharge as "impaired" for, among other things, Escherichia coli ("E. coli") and total suspended solids ("TSS"). See Mass. Div. of Watershed Mgmt., Year 2014 Integrated List of Waters 163 (Dec. 2015) (A.R. G.1). The segments of the Mill and Chicopee Rivers into which some Facility CSOs discharge are identified as "impaired" for E. coli and fecal coliform, respectively. See id. at 154-55, 183.

Long Island Sound, a 1,300-square-mile water body that borders Connecticut and New York, drains a densely populated watershed of over 16,000 square miles, including portions of Maine, Massachusetts, New Hampshire, and Vermont. As set forth in the TMDL, the Sound received far higher nitrogen loadings over the years than it could assimilate naturally, causing excessive algal growth and creating low-light and low-dissolved oxygen conditions in the lower strata of the Sound that are not conducive to aquatic life flourishing. See N.Y. State Dept of Envtl. Conserv. & Conn. Dep't of Envtl. Protection, A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound pts. I.B, III.A, IV.B-.C, at 1-2, 5, 9-10 (Dec. 2000) (A.R. G.4) ("LIS TMDL"); Fact Sheet at 18 & attach. J, at 10. Due to the Sound's failure to attain water quality standards for dissolved oxygen, Connecticut and New York completed a TMDL in December 2000 to address nitrogen-driven eutrophication impacts in the Sound. See generally LIS TMDL. The TMDL includes nitrogen wasteload allocations for point sources in those two states, which are deemed "inbasin" states. Id. pts. V.B, VI.A.1, at 11, 26-27 & app. C. The TMDL did not assign nitrogen wasteload allocations for sources in Massachusetts, New Hampshire, and Vermont, deemed "out-of-basin" states. *See id.* pt. V.B, at 11. Instead, the in-basin wasteload allocations were established in part based on an assumption that POTWs in out-of-basin states would reduce their nitrogen loadings by an aggregate twenty-five percent from the baseline, through the issuance of NPDES permits. *See id.* pt. VI.B.1, at 33; TMDL Approval Letter § 5.B, at 13. EPA approved this TMDL in 2001. *See* TMDL Approval Letter at 1.

Approximately 613 square miles of Long Island Sound fall within the boundaries of Connecticut. LIS TMDL pt. III.C, at 7. These 613 square miles are classified as Class SA and Class SB waters under Connecticut water quality standards, with designated uses including aquatic life habitat and recreation. See Conn. Agencies Regs. § 22a-426-4(f), (j) (2021). Connecticut water quality standards impose several specific restrictions on POTW nutrient discharges. They specify that nitrogen loads discharged "to any surface water body shall not exceed that which supports maintenance or attainment of designated uses." Id. § 22a-426-9 tbl.1. Further, they authorize "imposition of discharge limits or other reasonable controls" for point sources of nitrogen that "have the potential to contribute to the impairment of any surface water, to ensure maintenance and attainment of existing and designated uses, restore impaired waters, and prevent excessive anthropogenic inputs of nutrients or impairment of downstream waters." Id. § 22a-426-4(a)(11). Connecticut's standards also include an "antidegradation" provision, which states that "[e]xisting and designated uses such as propagation of fish, shellfish, and wildlife, recreation, public water supply, and agriculture, industrial use and navigation, and the water quality necessary for their protection are to be maintained and protected." *Id.* § 22a-426-8(a)(1). Connecticut determines whether these uses are sufficiently protected by considering any impairments identified in CWA section 303(d) lists or TMDLs established for the water body in question. See id. § 22a-426-8(f).

C. Permit Overview

The Commission's prior NPDES permit, issued on December 8, 2000, expired in February 2006 and was administratively continued pursuant to 40 C.F.R. § 122.6 after the Commission timely applied for the permit's renewal.⁵ Fact Sheet

⁵ In 1995, EPA issued a separate permit for discharges from the CSOs (NPDES Permit No. MA010333 ("CSO Permit")) based on a request from the City of Springfield, which at that time owned and operated both the treatment plant and the collection system and requested separate permits for the CSOs and the system because different divisions within the City were responsible for the treatment plant and the collection system. Fact Sheet at 27. In 1996, the Springfield Water and Sewer Commission was

at 5. This permit did not include any effluent limit for nitrogen. In November 2017, the Region issued a new draft permit, proposing to authorize discharges from the Facility and twenty-four CSOs, along with an accompanying fact sheet. See Region 1, U.S. EPA, & MassDEP, Draft NPDES Permit No. MA0101613 for Springfield Regional Wastewater Facility and CSOs (draft Nov. 2017) (A.R. B.5) ("Draft Permit"); Fact Sheet. For the first time, a permit issued for the facility included a loading benchmark for nitrogen (2,279 lbs/day), as well as optimization measures. See Draft Permit pts. I.A.1, .H.1, at 4, 6 n.9, 20. The 2017 draft permit also identified six nearby municipalities as co-permittees for specific requirements, along with the Commission: the Towns of Agawam, Longmeadow, East Longmeadow, Ludlow, West Springfield, and Wilbraham. Id. at 1. Each of these municipalities operates satellite collection systems that contribute wastewater effluent to the Facility. The 2017 draft permit also listed and authorized twenty-four CSO outfalls, including for Outfall 042, which was not listed as a CSO in the 2009 CSO permit.

At the Commission's request, the Region extended the 2017 draft permit's public comment period to run from November 15, 2017, through February 12, 2018. Following requests from CT DEEP and others for a public hearing, the Region reopened the public comment period from March 14, 2018, through April 27, 2018, to facilitate an April 24, 2018 public hearing. Region 1, U.S. EPA,

established and subsequently took ownership of both the City of Springfield's treatment plant and the collection system (while ownership of satellite collection systems remains with those municipalities). *Id.* The CSO Permit was reissued on September 30, 2009. *Id.*; see Region 1, U.S. EPA, Reissuance of NPDES Permit No. MA0103331 for Springfield Water and Sewer Commission (Sept. 30, 2009) (A.R. B.19) ("2009 CSO Permit"). Because the City of Springfield no longer operates either the treatment plant or the collection system, there is no longer a need for separate permits. This 2020 final permit integrates authorization for CSO discharges into the current Facility permit, and the 2009 CSO Permit is now terminated. See Letter from Ken Moraff, Dir., Water Div., Region 1, U.S. EPA, to Joshua Schimmel, Exec. Dir., Springfield Water & Sewer Comm'n, Re: NPDES Permit No. MA0101613 for Springfield Wastewater Treatment Facility 1 (Sept. 30, 2020) (A.R. F.1); see also Region 1, U.S. EPA, Final NPDES Permit No. MA0101613 for Springfield Regional Wastewater Facility and CSOs (Sept. 30, 2020) (A.R. A.1).

⁶ Nitrogen limits are commonly written in terms of total nitrogen, which includes two forms of gaseous nitrogen (molecular nitrogen and nitrous oxide) and five forms of nongaseous, combined nitrogen (nitrate, nitrite, ammonium, amino groups, and amide groups). See, e.g., Office of Water, U.S. EPA, Doc. No. EPA 440/5-86-001, Quality Criteria for Water 1986, at 193-98 (May 1, 1986), https://www.epa.gov/sites/production/files/2018-10/ documents/quality-criteria-water-1986.pdf. Our references to "nitrogen" and "total nitrogen" throughout this opinion refer, in all instances, to total nitrogen.

Fact Sheet Supplement for Draft NPDES Permit No. MA0101613, Springfield Regional Wastewater Treatment Facility and CSOs 2 (Aug. 17, 2018) (A.R. B.2) ("Fact Sheet Suppl."). The Commission, its co-permittees, CT DEEP, the Connecticut Fund for the Environment, the Connecticut River Conservancy, the Massachusetts Water Resource Authority, and others filed comments on various aspects of the draft permit. Id.; see Letter from Joshua D. Schimmel, Exec. Dir., SWSC, to Meridith Timony, U.S. EPA, & Claire A. Golden, MassDEP (Feb. 9, 2018) (A.R. C.1) ("Feb. 2018 Cmts."); Letter from Joshua D. Schimmel, Exec. Dir., SWSC, to Meridith Timony, U.S. EPA, & Claire A. Golden, MassDEP (Apr. 27, 2018) (A.R. C.3) ("Apr. 2018 Cmts."). In addition, representatives from the Commission, CT DEEP, the Connecticut Fund for the Environment, and the Connecticut River Conservancy provided oral testimony at the public hearing. Fact Sheet Suppl. at 2.

Based on these comments and supporting materials, the Region decided that different approaches to nitrogen and CSO requirements than those proposed in the draft permit were necessary to protect water quality in the Connecticut River and Long Island Sound. The Region accordingly issued a revised draft permit in August 2018 with new permit conditions, including an *enforceable* mass-based effluent limit for total nitrogen (2,534 lbs/day), and accepted public comments on the 2018 revised draft permit through October 15, 2018. *See* Region 1, U.S. EPA, & MassDEP, *Revised Draft NPDES Permit No. MA0101613 for Springfield Regional Wastewater Facility and CSOs* (draft Aug. 17, 2018) (A.R. B.1) ("Rev'd Draft Permit"); Fact Sheet Suppl. §§ 2-4, at 2-5. The Commission, CT DEEP, the Connecticut River Conservancy, Save the Sound, Inc., the Massachusetts Water Resources Authority, and others submitted comments on the 2018 revised draft permit. *See* Letter from Joshua D. Schimmel, Exec. Dir., SWSC, to Meridith Finegan, U.S. EPA, & Claire A. Golden, MassDEP (Oct. 15, 2018) (A.R. C.4) ("Oct. 2018 Cmts.").

After considering the public comments, the Region prepared a proposed final permit and submitted it to the Massachusetts Department of Environmental Protection ("MassDEP") for water quality review under CWA section 401. MassDEP subsequently certified that the terms and conditions contained in the proposed final permit are necessary to assure compliance with the applicable provisions of the federal CWA and with appropriate requirements of state law, including Massachusetts water quality standards. *See* Letter from Lealdon Langley, Dir., Div. of Watershed Mgmt., MassDEP, to Thelma Murphy, Water Permits Branch Chief, Region 1, U.S. EPA attach. 1, at 1 (Aug. 31, 2020) (A.R. D.1).

The Region prepared a response to the public comments and issued that document, along with the final NPDES permit, on September 30, 2020. See Region 1, U.S. EPA, & MassDEP, Final NPDES Permit No. MA0101613 for Springfield Regional Wastewater Facility and CSOs (Sept. 30, 2020) (A.R. A.1) ("Final Permit"); Region 1, U.S. EPA, Response to Public Comments on NPDES Permit No. MA0101613 (Sept. 30, 2020) (A.R. A.2) ("RTC"). Based on the comments received on the 2018 revised draft permit, the Region developed a comprehensive approach to regulating all out-of-basin POTWs using a tiering approach that took into account facility design flow (i.e., facility size), location, pollutant load, and a variety of other technical, regulatory, and policy factors. See RTC at 9-15. The Region explained that one of its objectives was that the overall out-of-basin nitrogen load not increase. Id. at 10-11. Among many other things, the final permit included a revised mass-based effluent limit of 2,794 lbs/day for total nitrogen. See Final Permit pt. I.A.1, at 4. The final permit also permitted Outfall 042 as a CSO. Id. pt. I.B.1, at 10.

VI. ANALYSIS

The Commission challenges several aspects of the Region's permit decision, which have been grouped into four main subject areas for analysis: (1) total nitrogen; (2) combined sewer overflows ("CSOs"); (3) co-permittees; and (4) various other monitoring/technical issues. We note that the Region challenges the petition on the threshold ground that, in "almost all instances," the Commission fails to meet the requirement in 40 C.F.R. § 124.19(a)(4)(ii) that, for issues raised in the petition and addressed by the Region in its response to comments, a petitioner must explain why the Region's response to comments was clearly erroneous. EPA Region 1's Response Brief to Petition for Review at 2 (Dec. 11, 2020) ("Resp.") The Board will address each category of issues in sequence below and address any procedural failures in the context of each issue.

A. Nitrogen

The Commission presents a series of challenges to the Region's decision to include in the Facility's final permit a WQBEL for nitrogen discharges, which we address below.

1. The Commission Has Not Demonstrated That the Region Clearly Erred by Declining to Reopen the Public Comment Period for a Third Round of Comments on the Nitrogen Limit

The Commission contends that, in developing the final permit, the Region adopted "an entirely 'new approach'" to out-of-basin permitting that resulted in an

enforceable mass-based total nitrogen ("TN") limit of 2,794 lbs/day being incorporated into that permit, without public notice of and opportunity to comment on the limit. Petition for Review of Springfield Water & Sewer Commission's NPDES Permit 6-7 (Oct. 30, 2020) ("Pet."). The Commission asserts that the Region derived the limit by multiplying the Facility's design flow by a TN concentration of 5 mg/L, and by removing incremental TN loading increases for future activities allowed in previous draft permits. ⁷ *Id.* at 9-10. According to the Commission, the Region's failure to provide for notice and comment on these permitting decisions violates federal law, is clearly erroneous, and warrants remand of the final permit. *Id.* at 8.

The Region disagrees, claiming that the Commission's arguments do not square with the record and overlook the discretion EPA possesses in deciding whether to reopen a comment period. Resp. at 25-26. The Region observes that, under federal court and Board decisions, reopening a comment period "is only appropriate where information received during the comment period raises "substantial new questions" regarding the permit." Id. at 25 (quoting In re Ash Grove Cement Co., 7 E.A.D. 387, 431 (EAB 1997)). Additional notice and comment are not needed for a permit that differs from, but is a "logical outgrowth" of, a draft permit. Id. at 25-26 (citing In re City of Taunton v. EPA, 895 F.3d 120, 130 n.10 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019)). The Region argues that it considered all relevant factors and determined that issuing the 2020 final permit without a third round of notice and comment was reasonable, on three primary grounds. First, the 2018 revised draft permit included a mass-based TN limit, so the notion of a mass-based TN limit was not a new question presented for the first time in the final permit, nor was it "substantial." Id. at 26. Second, the Region revised the TN limit upward, making it less stringent by 260 lbs/day, in direct response to comments from the Commission and its request for EPA to reconsider its allocative plan and use facility design flow. *Id.*; see Feb. 2018 Cmts. at 31. The limit also reflected the comments of others that the Region allocate the aggregate out-of-basin load using design flow. RTC at 180 (Connecticut River Conservancy comments). Third, the Region considered time to be of the essence in the context of nutrient discharges, as continued discharges of any magnitude exacerbate existing impairments and the Commission's prior permit, which has no nitrogen limits, was already fifteen years expired. Resp. at 27-28.

⁷ The incremental TN discharge increases contemplated in the 2018 revised draft permit are discussed in Part VI.A.3, below.

In determining whether a changed provision in a final permit qualifies as a logical outgrowth of a draft permit, the Board has held that the "essential inquiry" is whether interested parties reasonably could have anticipated the final permit condition from the draft permit. *In re D.C. Water & Sewer Auth.*, 13 E.A.D. 714, 759 (EAB) (quoting *NRDC v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002)), *pet. for review dismissed for lack of juris.*, No. 08-1251 (D.C. Cir. Dec. 12, 2008); *see N.E. Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 952 (D.C. Cir. 2004) (noting that "[a] rule is deemed a logical outgrowth if interested parties 'should have anticipated' that the change was possible"). The inquiry is fact-based and case-specific, and so the Board carefully examines the "evolution of the permit condition at issue" and the permit issuer's "corresponding explanatory statements." *D.C. Water*, 13 E.A.D. at 760.

Further, the Board has frequently noted that, under EPA's permitting rules, a permit issuer *may* reopen the public comment period on a draft NPDES permit "[i]f any data[,] information[,] or arguments submitted during the public comment period * * * appear to raise substantial new questions concerning the permit." *In re Town of Concord Dep't of Pub. Works*, 16 E.A.D. 514, 531 (EAB 2016) (quoting 40 C.F.R. § 124.14(b)); *accord In re City of Palmdale*, 15 E.A.D. 700, 714 (EAB 2012), *pet. for review vol. dismissed sub nom. Simpson v. EPA*, No. 12-74124 (9th Cir. Oct. 28, 2013). Decisions *not* to reopen comment periods are typically reviewed in light of four additional considerations developed in Board jurisprudence (sometimes referred to as the "*Dominion* factors"):

- (a) Whether existing permit conditions were changed;
- (b) Whether new information or new permit conditions were developed in response to comments on the draft permit;
- (c) Whether the record adequately explains the permit issuer's reasoning so that a dissatisfied party could develop a permit appeal; and
- (d) Whether adding further delay to the permit proceedings would be advisable.

In re Dominion Energy Brayton Point, L.L.C., 13 E.A.D. 407, 416 n.10 (EAB 2007), pet. for review vol. dismissed, No. 07-2059 (4th Cir. Jan. 4, 2008); accord Town of Concord, 16 E.A.D. at 532; City of Palmdale, 15 E.A.D. at 714. The Board's review of a permit issuer's decision on whether to reopen the comment period is deferential, given the regulatory language and options available to the permit issuer under the regulation. E.g., Town of Concord, 16 E.A.D. at 531-33;

City of Palmdale, 15 E.A.D. at 713-14; Dominion, 13 E.A.D. at 415-16; In re NE Hub Partners, L.P., 7 E.A.D. 561, 585 (EAB 1998), pet. for review denied sub nom. Penn Fuel Gas, Inc. v. EPA, 185 F.3d 862 (3d Cir. 1999).

In the instant case, the Region developed the TN permit condition in response to public comments, consistent with the second Dominion factor listed above. Taking note of the Commission's comment that "the fairest and most straightforward way" to allocate the allowable TMDL wasteload among individual dischargers "is based on design flows," Feb. 2018 Cmts. at 31, the Region did exactly that—it recalculated the TN limit using the Facility's design flow. RTC at 11, 15. This recalculation produced the final permit's TN limit and, as such, was a logical outgrowth of the Commission's comments on the 2018 revised draft permit. See Town of Concord, 16 E.A.D. at 532-33 (upholding permit issuer decision not to reopen comment period where change made to pH limit in direct response to public comments qualified as logical outgrowth and permit issuer provided substantive reasons for change). The facts here, as in *Town of Concord*, are readily distinguishable from those in D.C. Water, where the Region "completely reversed course on a proposed permit condition without even trying to explain why." *Id.* at 532; see 13 E.A.D. at 762. Also here, as in *Concord*, it was foreseeable that the Region might alter a permit limit, in this case the TN limit, in light of public comments specifically calling for that limit to be recalculated using facility design flow. See Town of Concord, 16 E.A.D. at 532; City of Palmdale, 15 E.A.D. at 717-18.

The Commission objects that it did not have an opportunity to comment on the Region's use of a 5 mg/L performance-based concentration in its calculation of the effluent limit or elimination of incremental TN loading increases for future growth. Pet. at 9-10; Springfield Water & Sewer Commission Reply in Support of Petition for Review 3-4 (Jan. 27, 2021) ("Reply"). The record is clear, however, that the Region carefully examined these factors and explained its reasoning in the response to comments, consistent with the third *Dominion* factor listed above. Among other things, the Region stated that the new permitting approach "was derived in order to balance the burden of treatment" among POTWs. RTC at 12. The four largest facilities, which "contribute 53% of the design flow for the out-ofbasin watershed," were required to meet the 5 mg/L concentration at design flow, and smaller facilities were assigned effluent limits that can be achieved through system optimization. Id. The Region noted that, in tiering the facilities in this fashion, it "considered a series of technical and environmental factors" and "took into account equitable considerations." Id. at 13. It rejected the Commission's preferred option to apply an 8 mg/L concentration when calculating the TN mass-based effluent limits for large facilities because "that would result in an

increase in the current loading [(specifically, a near-doubling of TN load from 2,794 lbs/day to 5,429 lbs/day for the Facility)] and place a greater burden on facilities that service relatively small communities." *Id.* at 13, 15. The Region also deemed it reasonable, on the basis of experiences at similar and smaller POTWs in Massachusetts, Connecticut, and Rhode Island, to expect that if increased population or industrial development drove TN loading increases, the Commission would "work to achieve lower nitrogen concentrations in future permit cycles." *Id.* at 15.

These and many other examples establish that the Region conducted a thorough analysis of the factors affecting its selection of a TN limit for the Facility and other out-of-basin facilities and provided extensive documentation of its decisionmaking processes. *See, e.g.*, RTC at 9-33, 132-37, 144-47; Fact Sheet at 18-21 & attachs. G-H; Fact Sheet Suppl. at 3-4 & attach. A. Indeed, the permitting record is robust, and the Commission cannot reasonably be said to have been disadvantaged in such a significant way that it could not develop an adequate appeal of the final permit decision, in accordance with the third *Dominion* factor. ⁹

⁸ Notably, in comments and at hearings on the permit, CT DEEP maintained the necessity for an enforceable TN limit. It argued that the limit should be set at 1,648 lbs/day. *See* RTC at 158-59, 162-64, 166, 170-71. That figure is the Region's estimate, based on 2004-2005 discharge data, of the Facility's annual average TN loading to the Connecticut River. Fact Sheet at 18. The Commission asked the Region to discount the estimate because it was based on insufficient data to accurately characterize discharge conditions. RTC at 94, 108. The Region agreed that the data set suffered from certain limitations and opted to use more recent data in deriving the TN limit, in the context of its new tiering approach. *See id.* at 94-95.

⁹ The Commission ignores the Region's detailed explanations and focuses instead on a June 7, 2019 public meeting the Region held in Springfield to explain the out-of-basin permitting approach to Massachusetts POTWs. See Pet. at 9; Reply at 4; see also RTC at 15, 33. According to the Commission, the Region "made clear" at this meeting that the Facility would not be subject to the new approach and instead "would receive the same limit announced in the Revised Draft Permit." Pet. at 9. The Region, for its part, states that written materials it provided at the meeting indicated that "POTWs above 10 MGD would receive limits derived from 5 mg/L TN," and so the Commission was on notice that its TN limit would change. Resp. at 27 n.5. Neither of these assertions is fully accurate. The June 2019 TN limit is less stringent by 57.4 lbs/day than the limit set forth in the 2018 revised draft permit, so contrary to the Commission's statement, the limits are not the same. And the Region's materials suggested that all POTWs between 10 and just under 50 MGD in size would receive an effluent limit derived from a 5 mg/L concentration at design flow, while POTWs of 50 MGD or greater would receive a TN limit of 2,591.4 lbs/day. See Region 1, U.S. EPA, Nitrogen Requirements for NPDES Permits in the Long Island Sound Watershed 11 (June 7, 2019) (A.R. G.27) (PowerPoint presentation); Region 1, U.S. EPA, Long Island Sound 2001 TMDL Implementation-Summary of Massachusetts Total

Though the Commission disagrees that the logical outgrowth doctrine applies here, its contention that the Region provided "no valid legal or technical basis for the significant change," Reply at 4, fails on this record. The fact is that a change in the limit reasonably could be anticipated based on the public comments seeking a change based on design flow. Again, the change resulted in a less stringent TN limit in the 2020 final permit compared to the 2018 revised draft permit, just not as relaxed a limit as would have been derived had the Region applied the specific concentration at design flow or benchmark the Commission requested. The Region explained its reasoning, and the material provided is far beyond "minimally sufficient," see Town of Concord, 16 E.A.D. at 532-33, for parties to develop a robust appeal. See, e.g., D.C. Water, 13 E.A.D. at 758-59 (explaining that notice and comment process is expected to lead to changes or refinement in final permit and that if those changes constitute "logical outgrowth" of comments received then the law does not require permitting authority to reopen public comment period); see also NRDC v. EPA, 279 F.3d 1180, 1186 (9th Cir. 2002) (observing that it would be "antithetical to the whole concept of notice and comment" if final permit were required to be identical to corresponding draft permit and that it is, in fact, expected that final permit decisions will be somewhat different from those originally proposed).

These factors support the Region's decision not to provide a third notice-and-comment period. So does the Region's need to update the Facility's NPDES permit, which expired fifteen years ago and has been administratively continued, without any TN effluent limitation, since that time. The Facility is the largest municipal or industrial discharger in all three out-of-basin states (as measured by

Nitrogen Annual Average Loading Limits 1-2 & n.2 (June 7, 2019) (A.R. G.29). The Facility, at 67 MGD design flow, is the only Massachusetts POTW in the latter category.

The June 7 public meeting in Springfield, and another like it in Greenfield, Massachusetts, on June 21, 2019, revealed an evolution in the Region's basin-wide permitting approach, unfolding (for purposes of the Facility) in real time between issuance of the 2018 revised draft permit and the final permit in September 2020. There is nothing untoward or erroneous about such an evolution; instead, further refinement is expected in the permit development context. *E.g., NRDC v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002) (highlighting expectation that final permit decisions will be somewhat different from those originally proposed). Though the record contains little discussion of the specific reasons why the Facility was initially assigned a 2,591.4 lbs/day effluent limit, instead of the later applied 5 mg/L concentration, the Region explained in the response to comments that it ultimately relaxed the Facility's TN limit to a mass-based limit of 2,794 lbs/day "[i]n response to comments received regarding the need for a fair and comprehensive approach based on design flow and consistent with the new approach for facilities with design flow greater than 10 MGD." RTC at 15.

design flow). See RTC app. A. The record establishes that the Commission has been on notice for twenty years that Phase IV of the Long Island Sound TMDL, involving nitrogen management actions coordinated by EPA for out-of-basin sources, would be forthcoming. LIS TMDL pt. VII.D, at 43-46; see Oral Argument Transcript 42-44 (Mar. 31, 2021) ("Oral Arg. Tr."). The Board agrees that in light of the ongoing nitrogen impairments in Long Island Sound, traceable in part to out-of-basin sources, further delay in imposing a TN limit on the Facility's effluent would be inadvisable, consistent with the fourth Dominion factor listed above. ¹⁰

For all these reasons, the Commission has failed to establish clear error by the Region in not proceeding with a third notice-and-comment period. Accordingly, the Board denies review of this issue.

- 2. The Commission Has Not Demonstrated That the Nitrogen Effluent Limit Is Clearly Erroneous
 - a. The Commission Failed to Confront the Region's Response Explaining Its Allocation of Nitrogen Loads to the Facility Based on Design Flow and Has Not Demonstrated Clear Error

As noted in Part V.C above, the Region developed a comprehensive program for regulating all out-of-basin POTWs using a tiering approach. The Region explained that the allocations were done in a manner that ensured compliance with water quality standards, as required under section 301 of the Act. RTC at 9. EPA stated that its intention was not specifically to achieve greater nitrogen reductions, but to cap the out-of-basin contribution in a manner that provides assurance to the downstream states that total nitrogen loading will not increase with population or economic development. *Id.* at 11. The Region explained that, based on its best professional judgment and information reasonably available to the permit writer at the time of permit issuance, it rejected approaches that "were not sufficiently protective to assure that all the applicable requirements

¹⁰ The Connecticut River Conservancy provides historical background on the long-standing efforts to address nitrogen pollution in Long Island Sound through updated permits and TMDLs. The Conservancy argues, "The 2020 permit establishes an enforceable limit on nitrogen loading that is achievable and based on the design flow of the facility. For the largest municipal discharge on the Connecticut River, this is not a high bar; *further delays are not warranted*." Conn. River Conservancy Amicus Curiae Brief in Support of Permitting Agencies at 4 (Dec. 16, 2020) (emphasis added); *accord* CT DEEP Amicus Br. at 6 (Dec. 16, 2020) ("vociferously defend[ing]" inclusion of enforceable WQBEL for nitrogen "nearly twenty years after the EPA's approval of the TMDL, and fifteen years after the Springfield Plant's current permit expired").

of the Act would be met (*i.e.*, they lacked enforceable TN effluent limitations to *ensure* as a matter of law that nitrogen loads would be maintained at protective levels)." *Id.* at 10. Further, the Region rejected approaches that "would entail unwarranted uncertainty and delay (*i.e.*, they called for the development of new or revised TMDLs or for development of extensive new data collection or modelling * * *)." *Id.*

For the twenty-nine POTWs in Massachusetts, the approach identified facility size, assessed using design flow (or magnitude of maximum effluent discharge), location (focused on proximity to Long Island Sound), other technical and environmental factors, and equitable considerations aimed at balancing the burden of TN treatment among facilities. See id. at 9-15. The Region established three tiers for POTWs with design flows of 1 MGD or greater and calculated enforceable mass-based TN effluent limits for those POTWs in pounds of nitrogen discharged per day, using the following equation: TN limit (lbs/day) = TN concentration (mg/L) * Design Flow (MGD) * 8.345. Id. at 11. On the first tier, facilities with design flows of at least 1 MGD but less than 5 MGD received TN effluent limits equivalent to a 10 mg/L TN concentration at design flow. Second-tier facilities, with design flows between 5 and just under 10 MGD, received TN effluent limits equivalent to an 8 mg/L TN concentration at design flow. And the largest, third-tier facilities, with design flows over 10 MGD, received TN effluent limits equivalent to a 5 mg/L TN concentration at design flow. *Id.* at 11-13.

On appeal, the Commission claims that the Region did not provide any basis for how it selected the TN concentrations of 5, 8, and 10 mg/L, at design flow, how it selected the facility design flows that would determine which concentrations would apply, or why those concentrations or the resulting mass-based effluent limits are necessary to achieve applicable water quality standards or the wasteload allocation established in the Long Island Sound TMDL. Pet. at 11; Reply at 6-7. The Commission contends that the Region's selections were arbitrary and cites as an example the City of Keene, New Hampshire, treatment facility, which has a design flow of 6 MGD but was assigned a TN concentration of 10 mg/L instead of

¹¹ CT DEEP observes that the Commission "seeks to have the total nitrogen limit eliminated altogether." CT DEEP Amicus Br. at 2 (citing Pet. at 7).

the 8 mg/L it purportedly should have received under the Region's tiering protocol. 12 Pet. at 11-12; *see* Reply at 7.

The Region argues that the Commission's assertions are contradicted by the record, which it claims contains detailed explanations of the Region's bases for each of these specific technical determinations and the tiering protocol in general. Resp. at 28 (citing RTC at 9-33). The Region further points out that comparisons of one permit to another are legally irrelevant "because permits are issued on an individual basis, taking into account individual differences where appropriate," and thus the Commission's reliance on the City of Keene treatment facility is misplaced. *Id.* at 24-25 (citation omitted).

The Board agrees that the permitting record contains detailed explanations of the bases for the Region's decisions. In the response to comments, the Region included a twenty-five-page section entitled, "General Response to Comments on Long Island Sound ("LIS") NPDES Out-of-Basin Total Nitrogen Permitting Approach." RTC at 9-33. The Region explained that it "adopted a systemic, state-by-state approach to control out-of-basin loading of nitrogen pollution into Long Island Sound from POTW point sources in Massachusetts, New Hampshire, and

¹² In its reply brief, the Commission also argues that its TN limit is not "necessary" to address impairments in Long Island Sound because EPA assigned less stringent limitations to "smaller facilities serving higher-income, suburban populations," compared to those serving "economically challenged inner-city populations" such as the Facility, even though, the Commission claims, the former collectively contribute a greater proportion of the overall TN load than the latter. Reply at 7. The Region contends that this argument could have been raised in the petition and is barred at this point as untimely. EPA's Surreply 4-5, 6-9 (Feb. 10, 2021).

The Region is correct. It is well settled that petitioners may not raise new issues or arguments in their reply briefs. 40 C.F.R. § 124.19(c)(2); see, e.g., In re Los Alamos Nat'l Sec., L.L.C., 17 E.A.D. 586, 601-02 (EAB 2018), pet. for rev. dismissed for lack of juris. sub nom. Concerned Citizens for Nuclear Safety, Inc. v. EPA, No. 18-9542 (10th Cir. Apr. 23, 2020); Town of Concord, 16 E.A.D. at 527 n.5; In re ArcelorMittal Cleveland Inc., 15 E.A.D. 611, 621 n.8 (EAB 2012); In re Scituate Wastewater Treatment Plant, 12 E.A.D. 708, 724 (EAB 2006), pet. for review vol. dismissed, No. 06-1817 (1st Cir. Aug. 4, 2006); In re Knauf Fiber Glass, GmbH, 8 E.A.D. 121, 126 n.9 (EAB 1999) ("New issues raised for the first time at the reply stage of these proceedings are equivalent to late filed appeals and must be denied on the basis of timeliness."). The Commission's assertion that these arguments are not new lack merit, as they cannot be found within the four corners of the petition. Compare Pet. at 6-23, with Reply at 7. The Commission offers no Board precedent or other legal authority to counter this well-established principle of Board jurisprudence. See Springfield Water & Sewer Commission's Response to EPA's Surreply 1, 3-5 (Feb. 17, 2021). These specific arguments therefore are barred as untimely.

Vermont, through the coordinated issuance of individual NPDES permits." *Id.* at 9. The Region articulated three overarching objectives for this tiering approach: (1) that the overall out-of-basin TN load not increase; (2) that POTWs be assigned TN limits achievable at design flow using readily available treatment technology; and (3) that smaller POTWs be assigned limits achievable through optimization. *Id.* at 10. Employing its best professional judgment and information reasonably available at the time of permit issuance, the Region derived POTW effluent limits by: (1) identifying the aggregate TN load from all contributing POTWs in a state; (2) capping that load to prevent further contributions to nitrogen impairment of Long Island Sound, even as local populations or development increase; and (3) allocating the TN load among POTWs in each state to achieve water quality standards in the Sound and fulfill the CWA's objectives. *Id.* at 10-11. In Massachusetts, as noted above, the Region chose to allocate the TN load in accordance with POTW size, measured by design flow. *Id.* at 11.

Among many other things, the Region explained that it arrived at its tiering determination by considering "a series of technical and environmental factors within its expertise, and also took into account equitable considerations," which resulted in its choice to "balance the burden of treatment" among out-of-basin POTWs. *Id.* at 12-13. The Region noted that, in Massachusetts, the four largest POTWs generate around fifty-one to fifty-eight percent of the state's nitrogen load to Long Island Sound, and so they will need to achieve TN effluent concentrations of 5 mg/L at design flow by using "readily available treatment technology" that may, in some future circumstances, "necessitate a facility upgrade." *Id.* at 12. The twenty-five smaller POTWs are assigned TN limits achievable through system optimization. *Id.*

The Region explained that, under this approach, "the proportion of the permitted load from the four largest facilities will be 60% of the combined permit load for all 29 Massachusetts facilities, consistent with the proportion of design flow." *Id.* at 13. The Region observed that the Facility is "the largest POTW discharger on the entire Connecticut River" and "nearly four times the size of the next largest POTW among out-of-basin dischargers." *Id.* at 15. It evaluated the relative magnitude of projected loads from different POTWs using varying TN concentrations, considering facility sizes and locations, degree of nitrogen attenuation in the receiving waters, and treatment burdens. *Id.* at 12-15. With nitrogen-related impairments in Long Island Sound water quality firmly in mind, the Region expressed its technical judgment that out-of-basin nitrogen loads should not be increased. The Region deemed it "reasonable," in these circumstances, to issue permits to out-of-basin POTWs "that hold loads constant and in so doing curtail the potential for these out-of-basin loadings to contribute to further

impairment and degradation of a water that is already beyond its assimilative capacity for nitrogen." *Id.* at 29. The Region concluded that the TN effluent limits and optimization requirements set forth in its tiering protocol "are necessary to assure that the out-of-basin load does not cause or contribute to further violation of water quality criteria" in Long Island Sound. *Id.*

These excerpts are just a small sampling of the information in the record that makes clear that the Region thoroughly explained its decisionmaking processes and responded to public comments questioning its choices. *See id.* at 9-33. On appeal, the Commission fails to confront these explanations, choosing instead simply to assert that the Region's choices were arbitrary and clearly erroneous. But simply asserting that a permit issuer's action or decision is arbitrary and unnecessary does not make it so. As noted in Part III above, a petitioner must demonstrate, with factual and legal support, why the permit issuer's responses to comments on the issues raised are clearly erroneous. 40 C.F.R. § 124.19(a)(4)(ii).

Indeed, it is well settled that mere allegations of error are insufficient for a successful appeal of a permit decision. E.g., In re City of Lowell, 18 E.A.D. 115, 157 (EAB 2020) ("By failing to grapple with the substance of the Region's position, [petitioner] leaves the Region's analysis unrebutted."); In re City of Taunton Dep't of Pub. Works, 17 E.A.D. 105, 111, 180, 182-83, 189 (EAB 2016) (same), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019). In a situation such as this, where a petitioner fails to confront a permit issuer's substantive explanations in the response to comments, and further fails to carry its burden under the regulations and Board case law to provide sufficient justification for supplanting the permit issuer's technical judgment, the Board denies review. See, e.g., In re Indeck-Elwood, L.L.C., 13 E.A.D. 126, 170 (EAB 2006) ("[A] petitioner's failure to address the permit issuer's response to comments is fatal to its request for review."); In re Town of Ashland Wastewater Treatment Facility, 9 E.A.D. 661, 667 (EAB 2001) (noting, in light of burden petitioners bear in seeking review of technical issues, that "clear error * * * is not established simply because the petitioner presents a difference of opinion or alternative theory regarding a technical matter"). The Commission's attempt to divert attention from the Region's substantive explanations using the Keene example also fails, as that example is not germane to the Commission's situation. See, e.g., In re City of Port St. Joe, 7 E.A.D. 275, 304 n.44 (EAB 1997) (holding that disparity of requirements imposed on POTWs does not by itself provide basis for permit review); accord In re City of Attleboro Wastewater Treatment Plant, 14 E.A.D. 398, 425 (EAB 2009). Accordingly, the Board denies review of this issue.

b. The Commission Has Not Demonstrated That the Region's Determination of the Nitrogen Limit Was Based on an Assumption That the Facility Could Consistently Meet the Nitrogen Limit Without Substantial Investment by the Commission, or That the Region's Determination Was Clearly Erroneous

Next, the Commission objects to the TN limit because a "statistical calculation of historical flows and recent process optimization efforts" demonstrates that the Facility is likely to experience one-to-two monthly violations of the TN limit per year over the five-year permit term. Pet. at 12 (citing ex. 10). The Commission also states that additional risk of noncompliance will arise when long-term CSO control projects are completed, resulting in significant influent flow increases to the Facility and their associated nitrogen burdens. *Id.* On these grounds, the Commission argues that, to the extent the Region based the TN limit on an assumption that the Facility could consistently meet the limit, such an assumption is clearly erroneous, as technology upgrades for more advanced nitrogen removal would be required to meet the limit. *Id.* at 12-13.

In its petition, the Commission also references a "reliability analysis" conducted to evaluate the Facility's ability to reliably achieve different performance benchmarks. According to the Commission, that analysis suggests that the Facility has achieved only ninety-two percent reliability at a TN concentration level of 8 mg/L and would only achieve seven percent reliability were the TN concentration level reduced to 5 mg/L. *Id.* at 13-14 & ex. 11. Based on this analysis, the Commission contends that it is "not rational" for the Region to assume that the Facility can meet a TN limit based on a concentration of 5 mg/L. ¹³ *Id.* at 13.

Exhibits 10 and 11 contain new information, not presented during the public comment periods. The Commission argues that, because the TN limit appeared for the first time in the final permit, the limit was not reasonably ascertainable under 40 C.F.R. § 124.13 and thus the Commission is allowed to present new information in its efforts to demonstrate clear error. Pet. at 5, 12. To support this argument, the Commission quotes Board precedent that states, "[T]here is nothing in the regulations that constrains a petitioner's ability to raise issues that were not reasonably ascertainable during the comment period." *In re Town of Ashland Wastewater Treatment Facility*, NPDES Appeal No. 00-15, at 6 (EAB Apr. 4, 2001) (Order Denying Motion for Reconsideration), *quoted in* Pet. at 7; *see also* Pet. at 12.

The Region does not object on procedural grounds to the Commission's use of these materials on appeal. *See* Resp. at 29-30. Instead, the Region evaluates and discounts their contents, as explained in the text of this section. The Board is persuaded by the

The Region, not having been presented with the statistical or reliability analyses before this appeal, rejects these concerns. First, the Region notes that, in these two documents, the Commission provides "figures without attendant data or any explanation of assumptions (e.g., averaging period, date range, etc.)." Resp. at 30. Without this underlying information, the Region suggests, projections of hypothetical violations may be made based on the statistical analysis, but such projections cannot be replicated and are unverifiable. See id. The Region argues that, rather than introducing these new documents, the Commission should have confronted the Region's analysis of the Facility's historical performance (documented in the record) showing consistent compliance with the TN limit. See id. The Region goes on to note that it did not, in fact, assume that the Facility could meet the TN limit by optimizing its existing technology as influent flow increases. Id. at 29. Instead, the Region assigned TN limits to the four largest POTWs, including the Facility, on the assumption that they could achieve the limits using "readily available treatment technology." Id. (citing RTC at 12). The Region contends that EPA's analysis of the Facility's historical performance shows consistent compliance with the TN limit, contrary to the Commission's view. *Id.* at 29-30 (citing RTC at 47 & app. A). The Region expects the Facility to continue meeting the limit, even if it might need to invest in wastewater infrastructure upgrades at some point in the future to comply with legal obligations under the CWA. Indeed, the Region points out that CWA section 301(b)(1)(C) requires effluent limits to meet water quality standards, without exception for cost or technical feasibility. Resp. at 29-30 (citing Upper Blackstone Water Pollution Abatement Dist. v. EPA, 690 F.3d 9, 33 (1st Cir. 2012), cert. denied, 569 U.S. 972 (2013)).

The Region also emphasizes that the Facility will not need to achieve TN effluent concentrations of 5 mg/L for the foreseeable future. Instead, the facility must comply with a mass-based limit based on design flow, which its present discharges are far below. *Id.* at 30 (citing RTC at 144-45). The final permit contains no concentration limit; it has a mass-based limit. So the only time the Commission's effluent may not exceed a TN concentration of 5 mg/L is when the Facility is operating at its design flow, something it is far from doing. The Region points out that the Commission does not refute the detailed responses to comments but instead simply reprises its flawed analysis, which the Region states is

Region's arguments that the two exhibits do not establish clear error. Accordingly, we need not reach the procedural question whether all aspects of the analyses encapsulated in the exhibits were not reasonably ascertainable during the public comment periods such that they may be presented here.

insufficient to obtain review on this technical issue. *Id.* Finally, the Region argues that the Commission's assertions about future influent increases are not supported by relevant facts and data, such as when potential flows may increase or whether they might be mitigated by infiltration/inflow reductions or other good operation and maintenance practices. *Id.* The Region states that "[1]ess speculation and more empirical evidence is needed by petitioner to justify review of the permit." *Id.* (quoting *In re Texas Indus., Inc.*, 2 E.A.D. 277, 279 (Adm'r 1986)).

The Board agrees that the arguments and information the Commission presents to support its position are cursory and fall far short of establishing clear error in the Region's considered judgment on a technical issue. The two documents portraying the Commission's statistical and reliability analyses each consist of a single-page summary diagram, with no accompanying raw data, no explanation of those data, no underlying facts and assumptions (e.g., dates, averaging periods), and no foundations for the analyses. *See* Pet. exs. 10-11. The Commission's arguments about anticipated future inflow increases similarly are unsupported by any timeframes or discussions of mitigation measures that could be deployed to offset any such increases. *See* Pet. at 12-14.

The Region's data, by contrast, cover six years of TN reporting data for the Facility, from 2013 through 2018. RTC app. A, at A-2. In those six years, the average flow of effluent from the Facility was 36.36 MGD and the annual average TN load discharged to the Connecticut River appeared to decrease from 2,528 lbs/day in 2013 to 1,684 lbs/day in 2018. Id. This average flow rate is well below the facility's 67 MGD design flow, and the quantity of TN discharged in all cases is below the 2,794 lbs/day limit authorized in the final permit. These facts support the Region's considered view that the Facility is not violating that limit at this juncture and is not likely to have the potential to do so for at least some period of time into the future.

The Commission has failed to grapple squarely with the Region's analyses of these issues or present meaningful technical arguments to contradict or

Other data have raised concerns that the Facility's TN loads might *not* have decreased over the past ten years, but instead might have increased. Resp. at 16. Reviewing discharge data from 2007 to 2017, the Region reported that "TN loads discharged from the facility," which continually fluctuate, "have not decreased and may be increasing." Fact Sheet Suppl. at 3 & attach. A; *see* RTC at 133 (noting that the Facility "is marked by increasing load trends"). The uncertainties regarding these data sets further convinced the Region that an enforceable WQBEL is needed to cap the TN load. Resp. at 16.

undermine them. Instead, it mistakenly alleges that the Region made assumptions that the Region did not make. As the record shows, the Region explicitly stated that the four largest POTWs would be expected to use "readily available treatment technology" to meet their effluent limits. RTC at 12. As referenced above, the Region explained that, after considering multiple factors, it determined "in its technical judgment" that "a more stringent numeric cap in loading that may necessitate a facility upgrade, as opposed to limits achievable through optimization only," was warranted for the Facility to ensure water quality standards would be met. *Id*.

At most, the Commission has demonstrated differences of technical opinion between itself and the Region. Such differences are insufficient to demonstrate clear error. *In re Town of Newmarket*, 16 E.A.D. 182, 214 (EAB 2013); *see In re Upper Blackstone Water Pollution Abatement Dist.*, 14 E.A.D. 577, 608 (EAB 2010) (explaining that, on technical issues, Board will defer to permit issuer where Board "is satisfied that the permit issuer gave due consideration to comments received and adopted an approach" that is "rational and supportable"), *pet. for review denied*, 690 F.3d 9 (1st Cir. 2012), *cert. denied*, 569 U.S. 972 (2013); *In re Dominion Energy Brayton Point, L.L.C.*, 12 E.A.D. 490, 510 (EAB 2006) (""[W]hen issues raised on appeal challenge a Region's technical judgments, clear error * * * is not established simply because petitioners document a difference of opinion or an alternative theory regarding a technical matter."") (quoting *NE Hub*, 7 E.A.D. at 567). The Commission has failed to carry its burden of establishing clear error by the Region on these technical grounds. The Board denies review of this issue.

3. The Commission Has Not Demonstrated That the Region Clearly Erred by Removing Allowances for Increased Nitrogen Loadings for Future Activities

The Commission argues that the Region clearly erred by eliminating a provision in the 2018 revised draft permit that authorized incremental increases in TN discharges to allow the Facility to accept loadings from other POTWs, increase flow to the facility for CSO reductions, and accommodate future growth. Pet. at 14-16; *see* Rev'd Draft Permit pt. I.A.1, at 6 n.9. In its response to comments, the Region explained that the new TN effluent limit was based on total design flow, which is set far above the Facility's current flows, and thus the limit was increased to a level sufficient to accommodate all the above-mentioned potential incremental increases. RTC at 145-46. The Region also explained that tie-ins from other POTWs would need to be authorized through the vehicle of a permit modification, at which time the Agency would evaluate all relevant information and make a considered determination. *Id.* at 147.

The Commission labels these explanations as clearly erroneous. It contests the Region's determination that using design flow to establish an effluent limit automatically accounts for future activities, asserting that, instead, those activities would increase flows to the Facility beyond the current design flows and thus likely contribute to additional permit violations. Pet. at 14. The Commission also states that requiring a permit modification "is a significantly longer, more involved, more expensive, and more onerous process" that will "discourage smaller facilities from consolidation and eliminate opportunities for environmentally-beneficial overall reductions in nitrogen loadings." *Id.* at 16.

In presenting these arguments, the Commission does not reference any new information in support of its claim that future growth will increase flows beyond the Facility's current design flow. Instead, it cites comments it submitted on the 2018 revised draft permit, which the Region repeated verbatim in the response to comments document and sequentially addressed. *See* Oct. 2018 Cmts. at 26-31; RTC at 145-51 (quoting and responding to Comments 48-52). The Commission's approach on appeal constitutes a failure to confront the Region's considered evaluation of the issues and, under well-established Board precedent, must be rejected as such. *See, e.g., City of Taunton*, 17 E.A.D. at 111; *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000) ("Petitions for review may not simply repeat objections made during the comment period; instead they must demonstrate why the permitting authority's response to those objections warrants review.").

Further, the Commission's concerns about the burdens of permit modifications also must be rejected. The mere expression of preference for implementing flow increases by a purportedly less burdensome process, unsupported by relevant legal authorities of any kind, does not and cannot constitute a demonstration of clear error. *See City of Port St. Joe*, 7 E.A.D. at 312 (denying review where petitioner proposed alternative fish/shellfish tissue plan of study it considered less burdensome than one included in permit; mere expression of preference fails to demonstrate clear error). The Commission has failed to present the Board with any substantiated reason to question the Region's considered judgment on the technical considerations of incremental flow increases. Accordingly, the Board denies review of this issue.

4. The Commission Has Not Demonstrated That the Region Clearly Erred in Its Derivation of a Water Quality-Based Effluent Limit for Total Nitrogen

The Commission argues that, in deriving the Facility's new TN effluent limit, the Region failed to comply with applicable regulatory procedures for establishing WQBELs. Pet. at 16; Reply at 7-9. In this appeal, the Commission

focuses on the sufficiency of the Region's reasonable potential analysis and the consistency of the TN WQBEL with wasteload allocations in the TMDL and alleges that the Region's determination on the TN limit is unsupported and clearly erroneous. It also implicitly questions the status of Connecticut as a downstream affected state (which implicates the state's antidegradation policy). *See* Pet. at 16-21. The Commission asks the Board to remand the final permit so that the TN effluent limit can be removed. *Id.* at 21. In fact, the Commission's position is that no enforceable TN limit is warranted. *See* Oral Arg. Tr. at 39-40.

As noted in Part IV.B above, if a permit issuer's analysis shows that a permit applicant's discharge has a reasonable potential to cause or contribute to an exceedance of a water quality standard or criterion, the permit must contain water quality-based effluent limitations for the pollutant. 40 C.F.R. § 122.44(d)(1)(i), (iii)-(vi); see Upper Blackstone, 14 E.A.D. at 599 n.29 ("Reasonable potential' requires some degree of certainty greater than a mere possibility"); accord City of Taunton, 17 E.A.D. at 132, 151. The regulation provides that, where wasteload allocations (based on TMDLs) have been established pursuant to 40 C.F.R. § 130.7, the effluent limits in the NPDES permit are to be consistent with the assumptions and requirements of those wasteload allocations. See 40 C.F.R. § 122.44(d)(1)(vii)(B).

In response to the petition, the Region contends that the Commission's position generally "is meritless and flouts Board precedent." Resp. at 32. The Region argues that it derived the TN limit in a manner fully consistent with the regulations, as interpreted by relevant case law, and thus remand would be inappropriate. The Board addresses the parties' arguments below.

a. Reasonable Potential Analysis

First, with respect to the Commission's challenge to the Region's reasonable potential analysis, the Region argues that lengthy substantive discussions in the administrative record on this topic contradict the notion that it did not conduct or document its reasonable potential analysis in accordance with regulatory and other protocols. *Id.* at 34-35. The record supports the Region on this point. The response to comments is replete with explanations of the Region's approach to the reasonable potential question and the legal basis for its approach. *See, e.g.*, RTC at 9-33, 132-37.

In terms of the underlying legal framework for the permitting decision, the Region explained that it is obligated to regulate discharges that have the reasonable potential to cause or contribute to exceedances of water quality standards through WQBELs even where a TMDL or WLA has not been issued or updated. *Id.* at 18.

The Region noted that it also may impose limitations that are not identical to, but consistent with, and more stringent than, the assumptions of any available WLA or TMDL. *Id.* And the Region pointed out that WQBELs may be derived on the basis of both a TMDL *and* relevant water quality standards. *Id.* at 18-19.

The Region began by determining that, with a design flow of 67 MGD, the Facility is the largest POTW discharger on the entire Connecticut River, substantially larger than the three other largest out-of-basin POTWs (Holyoke, at 17.5 MGD; Pittsfield, at 17 MGD; and Chicopee, at 8.6 MGD). *Id.* at 12, 15. The Region then reported it "undisputed" that "significant amounts of nitrogen from out-of-basin facilities are discharged to the [Long Island Sound] watershed (as much as 6 million pounds per year, based on the sum of the maximum annual discharge from each out-of-basin discharger from 2013 to 2017)." *Id.* at 24. The Region found that, by itself, the Facility currently contributes sixteen percent of the average out-of-basin load for the entire Long Island Sound watershed and nineteen percent of the average out-of-basin load for the Connecticut River. *Id.* at 15. The Region noted further that ninety-two percent of TN loading from out-of-basin point sources in Massachusetts derive from POTWs with design flows greater than 1 MGD, of which the Facility is by far the largest. *Id.* at 28 & tbl.1.

The Region then explained that both Connecticut and New York employ narrative water quality criteria for nutrients, so the Region "relied in the first instance on the TMDL *** as a translation of these criteria under 40 CFR § 122.44(d)(1)(vi), and supplemented that reliance with an analysis of subsequent water quality monitoring data and other information related to [Long Island Sound] nutrient-driven impairments." RTC at 23 & n.10; see id. at 24, 27 (citing Connecticut's narrative water quality criteria for nutrients). The Region noted that, under Board and federal court precedent, EPA has "a significant amount of flexibility within the bounds of the CWA in determining whether a particular discharge has a reasonable potential to cause an excursion above a water quality criterion." Id. at 23; see In re City of Taunton Dep't of Pub. Works, 17 E.A.D. 105, 144, 147-49 (EAB 2016), aff'd, 895 F.3d 120, 136 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (Feb. 19, 2019); In re Town of Newmarket, 16 E.A.D. 182, 224 n.23 (EAB 2013); Upper Blackstone, 14 E.A.D. at 599-601 & n.29, 618-20; In re City of Attleboro Wastewater Treatment Plant, 14 E.A.D. 398, 447 (EAB 2009). The Region further explained that some degree of certainty, more than a mere possibility, is required in the result, and "worst-case" effluent conditions must underlie the reasonable potential analysis. RTC at 23 (citing *Upper Blackstone*, 14 E.A.D. at 599 & n.29).

Together, these principles led the Region to adopt a conservative, protective approach in this case. *Id.* at 23-24. Such an approach, the Region claimed, is appropriate because:

[O]nce begun, the cycle of eutrophication can be difficult to reverse due to the tendency of nutrients to be retained in sediment and from there reintroduced into the water body. In addition, in flowing systems, nutrients may be rapidly transported downstream and the effects of nutrient inputs may be uncoupled from the nutrient source, which complicates source control. Thus, a key function of a nutrient limit is to protect downstream receiving waters regardless of their proximity in linear distance.

Id. at 24. The Region concluded:

Although nitrogen driven impairments in [Long Island Sound] have been reduced, they have not been eliminated, and remain significant. In EPA's technical and scientific judgment, the current quantity of nitrogen in [Long Island Sound] exceeds the narrative and numeric nutrient-related criteria applicable to [the Sound], and existing uses are not being protected, based on analyses of water quality data and information in the administrative record. The out-of-basin loads ** necessarily contribute, or have the reasonable potential to contribute, to these violations.

Id. (emphasis added) (footnote omitted).

In its response brief, the Region discounts, as "plainly incorrect," the Commission's view that the Region's failure to employ one particular proposed reasonable potential methodology in Agency guidance constitutes clear error. Resp. at 34 (citing *City of Attleboro*, 14 E.A.D. at 438 n.71 ("While guidance documents are valuable tools in aiding the Agency's deliberative processes where regulations may lack details about their implementation, they do not confer any rights nor are they binding.")). The Board agrees. The portion of the Agency's Permit Writers' Manual relied on by the Commission emphasizes the flexibility permit issuers have in making technical determinations. *See* Office of Wastewater Mgmt., U.S. EPA, Doc. No. EPA-833-K-10-001, *NPDES Permit Writers' Manual* § 6.3.1, at 6-23 (Sept. 2010) (A.R. J.7) ("*Permit Writers' Manual*") ("A permit writer can conduct a reasonable potential analysis using effluent and receiving water data and modeling techniques * * * or using a non-quantitative approach."). Contrary to the Commission's view, the NPDES regulations and guidance do not require EPA to use any particular methodology in determining whether the

"reasonable potential" standard is met, and EPA is not required to demonstrate that nitrogen is causing an impairment before setting a nitrogen limit. *See* Resp. at 34 (citing *City of Taunton v. EPA*, 895 F.3d 120, 133 (1st Cir. 2018), *cert. denied*, 139 S. Ct. 1240 (2019), and *In re City & Cty. of San Francisco*, 18 E.A.D. 322, 343-44 (EAB 2020), *appeal docketed*, No. 21-70282 (9th Cir. Feb. 9, 2021)).

Nor is the Commission's criticism of the Region as somehow believing it "need not follow" Agency regulations and guidance meritorious. The response to comments establishes that the Region derived the TN WQBEL on the basis of available site-specific and facility-specific data indicating that the Facility contributes significant quantities of nitrogen to the Connecticut River and Long Island Sound, whose assimilative capacity for nitrogen has long been and continues to be exceeded, causing cultural eutrophication and violating water quality criteria. *See* RTC at 24-29, 84-85, 92, 132-33, 159; Fact Sheet at 18. The Region states that its technical and scientific judgment in this regard is "shared by all five in- and out-of-basin states," as well as being supported by water quality data and information in the record. Resp. at 20 (citing RTC at 26-30).

The Board has held that "conducting a reasonable potential analysis is an inherently technical determination." *In re City of Lowell*, 18 E.A.D. 115, 148 (EAB 2020). In this case, the Board concludes, based on the record, that the Region's rationale for imposing a TN WQBEL is reasonable and the Commission has provided no legitimate, substantive basis for us to disregard the Region's considered scientific and technical judgment on this issue. ¹⁵ Accordingly, as the Commission has failed to carry its burden of demonstrating clear error in this

¹⁵ In its reply brief, the Commission challenges the Region's purported "great reliance" on CT DEEP comments to justify selection of a numeric WQBEL over a narrative optimization provision. Reply at 9 (citing Resp. at 15). The Commission asserts that CT DEEP did not request a WQBEL based on 5 mg/L and at no time argued that such a limit was necessary to achieve water quality standards. Id. Putting aside the accuracy of the Commission's characterization of CT DEEP's comments, these and the Commission's related arguments overlook the Region's further explanation, set forth in its response brief and the response to comments, which is germane to this point. The Region explained that its decision to impose the WQBEL was "based on both [1] the need to assure that the outof-basin target will continue to be met through the imposition of enforceable permit limits rather than voluntary reductions that could be abandoned at any point and [2] the need to prevent further degradation of a water body in a downstream state." RTC at 134, quoted in Resp. at 15. Rather than confronting either of these two significant rationales, the Commission focuses on CT DEEP comments' potential influence on the Region's thinking. This approach provides no basis for review. E.g., In re Indeck-Elwood, L.L.C., 13 E.A.D. 126, 170 (EAB 2006) ("[A] petitioner's failure to address the permit issuer's response to comments is fatal to its request for review.").

technical area, the Board denies review of this issue. ¹⁶ See id. at 150, 192-93 (denying review where petitioner failed to carry heavy burden of establishing clear error on technical matters).

b. WQBEL Consistency with TMDL Wasteload Allocation

Second, the Commission argues that the TN limit assigned to the Facility is not consistent with the wasteload allocation established in the Long Island Sound TMDL. Pet. at 18-20; Reply at 7-8. The Region refers to the record for support that the TMDL did not assign individual wasteload allocations to out-of-basin POTWs in Massachusetts, New Hampshire, or Vermont. LIS TMDL pt. VI.B.1, at 33-34; RTC at 132. Instead, the wasteload allocations for in-basin sources in Connecticut and New York were established in part on an assumption that out-ofbasin POTWs would reduce their TN discharges by an aggregate twentyfive percent from an estimated baseline of 21,672 lbs/day. See LIS TMDL pt. VI.B.1, at 33 (noting that "[t]ributary nitrogen enrichment can be reduced * * * through low-cost [Biological Nutrient Removal] retrofits of existing sewage treatment plants (resulting in a [twenty-five] percent reduction in point sources) * * * throughout the Long Island Sound basin north of Connecticut"); RTC at 21-22 & app. A, at A-1 (summary of out-of-basin TN average annual effluent loads). This twenty-five percent reduction equates to an aggregate allowable discharge from the out-of-basin POTWs of 16,254 lbs/day, to be achieved through issuance of NPDES permits, and is referred to as the "TMDL target" for these sources. RTC app. A, at A-1; Fact Sheet at 18-21 & tbls.3, 5; Fact Sheet Suppl. at 3-4 & n.1.

According to the Commission, the Facility's share of the aggregate TMDL target, apportioned in accordance with facility design flow, is 5,429 lbs/day. Pet. at 18. The Commission refers to this figure as a "wasteload allocation" and asserts that the Facility has routinely met this allocation since at least 2005. *Id.* The Commission notes that the LIS TMDL remains effective and thus, under 40 C.F.R. § 122.44(d)(1)(vii)(B), any WQBEL for TN must be consistent with the wasteload allocations in that TMDL. The Commission therefore contends that the Region clearly erred in imposing a TN limit that, at 2,794 lbs/day, is far more stringent than, and thus not consistent with, its individual TMDL target of 5,429 lbs/day. *See*

¹⁶ Amicus Save the Sound supports the Region's determination, stating that because the Facility "discharges nitrogen into the Connecticut River and such nitrogen reaches Long Island Sound," the facility "is causing or contributing to a water quality standard violation." Save the Sound, Inc., Amicus Brief at 8 (Dec. 16, 2020); *see also* Conn. River Conservancy Amicus Curiae Br. in Support of Permitting Agencies at 3-4 (Dec. 16, 2020); CT DEEP Amicus Br. at 5-7 (Dec. 16, 2020).

Pet. at 18-20. Alternatively, the Commission argues that the assumed twenty-five percent reductions from out-of-basin sources, including the Facility, have already taken place, and thus the continuing existence of wasteload allocations for in-basin POTWs forecloses the Region's ability to impose any more stringent WQBEL on the Facility under section 301 of the CWA. *See id.* at 17-19; Resp. at 32-33.

The Commission's arguments fail to establish clear error by the Region for many reasons. At the outset, while on appeal the Commission characterizes its TMDL target as a wasteload allocation, the permitting record consistently refers to that figure as a target and not a WLA.¹⁷ *E.g.*, RTC app. A, at A-1; Fact Sheet at 18-21 & tbls.3, 5; Fact Sheet Suppl. at 3-4 & n.1. In its TMDL approval letter, the Region explicitly stated that it was "not approving the out-of-basin nitrogen reductions as formal allocations but rather as reasonable assumptions on which the in-basin reductions are based." TMDL Approval Letter § 5.B, at 13. Similarly, in the response to comments, the Region explained that the Facility's discharge "has not been assigned a specific WLA." RTC at 21.

Regardless of how this discrepancy in terminology might be resolved, the Commission has failed to demonstrate that the TN limit is not consistent with the assumptions and requirements of the wasteload allocation established in the LIS TMDL. 18 The Board has addressed this issue in a number of prior cases, and it is clear from those decisions that the "consistency" called for in 40 C.F.R. § 122.44(d)(1)(vii)(B) does not mean that permit limits must be identical to wasteload allocations established by TMDLs. In re City of Homedale Wastewater Treatment Plant, 16 E.A.D. 421, 426 (EAB 2014) (upholding, as "consistent with the assumptions and requirements" of applicable TMDL, permit issuer's decision to include monthly and weekly average effluent limits for phosphorus, rather than daily maximum limits contained in TMDL). Indeed, in In re City of Moscow, the Board upheld a permit issuer's decision to deviate from a wasteload allocation based on new information. 10 E.A.D. 135, 148 (EAB 2001) ("We do not regard the choice to use the facility's current, known design flow in developing WQBELs rather than the higher number referenced in the TMDL as being in conflict with the requirement that WQBELs be consistent with available WLAs. While the

¹⁷ Notably, the Commission itself acknowledged in comments on the 2018 revised draft permit that the Long Island Sound TMDL does *not* include an individual WLA for the Facility or any out-of-basin discharger. *See* Oct. 2018 Cmts. at 12-13, 15 (stating that 25% reduction in TMDL is not WLA but merely "vague statement").

¹⁸ The Region agreed at oral argument that the terminology does not affect the analysis or its determination of the TN permit limit. *See* Oral Arg. Tr. at 52-53.

governing regulations require *consistency*, they do not require that the permit limitations that will finally be adopted in a final NPDES permit be *identical* to any of the WLAs that may be provided in a TMDL."); *see id.* at 148 n.35 (citing regulatory history). In so doing, the Board held that "TMDLs are by definition maximum limits; permit-specific limits like those at hand, which are more conservative [i.e., more stringent] than the TMDL maxima, are not inconsistent with those maxima, or the WLA upon which they are based." ¹⁹ *Id.* at 148.

In the response to comments, the Region included a lengthy discussion of case law and statutory and regulatory history to support the principle that the Region has discretion to deviate from a wasteload allocation in a TMDL "if such a departure is warranted by the record and in accordance with [40 C.F.R. §] 122.44(d)(1)(vii)(A)," which requires that WQBELs ensure compliance with state water quality standards. RTC at 19; *id.* at 18-20 (citing authorities). These authorities also establish that permit issuers need not wait for TMDLs or wasteload allocations to be developed or updated; rather, permit issuers must establish WQBELs for relevant pollutants that ensure compliance with existing water quality standards. *See* RTC at 18-20; *see*, *e.g.*, *Upper Blackstone Water Abatement Dist. v. EPA*, 690 F.3d 9, 26 (1st Cir. 2012), *cert. denied*, 133 S. Ct. 2382 (2013); *City of Taunton*, 17 E.A.D. at 144; 54 Fed. Reg. 23,868, 23,879 (June 2, 1989).

The Commission also misconstrues the Region's explanation as a claim that permit issuers may establish WQBELs that are completely independent of wasteload allocations in existing TMDLs. See Pet. at 20. The Commission labels this claim "remarkable," new, and without legal basis. Id.; see Reply at 5-6. The Region counters by stating that it is making no such claim and pointing out that its interpretation is consistent with another important regulatory provision that

¹⁹ The Commission faults the Region for relying on *City of Moscow* to support the Region's determination that WQBELs may be more stringent than required by an applicable TMDL. Reply at 6. *Moscow*, the Commission claims, is an example of a permit issuer *adopting* a TMDL's allocations, specifically the concentration-based allocations, whereas in this case the permit issuer allegedly is *ignoring* the TMDL's allocations. *Id.*; Oral Arg. Tr. at 45. But that is not the case. The Board in *Moscow* upheld the permit issuer's decision to deviate from the TMDL's assumed 4.0 MGD flow rate in converting the concentration-based allocations to mass-based WQBELs, using instead a more stringent 3.6 MGD flow rate. 10 E.A.D. at 148. Such deviation, we held, fell within the permit issuer's discretion under the CWA and was not in conflict with less stringent wasteload allocations computed using the higher flow rate. *Id.* The Commission labels, as an "appropriate[] adjust[ment]," the permit issuer's decision to use a more stringent flow rate than the one assumed in the TMDL, rendering its argument contradictory and logically unsound. *See* Reply at 6.

requires NPDES permits to include requirements "in addition to or more stringent than" state water quality standards. That provision—40 C.F.R. § 122.44(d)(4)—applies in cases where, as here, a discharge affects a state other than the certifying state, and the other state's water quality standards differ, as here, from those of the certifying state. *See* Resp. at 33; *see also* RTC at 19-20.

The Region aptly observed, in its response to comments, that the Commission's arguments "imply that the permit need only comply with the WLA, as opposed to the Act as a whole." RTC at 29-30. According to the Region, the Commission's view "is incorrect in at least two ways," first because it obscures the fact that the TMDL did not assign WLAs to out-of-basin sources but rather assumed an aggregate twenty-five percent reduction in TN loadings, and second because it overlooks the fact that the TN WQBEL was made more stringent than the twenty-five percent reduction to ensure compliance with state water quality standards. ²⁰ *Id.* at 30 (citing CWA §§ 301, 303, 33 U.S.C. §§ 1311, 1313).

These arguments are not met, let alone overcome, by any counterarguments from the Commission. See Reply at 5-6. As noted previously, the Board agrees that WQBELs need not be identical to TMDL provisions but rather should, as needed to comply with applicable state water quality standards or other relevant provisions of the governing statute and implementing regulations, be more stringent than the TMDL requirements. See, e.g., Homedale, 16 E.A.D. at 426; City of Moscow, 10 E.A.D. at 148; 40 C.F.R. § 122.44(d)(4). Such WQBELs are

²⁰ Again, the Region noted that out-of-basin facilities were not assigned wasteload allocations under the LIS TMDL but that the Facility's TN limit is consistent with the assumptions in the TMDL. RTC at 9-10, 22.

²¹ In its reply brief, the Commission argues that the Region erred by relying on two decisions by the U.S. Court of Appeals for the First Circuit "to support the concept that the Agency has the authority under the CWA to impose any limits it chooses in NPDES permits regardless of whether those limits bear any rational relation to an established TMDL." Reply at 5 (citing *City of Taunton*, 895 F.3d at 137-38, and *Upper Blackstone*, 690 F.3d at 14 & n.8). But the Region did not represent that the cases stood for this proposition and did not cite them for the proposition that the Commission posits. *See* Resp. at 33-34. Instead, a fair reading of the record reveals the Region's persistent focus on ensuring that WQBELs are (1) consistent with the assumptions and requirements of any available WLA, and (2) in compliance with state water quality standards, including those of downstream affected states, as required by the NPDES permitting regulations. *E.g.*, RTC at 20-21 (citing, e.g., 40 C.F.R. § 122.44(d)(1)(vii)(A)-(B), .44(d)(4)). That neither *Taunton* nor *Upper Blackstone* involved an existing TMDL is not germane to this situation and does not undermine the Region's prudent, necessary decision to ensure the WQBELs complied with the *entire* CWA and not simply the portions the Commission deemed relevant.

consistent with the assumptions and requirements of TMDL wasteload allocations, within the meaning of 40 C.F.R. § 122.44(d)(1)(vii)(B). Accordingly, the Board denies review of this issue.

c. Connecticut's Antidegradation Policy

Finally, the Commission argues that "no total nitrogen impairments have been identified in Connecticut," suggesting that Connecticut is not a "downstream affected state" and thus its water quality standards are irrelevant. Pet. at 20. The Commission's argument lacks merit. The record demonstrates that Long Island Sound is impaired for nitrogen, and approximately 613 square miles of the Sound, including many offshore areas suffering from nitrogen-driven hypoxia, fall within Connecticut's boundaries. LIS TMDL pt. III.C, at 7.

Moreover, the Region argues that the Commission's petition overlooks the basis for the Region's additional justification for maintaining the TN limit—which is Connecticut's antidegradation policy. Resp. at 33. As noted above, and as noted in the response to comments, CWA § 401(a)(2) and 40 C.F.R. § 122.44(d)(4) "require EPA to condition NPDES permits in a manner that will ensure compliance with the applicable water quality standards of a 'downstream affected state,' in this case Connecticut." RTC at 135. The Region maintains that section 124.44(d)(4) is a justified basis for its decision on TN in addition to its justification under section 122.44(d)(1)(vii)(B). Resp. at 33. Connecticut's water quality standards include an antidegradation provision that requires existing and designated uses of state water bodies to be maintained and protected. Conn. Agencies Regs. § 22a-426-8(a)(1). Accordingly, the Region derived the TN limit in part to ensure that Connecticut waters "are not further impaired by increases in TN loading from out-of-basin discharges, and also to be consistent with the assumptions of the 2000 TMDL" for those waters. RTC at 135.

The Commission's arguments in its reply brief, in addition to coming too late, misapprehend this regulatory program. In Connecticut, antidegradation provisions are intended to prevent impairment of existing and designated uses. As the Region explained, "EPA is applying the antidegradation requirement by capping the aggregate loading of nitrogen to Long Island Sound from Massachusetts dischargers ***. Holding the load from these facilities will

²² The Region rightly points out that, by failing to raise in its petition any arguments relating to the Connecticut antidegradation policy, the Commission has waived such arguments. *See* Resp. at 34 n.6; *see also* 40 C.F.R. § 124.19(c)(2) (specifying that petitioners may not raise new issues or arguments in reply briefs).

maintain and protect existing uses" in all downstream waters and thus allow EPA "to ensure that the nitrogen limits are applied fairly and in a technologically feasible manner while ensuring that antidegradation provisions of Connecticut's water quality standards are being met." *Id.* at 28. The Commission presents no counterarguments.

Accordingly, the Board denies review of the Commission's challenges related to the derivation of the WQBEL for total nitrogen.

5. The Commission Has Not Demonstrated That the Region Clearly Erred in Declining to Include a Nitrogen Compliance Schedule in the Final Permit

In comments on the 2018 revised draft permit, the Commission "strongly oppose[d]" the inclusion of a TN effluent limit. Oct. 2018 Cmts. at 17. The Commission requested that, if the limit nonetheless was retained in the final permit, a compliance schedule be included to provide it an additional twelve years to implement treatment upgrades needed to achieve compliance with the limit. *Id.* at 17-18; *see* Pet. at 21-22. On appeal, the Commission contends that the Region clearly erred by failing to provide the Facility with a compliance schedule to achieve the TN limit, as it had requested in its comments. Pet. at 21-22. The Commission claims that the facility's current Biological Nutrient Removal process is not intended to achieve TN concentrations below 8 mg/L and that violations at 5 mg/L are "even more likely, particularly as flows to the [Facility] increase." *Id.* at 21. In response to these comments, the Region was receptive to the idea of a compliance schedule, so long as the schedule could be provided through an administrative order. RTC at 145.

The Commission objects, claiming that administrative orders are "inadequate and unnecessarily burdensome" because they open the Commission to third-party challenges and higher administrative penalties for noncompliance. Pet. at 21. The Commission argues that the Region's decision not to incorporate a

²³ In Part VI.A.2.b above, the Board held that the Commission failed to demonstrate clear error in the Region's decision to impose the new TN limit, which was based in part on an assumption that the Facility could achieve the limit using "readily available treatment technology" (i.e., the Biological Nutrient Removal process) that might include wastewater infrastructure upgrades at some future point. It bears repeating here that the effluent limit is a mass-based limit, not a concentration-based limit. In Part VI.A.3 above, we held further that the Commission failed to confront the Region's considered evaluation of the increased flows issue. While the Commission restates variations of these arguments here, the Board need not readdress them in this different context.

compliance schedule directly into the final permit is clearly erroneous. *Id.* Further, the Commission alleges that the Region's arguments are contradictory. It claims that the Region asserts, on one hand, that TN discharges from the Facility are increasing and thus the TN WQBEL is necessary, but also on the other hand that TN discharges may be trending downward and thus the Commission's claims that it will be unable to meet the limit are unpersuasive. Reply at 9.

Notably, the Commission does not cite any legal or other authority to support its contention of clear error when a permitting authority agrees to a permit applicant's request for relief but decides on a different vehicle than the one proposed to provide that relief. For its part, the Region notes that, under the permitting regulations, "[t]here is no right to a compliance schedule; one 'may' be provided 'when appropriate." Resp. at 35 (quoting 40 C.F.R. § 122.47(a)).

However, the Board notes that, while the Massachusetts standards provide that a compliance schedule may be included in a permit when various conditions are fulfilled (such as a permittee being unable to comply with permit limits), the Connecticut standards do not appear to contain any provisions relating to compliance schedules. See 314 Mass. Code Regs. § 4.03(1)(b); Conn. Agencies Regs. §§ 22a-426-1 to -9. In Upper Blackstone, the Board dealt with a seemingly similar situation where two affected states— Massachusetts and Rhode Island—had different state standards, with Massachusetts allowing compliance schedules to be incorporated in permits but Rhode Island only allowing schedules to be provided through administrative orders or consent agreements. 14 E.A.D. at 651. In those circumstances, we found no clear error in the permit issuer's refusal to include a nitrogen limit compliance schedule in Upper Blackstone's NPDES permit. Id.; cf. In re D.C. Water & Sewer Auth., 13 E.A.D. 714, 736-38 (EAB) (holding that District of Columbia's water quality standards include mandatory requirement that compliance schedules be incorporated in NPDES permits when new WQBELs are added to permits, and thus permit issuer clearly erred in failing to include such schedules in POTW's permit), pet. for review dismissed for lack of juris., No. 08-1251 (D.C. Cir. Dec. 12, 2008).

Consequently, while it appears there may have been an *additional* basis for the Region to decline to include a compliance schedule in the Commission's final permit, we decline to interpret the Connecticut water quality standards in the first instance. Any such interpretation would not alter the outcome here. We therefore do not decide what the affected states' water quality standards would require or allow with respect to a compliance schedule.

²⁴ In *Upper Blackstone*, the Board noted that 40 C.F.R. § 122.47(a) grants permit issuers discretion to include compliance schedules in NPDES permits only in cases where applicable state regulations authorize permits to contain such schedules. 14 E.A.D. at 650. In this case, the Region found it inappropriate, under § 122.47(a), and for the reasons discussed above, to provide a compliance schedule in the final permit, and we find no clear error in this determination.

Based in part on its technical determination on the TN permit limit, and its rejection of the Commission's claims that the Facility could not meet the TN limit, the Region determined that a compliance schedule in the final permit would not be appropriate. *Id*.

The Board concludes there is no clear error here. To the extent the Commission encounters compliance problems in the future, the Region has made clear that EPA is prepared and willing to work to ensure that, "if SWSC cannot meet the new nitrogen effluent limit by optimizing the operation of its existing processes, a compliance schedule, implemented through an administrative order, may be developed to allow the time necessary to make any necessary facility upgrades." RTC at 145. Any fears or conjectures about possible third-party litigation or Agency enforcement action disrupting the Commission's operations are speculative and do not constitute grounds for review. E.g., In re City of Caldwell, NPDES Appeal No. 09-11, at 14-15 (EAB Feb. 1, 2011) (Order Denying Review) ("A permit appeal is not a forum to entertain speculations about future permit violations and enforcement."). And as for the perceived inconsistency in the Region's arguments, we noted above, in footnote 14, the fact that the trajectory of the Facility's TN loadings varied over time was part of the Region's rationale as to why an enforceable WQBEL is needed to ensure the TN load is capped and water quality not further degraded. That there may be uncertainty surrounding the TN loadings does not render the Region's decision clearly erroneous, particularly where the undisputed points in the record are that the Facility discharges substantial quantities of TN to a watershed that is in noncompliance with water quality standards, rendering any continued TN discharges problematic and requiring that actions be taken to ensure compliance with the CWA. See RTC at 15, 20, 24, 33. Accordingly, the Board denies review of this issue.

6. The Commission Has Not Demonstrated That the Region Clearly Erred by Imposing a Narrative Nitrogen Optimization Standard

Lastly, the Commission argues that the Region clearly erred by imposing a special permit condition directing the Commission to "continue to optimize the treatment facility operations relative to [TN] removal through continued ammonia removal, maximization of solids retention time while maintaining compliance with [biochemical oxygen demand ("BOD₅")] and TSS limits, and/or other operational changes designed to enhance the removal of nitrogen." Pet. at 22 (quoting Final Permit pt. I.H.1.a, at 22). According to the Commission, this condition is "impermissibly vague" because it fails to provide fair notice of what is required under the final permit. *Id.*; Reply at 11. The Commission also argues that the permit condition is unnecessary, since once the TN effluent limit is achieved (which

in its view will require "substantial plant upgrades"), no further optimization should be required. Pet. at 23; Reply at 11.

In the response to comments, the Region explicitly disagreed that the permit condition is vague. RTC at 31-32, 92. The condition specifically requires, as the Commission notes, "continued ammonia removal, maximization of solids retention time while maintaining compliance with BOD₅ and TSS limits, and/or other operational changes" to enhance nitrogen removal. *Id.* at 84. The Region identified the provision as both a narrative WQBEL, which it maintains it has authority to impose under 40 C.F.R. § 122.44(k)(4), and a "special condition" that supplements the numeric WQBEL and requires the Commission to undertake activities to reduce the overall quantity of nitrogen being discharged. RTC at 31 (citing *Permit Writers' Manual* at 9-1).

The Region then noted that the "continue to optimize" requirement is defined as "the process of identifying the most efficient or highest quality outcome, given current constraints, by maximizing positive factors and minimizing negative factors." Id. The Region stated that its intent in including the permit condition was to afford latitude to the Commission to employ its "deep and nuanced" facility-specific expertise in developing an optimization strategy that "best meets the configuration and operation" of the Facility. *Id.* After a year of experimenting with various optimization methods, the Region explained, the Commission will submit a report evaluating the alternatives and implement the optimal method the following year. *Id.* at 32; see Final Permit pt. I.H.1.b, at 23 (requiring annual reports that summarize optimization activities). And the Region added an explicit floor: In its efforts to optimize nitrogen removal, the Region emphasized, the Commission, "at a minimum," must not increase its nitrogen discharge loadings. RTC at 32. The Region outlined the "objective factors" to consider when doing so: continued ammonia removal, maximization of solids retention time while maintaining compliance with BOD₅ and TSS limits, and/or other operational changes. Resp. at 36 (citing RTC at 92). In response to the Commission's fair notice challenge in this appeal, the Region reiterates that the Commission is free to devise an operational plan of its own, with the goal of continued optimization of nitrogen removal from wastewater effluent to ensure compliance with water quality standards. Id. at 36-37.

To evaluate a claim of unfair notice, the Board examines the contested permit provisions to determine if they are "confusing," ambiguous," or "unclear." *In re City of Lowell*, 18 E.A.D. 115, 182 (EAB 2020) (citing *In re Puna Geothermal Venture*, 9 E.A.D. 243, 262-63 (EAB 2000)); accord *In re City & Cty. of San Francisco*, 18 E.A.D. 322, 350 (EAB 2020), appeal docketed, No. 21-70282

(9th Cir. Feb. 9, 2021). The Board concludes that the text of the disputed provision here is quite specific, involving, as the Region describes, removing ammonia, maximizing solids retention time, and experimenting with other plant-specific practices designed to enhance nitrogen removal. These types of discrete physical and operational activities are plain and clear in and of themselves. One sticking point for the Commission appears to be the latitude it is granted—through use of the words "continue to optimize"—to think creatively about and develop optimization methods uniquely suited to its facility; it is not instructed explicitly on what to do or how much nitrogen removed would be deemed "optimal." But the Region responded to these concerns. As just noted, the Region explained that the optimization exercise is part of an overall plan to evaluate alternative operational techniques by collecting data and reporting findings to the regulatory agencies, and ensuring, at a minimum, that nitrogen discharges do not increase. RTC at 31-32. In other words, keeping nitrogen discharges steady is the minimum necessary outcome, and decreasing them would be even better (i.e., optimal, optimized).

On appeal, the Commission repeats a suggestion, submitted with its comments, that optimization be deemed achieved based on an annual average benchmark TN concentration of 8 mg/L. Pet. at 22. It claims that, without that benchmark, the permit condition does not inform it what is meant by "enhance the removal of nitrogen" or when optimization activities would be deemed sufficient to achieve permit compliance. *Id.* In so arguing, the Commission fails to confront the Region's legal authority to impose the optimization condition or the Region's acknowledgement that the Commission, the technical expert on Facility operations, is best positioned to develop ways to decrease nitrogen loads in plant effluent. The Region discussed in other contexts the reasons why it deemed a TN concentration of 8 mg/L as too lax for the Facility and not capable of ensuring that downstream water quality standards are achieved, but the Commission disregards those points as well. *See* RTC at 13, 15.

Similarly, in contending that the optimization provision is "unnecessary" in light of the new numeric TN WQBEL, derived in part based on a TN concentration of 5 mg/L, the Commission ignores the Region's detailed explanations in the record. The Region pointed out that, because the TN limit restricts the *mass* rather than the *concentration* of nitrogen allowed in effluent, the Facility will be able to discharge nitrogen at levels well above 5 mg/L until such time as its effluent flows approach its design flow, which may never occur. *See* RTC at 144-45. The Commission provides no rejoinder. The Commission also fails to address in this context the Region's view that the optimization condition is necessary to help ensure protection of water quality in Long Island Sound, which has been subjected to excessive nitrogen loadings for many years. *Id.* at 24, 91-92.

In sum, the Commission shows no clear error in the Region's approach to the nitrogen optimization requirement and fails to confront significant portions of the Region's rationale for adopting the provision. Based on the record, the Board denies review of this issue.

B. Combined Sewer Overflow Issues

The Commission challenges several of the Region's decisions regarding final permit terms that address CSOs. We address each of these challenges below.

1. The Commission Has Not Demonstrated That the Region Clearly Erred in Its Decision Regarding the Bypass of Secondary Treatment

The Commission challenges aspects of the Region's decisionmaking with respect to the bypass of secondary treatment. Specifically, the Commission claims the Region erred when it: (a) characterized the bypass of secondary treatment as noncompliance; (b) required metered flow readings of secondary bypasses; and (c) declined to provide a compliance schedule for the Commission to implement sampling of commingled flow to determine compliance with water quality standards. *See* Pet. at 24-26. Prior to addressing each issue below, we provide brief background information.

Bypass is the intentional diversion of waste streams from any portion of a facility. 40 C.F.R. § 122.41(m)(1)(i). As noted above in Part IV.D, an anticipated bypass is prohibited unless a permitting authority determines it will meet the conditions set forth in 40 C.F.R. § 122.41(m)(4)(i)(A)-(C).²⁵ Section II.C.7 of the CSO Control Policy further explains that a permittee seeking CSO-related bypass

²⁵ Pursuant to section 122.41(m)(4)(i)(A)-(C), bypass is prohibited, and enforcement action may be taken against a permittee for a bypass, unless:

⁽A) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

⁽B) there were no feasible alternatives to the bypass, such as auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time; and

⁽C) the permittee submitted proper notices as required, either at least ten days prior to an anticipated bypass, or within twenty-four hours of becoming aware of an unanticipated bypass.

⁴⁰ C.F.R. § 122.41(m)(4)(i)(A)-(C), quoted in RTC at 45-46; see also 40 C.F.R. § 122.41(m)(3) (notice requirements for anticipated and unanticipated bypass).

approval must demonstrate, at a minimum, that its long-term control plan provides "justification for the cutoff point at which flow will be diverted" from secondary treatment, and "a benefit-cost analysis demonstrating" that conveying wet weather flow to the facility for primary treatment is "more beneficial than other CSO abatement alternatives such as storage and pump back for secondary treatment, sewer separation, or satellite treatment." CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693. In addition, to meet the feasible alternatives requirement of the bypass regulation, 40 C.F.R. § 122.41(m)(4)(i)(B), see above note 25, the record must demonstrate "that the secondary treatment system is properly operated and maintained, designed to meet secondary limits for flows greater than the peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment" at the existing facility "for greater amounts of wet weather flow." CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,694 (stating the "feasible alternatives analysis should include, for example, consideration of enhanced primary treatment (e.g., chemical addition) and non-biological secondary treatment," and that other bases that support a no feasible alternative finding may be available on a case-by-case basis).

a. Prohibition Against Bypass of Secondary Treatment

The Commission challenges the Region's inclusion of regulatory language in the final permit prohibiting the bypass of secondary treatment. Pet. at 24-25; see also Final Permit pts. I.A.1 n.3, at 5, II.B.4, at 5-6. In comments on the 2017 draft permit, the Commission referenced the fact sheet that accompanied the 2017 draft permit, which stated "[a]t this time, [] no feasible alternatives to this bypass have been identified without the discharge of additional untreated sewage in system's CSOs." Fact Sheet at 8, *quoted in* Feb. 2018 Cmts. at 7. The CWA authorizes peak wet weather discharges consistent with the CSO Control Policy, such that "a facility may be authorized to allow a CSO-related bypass of secondary treatment without the need to provide approval on a case-by-case basis" if the facility "has completed a No Feasible Alternatives Analysis." Feb. 2018 Cmts. at 7 (citing CWA § 402(q)(1), 33 U.S.C. § 1342(q)(1); CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693). In its comments the Commission expressed concern that blending of primary and secondary treated flows would be considered noncompliance given that during high flow events such blending "was part of the original plant design to maximize the amount of flow it can treat." Id. (stating it was "perplexing" that EPA would identify blending as noncompliant when fact sheet stated there were no feasible alternatives). The Commission also referenced sample permit language for CSO-related bypasses included in EPA guidance as evidence that EPA can authorize such bypasses during wet weather events that cause a facility to exceed a specified flow rate. Id. at 7-8 (citing U.S. EPA, Doc. No. EPA 832-B-95-008,

Combined Sewer Overflows Guidance for Permit Writers § 4.9.1, at 4-37 (Sept. 1995) (A.R. H.11) ("CSO Permit Writers' Guidance")).

The Region's response to comments stated that bypasses of secondary treatment are subject to requirements of part II.B.4 of the final permit, which incorporates verbatim the bypass rule codified at 40 C.F.R. § 122.41(m). See RTC at 45. In addition to referencing CSO Control Policy Section II.C.7 requirements for approval of a CSO-related bypass, 59 Fed. Reg. at 18,693, 18,694, the Region further explained that "the permittee should 'provide adequate justification for the CSO-related bypass and clearly define the wet weather flow conditions and flow rate at which secondary treatment is exceeded." CSO Permit Writers' Guidance § 4.9.1, at 4-36, quoted in RTC at 46. The Region explained that it required "further information or analysis" to support including "CSO-related bypass conditions in the Permit for specific flows." RTC at 46 (citing City of Lowell, 18 E.A.D. at 173 n.36 ("[T]he CSO [Control] Policy emphasize[s] that the permittee bears the burden of showing that there is no feasible alternative to bypass of treatment.")).

Thus, the onus to demonstrate that a CSO-related bypass provision is warranted in a permit lies with the permittee. While the Commission submitted some information that could be useful to demonstrate that a CSO-related bypass provision was warranted in the final permit, the Region made clear it was not RTC at 47. Specifically, the Region explained that although the Commission submitted its 2014 Integrated Wastewater Plan ("IWP"), which contains a "Financial Capability Assessment," it does not "expressly analyze the cost/benefits of eliminating the secondary bypass versus other CSO abatement project[s]." Id. (citing CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693, and further explaining that the IWP was "largely silent on the issue of bypass and elimination of bypass"). In addition, the Region acknowledged that while the Commission had submitted its High Flow Wet Weather Management Standard Operating Procedure dated August 2016, the Region needed clarification on when "secondary treatment is technically feasible" in order to "define under what specific wet weather conditions a CSO-related bypass is allowed," as well as information to ensure that CSO-related bypasses would not cause exceedances of water quality standards. Id. (citing CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693); see also Resp. at 38. Nonetheless, the Region stated that the Commission was "welcome" to submit documentation to the Region and offered "to provide any additional clarification necessary" as to the types of information that would support the Commission's "request for bypass approval in the permit." RTC at 47 (confirming that if Commission provided adequate information for approval of CSO-related bypass during current permit term, Region would consider modifying permit). The Region also noted that the Commission could still bypass flows legally by documenting bypasses on a case-by-case basis in compliance with 40 C.F.R. § 122.41(m), which the Region points out is the "default, regulatory bypass approach that has been in place in past permits and other Region 1 issued permits for CSO-[wastewater treatment facilities]." *Id.* (citing *City of Lowell*, 18 E.A.D. at 174).

Finally, the Region explained that the statement in the 2017 fact sheet that there are no feasible alternatives to the secondary bypass was not a formal determination within the meaning of Section 7 of the CSO Control Policy, contrary to the Commission's claim. *Id.* Rather, it "occurred within a technical explanation of the wastewater collection system" and was not a "legal determination." *Id.* The Region further explained that "EPA is lacking, as it was at the time of issuing the Fact Sheet, a significant amount of information it would need in order to support a no feasible alternatives determination to approve secondary bypass." *Id.*

The Commission has not addressed the Region's response to comments, including that the Commission failed to supply a "significant amount" of information and analysis that the Region would need to determine whether a permit condition allowing for CSO-related bypasses is warranted. *Id.* at 47; see, e.g., *In re* City of Taunton Dep't of Pub. Works, 17 E.A.D. 105, 111, 180, 182-83, 189 (EAB 2016), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019). Nor has it explained why the Region's response is clearly erroneous. See 40 C.F.R. § 124.19(a)(4)(ii); see also City of Lowell, 18 E.A.D. at 157. As the Region points out in its response to the petition for review, the 2017 draft permit contained a provision prohibiting bypass and had "none of the permit provisions required" by the CSO Control Policy to authorize prospective bypass (e.g., defining specific conditions when bypass is allowed). Resp. at 38-39. Yet the Commission argues that the Region's prior statement regarding no feasible alternatives in the fact sheet, which was unaccompanied by a technical analysis, is conclusive. They argue this despite the Region explaining its analysis and including regulatory language in the final permit that prohibits bypass of secondary treatment. See id. at 39; see, e.g., In re ConocoPhillips Co., 13 E.A.D. 768, 780 (EAB 2008) (""[T]he response to comments document provides the Agency's final rationale for its decision,' and 'document[s] any changes between the draft and final permit []."" (quoting In re Dominion Energy Brayton Point, L.L.C., 12 E.A.D. 490, 533 (EAB 2006), pet. for review vol. dismissed, No. 07-2059 (4th Cir. Jan. 4, 2008)); In re Chem-Security Sys., Inc., 2 E.A.D. 804, 807 n.11 (Adm'r 1989) ("It is entirely appropriate for a public comment period to result in changes to the Region's decisional basis, the record, or the draft permit itself."). Without more, the Commission has not demonstrated that the Region clearly erred in including the provision barring bypass of secondary treatment. See 40 C.F.R. § 124.19(a)(4)(i)-(ii). The Board denies review of this issue.

b. Requirement to Measure Bypass Flows

The Commission next argues that the Region clearly erred when it required metered readings of the flow volume for bypasses because the Region lacked the "regulatory authority or need" to mandate internal plant metering of these flows. See Pet. at 25-26. The Commission states that plant bypasses are an "extreme rarity," and cites the "level of effort that would be required to accomplish this request." Id. In its comments on the 2017 draft permit, the Commission raised these same points, and provided as an example of infrequent bypass what it states was the single occurrence of secondary bypass in 2017. Feb. 2018 Cmts. at 9. The Commission noted that the estimated bypass flow from that event represented less than 0.03% of total flow for 2017, and stated that the physical conditions at the Facility along with the high cost would make installing a meter "a very expensive effort to obtain a flow reading once or twice a year." *Id.*; cf. Fact Sheet at 27 (stating that in 2016 Springfield's facility had "discharges of 6.7 million gallons of partially treated sewage from the treatment plant through a CSO-related bypass of secondary treatment"). The Commission requested that, in lieu of metering secondary bypass flow, the Region allow it to estimate secondary bypass flows and submit that data as a calculated determination, as opposed to a metered determination. Feb. 2018 Cmts. at 9.

The Region's response to comments explained that while the Commission currently operates its facility to reduce the use of secondary bypass, future operations or conditions at the Facility may change and result in the increased frequency of bypass flows around secondary treatment. RTC at 48. The Region concluded that while no change to the 2017 draft permit was warranted despite the Commission's objections to the new metering location, it had extended the date this permit provision goes into effect to allow the Commission six months from the effective date of the final permit to install the metering equipment. *See id*.

Further, in its response to the petition for review, the Region notes that the decision to require a metering location in the secondary bypass "was not speculation." Resp. at 39. In fact, the Region explains that a "key rationale" for including this requirement in the final permit, *id.*, was the Commission's own comment that "[f]uture increases in flow to the plant" due to "planned capital projects" and the potential to expand regionalization "will also contribute to an increase in annual loading." *See* Apr. 2018 Cmts. at 3; RTC at 108. The Region also disagrees with the Commission's characterization of bypass as extremely rare,

stating that the record demonstrates an average of twenty bypasses annually over a five-year period. Resp. at 39.

The Commission does not explain why the Region's response to its comments regarding the metering location was in error. See 40 C.F.R. § 124.19(a)(4)(ii). The Commission states only that EPA failed "to justify the regulatory authority or need for internal plant metering of bypass flows," and baldly alleges clear error without further analysis. Pet. at 26. Without more, we are left with the Region's unrebutted record. See, e.g., City of Lowell, 18 E.A.D. at 157.

We also agree with the Region's conclusion in its response to the petition that this permit provision falls within EPA's broad monitoring authority. Resp. at 39; see, e.g., City of Lowell, 18 E.A.D. at 189-90 & n.43 (citing CWA § 308(a)(1)(A), 33 U.S.C. § 1318(a)(1)(A)); In re City of Moscow, 10 E.A.D. 135, 170-71 (EAB 2001). As we have stated before, CWA section 308(a) confers on the Agency broad authority to impose monitoring requirements "regardless of a pollutant's potential to cause or contribute to a water quality violation, and regardless of whether pollutant discharges are restricted by an effluent limit." In re Town of Concord Dep't of Pub. Works, 16 E.A.D. 514, 541-42 (EAB 2016) (citing cases). Further, for a petitioner to challenge whether a monitoring requirement exceeds the Agency's authority under CWA section 308(a), a petitioner must cite evidence sufficient to support a finding that there is no basis for the Agency to require information in the first place. See In re City of Port St. Joe, 7 E.A.D. 275, 310 (EAB 1997) (emphasis added). The Commission has failed in this regard. Moreover, the Board generally defers to the Region's technical determinations on matters such as the amount of monitoring required to protect receiving waters, and the Commission has provided no information that would cause us to disregard the Region's technical judgment, particularly in light of its comments regarding increased annual flows that would appear to augur in favor of the monitoring location. See, e.g., In re Evoqua Water Techs., L.L.C., 17 E.A.D. 795, 828-29 (EAB 2019) (deferring to Region's judgment on amount of monitoring required), cited in City of Lowell, 18 E.A.D. at 190 (citing cases). Accordingly, the Commission has not demonstrated that the Region clearly erred when it included the monitoring location provision in the final permit. The Board denies review of this issue.

c. Compliance Schedule for Measurement of Commingled Flow

The Commission's final claim regarding secondary bypass is that the Region clearly erred when it failed to provide the Commission with its requested eighteen-month compliance schedule to "implement the requirement to utilize samples of com[m]ingled flow to determine compliance" with the final permit's effluent limits, including during secondary bypass. Pet. at 26. The petition for review hews closely to the comments the Commission submitted on the 2017 draft permit, which stated that the requirement to utilize samples of commingled flow to determine compliance was a new requirement, and that as a result the Commission requested the eighteen-month compliance schedule so it could sample commingled flows for twelve months over a variety of flow and weather conditions and then conduct an engineering analysis to determine what, if any, modifications to plant operations were required to ensure that it could meet the final permit's effluent limits at all times, including during secondary bypasses. *Compare* Feb. 2018 Cmts. at 9, *with* Pet. at 26. The Commission states in its petition that the Region "has no regulatory basis for refusing to provide a compliance schedule as requested." Pet. at 26.

The Region's response to the Commission's comment makes clear that the requirement to sample effluent at a location that yields data that is representative of the discharge is not new; rather, it is required by NPDES regulations at 40 C.F.R. § 122.41(j)(1), which state that "[s]amples and measurements taken for the purpose of monitoring shall be representative of the monitored activity." See RTC at 48-49 (citing 40 C.F.R. § 122.41(j)(1)). The Region explained that in the case of a secondary bypass at the Facility, effluent that bypasses secondary treatment is combined with secondary effluent (effluent that has received secondary treatment) before it is discharged to the Connecticut River through Outfall 001. RTC at 49; see also Fact Sheet at 8 (stating that currently, continuous sampling of effluent is conducted on secondarily treated flow "at a point before the secondary bypass flow rejoins") (emphasis added). The "combined effluent" must meet effluent limits that apply to Outfall 001 and a "representative sample" would be one collected from the commingled effluent prior to discharge at Outfall 001. RTC at 49. This is consistent with guidance to NPDES permit writers that effluent monitoring locations should occur "after all industrial uses and treatment processes," and that, "[m]ost importantly, the point where a final effluent limitation applies and the point where monitoring is required must be the same." *Permit Writers' Manual* § 8.1.2.3, at 8-4 to -5, quoted in RTC at 49.

The Region is correct. Its response underscores that the requirement to sample effluent at a location that will yield data representative of the discharge at Outfall 001 is not new to this final permit—the Commission's prior permit required that it sample commingled effluent and comply with the effluent limits in the permit. See RTC at 48-49; Resp. at 40. The Commission alleges that while the monitoring requirements at 40 C.F.R. § 122.41(j)(1) are not new, the requirement to sample at this location is new. Pet. at 26. The Commission's argument is

unavailing. As the Region explained in its response to the petition, a compliance schedule is not appropriate in this instance because the Commission was already required to comply with the requirements of 40 C.F.R. § 122.41(j)(1) as set forth in its previous permit. Resp. at 40; see also 40 C.F.R. § 122.47(a)(1)-(2) (stating that any compliance schedule requires compliance "as soon as possible," and making clear that for recommencing dischargers such as the Springfield facility, compliance schedules are only available when necessary to obtain compliance "with requirements issued or revised less than three years before recommencement of discharge"). Thus, contrary to the Commission's argument, both the prior permit and applicable regulations provide bases for the Region to refuse to incorporate a compliance schedule in the final permit, because the Commission should already be meeting this requirement.

In addition, the Commission does not confront the Region's rationale in the response to comments. *See, e.g., In re Indeck-Elwood, L.L.C.*, 13 E.A.D. 126, 143, 170 (EAB 2006), *quoted in In re Pio Pico Energy Ctr.*, 16 E.A.D. 56, 100-01 (EAB 2013). While all parties agree that the requirements of 40 C.F.R. § 122.41(j)(1) are not new to this permit, *see* Pet. at 26; RTC at 48-49, the Commission has not provided any rebuttal to the Region's explanation in the response to comments. The Region is authorized to issue NPDES permits that ensure compliance with the CWA and its implementing regulations. *See* CWA § 402(a), 33 U.S.C. § 1342(a); 40 C.F.R. § 122.41(j)(1).

Accordingly, the Board denies review of the Commission's challenges related to bypass of secondary treatment.

2. The Commission Failed to Confront the Region's Responses to the Commission's Comments and Has Not Demonstrated That the Region Clearly Erred When It Classified Outfall 042 as a Combined Sewer Overflow

The Commission alleges the Region clearly erred when it determined that Outfall 042 meets the definition of a combined sewer overflow ("CSO") and should be permitted as such. Pet. at 27-28. The Commission asserts the Region's decision is in error because prior to this permit cycle Outfall 042 was correctly "designed and continuously operated as a plant emergency bypass," and historically treated as a bypass in previous permits. *Id.* at 28, 29. As explained above in Part VI.B.1, a bypass is defined as the intentional diversion of waste streams from any portion of a treatment facility, including secondary treatment. 40 C.F.R. § 122.41(m)(1)(i);

CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693.²⁶ The Commission also states that if Outfall 042 remains a CSO in the final permit, it will require three years to "install solids and floatables control" technology, and the Region made a clearly erroneous finding of fact that the Commission would not require three years to install the equipment. Pet. at 30. We address these arguments below.

a. Outfall 042 and the Definition of a Combined Sewer Overflow

The Region explained that it permitted Outfall 042 as a CSO because it meets the definition of a CSO and is a reasonable application of the CSO Control Policy as incorporated into the CWA. RTC at 51-52. A CSO is defined as "a discharge from a combined sewer system at a point prior to the POTW Treatment Plant." CSO Control Policy, § I.A, 59 Fed. Reg. at 18,689; see also CWA § 402(q), 33 U.S.C. § 402(q); Part IV.D above (defining combined sewer system). A POTW Treatment Plant is "that portion of the POTW which is designed to provide treatment (including recycling and reclamation) of municipal sewage and industrial waste." 40 C.F.R. § 403.3(r). EPA guidance also defines CSOs as the "portion of flow from a combined sewer system (CSS) which discharges into a water body from an outfall located upstream of the headworks of a POTW." U.S. EPA, Combined Sewer Overflows—Guidance for Long-Term Control Plan, at G-1 (Aug. 31, 1995) (A.R. H.18), cited in RTC at 52. The Region explained that Outfall 042 falls within the definition of a CSO because Outfall 042 is situated prior to the headworks of the facility, and discharges from Outfall 042 occur prior to any treatment. RTC at 52; Resp. at 22-23, 41.

In comments on the 2017 draft permit, the Commission first contended that the Region had failed to provide a regulatory basis for designating Outfall 042 as a CSO and that the Commission's previous CSO and NPDES permits did not identify Outfall 042 as a CSO, but as a bypass. Feb. 2018 Cmts. at 10 (requesting the Region explain the permitting history and "how 042 was identified in each historical permit," and "provide an adequate and defensible basis" for reclassifying Outfall 042). The Commission objected to the Region's statement in the fact sheet that "CSO 042, which is the CSO outfall located at the treatment plant, was inadvertently omitted from the list of outfalls from which discharges are authorized by the existing CSO permit. It is incorporated here for completeness." Fact Sheet at 27, quoted in Feb. 2018 Cmts. at 10. In particular, the Commission argued that

²⁶ The Board notes that the terms "plant emergency bypass" and "emergency bypass" are not in the regulations and at oral argument, the Commission acknowledged that "the term plant emergency bypass is not in the regulation." Oral Arg. Tr. at 15.

this brief statement was "clearly insufficient" to support the Region's decision to reclassify Outfall 042 from a bypass to a CSO in the 2017 draft permit. Feb. 2018 Cmts. at 10.

The Commission then asserted that Outfall 042 does not meet the definition of a CSO and argued that flows from Springfield and customer communities enter the POTW Plant Inlet Structure "where preliminary mixing occurs prior to" what it refers to as "the 042 emergency plant bypass." Id.; see also id. attach. A (Plant Flow Diagram). The Commission contends that because Outfall 042 is not located, in its opinion, "at a point prior to the POTW Treatment Plant," per the definition of a CSO, but is, "in fact, after flows enter the POTW Treatment Plant Influent Structure," Outfall 042 was correctly identified as an emergency plant bypass that acts as a "plant protection line" during high flows to prevent overloading of the treatment plant. Id. at 10-11; see also Apr. 2018 Cmts. at 3 ("Since Outfall 042 is located after the Plant Inlet Structure, and after preliminary mixing of flows, Outfall 042 is clearly not a CSO."). The Commission also contended that EPA both at that time and historically recognized Outfall 042 as an "emergency bypass" and not a CSO. Feb. 2018 Cmts. at 11. The Commission stated that both the long-term control plan ("LTCP") and the integrated wastewater plan ("IWP") submitted to EPA in 2012 and 2014, respectively, clearly identify Outfall 042 as a plant emergency bypass. *Id*.

As noted above, the Region explained in its response to comments that it applied the definition of a CSO to determine how it would classify Outfall 042. See RTC at 51-52. The Region explained that influent flows from the City of Springfield and the customer communities enter the inlet structure at the Facility where they are commingled, or mixed, to form a single waste stream just upstream of Outfall 042. Id. at 52 (stating the inlet structure is located before or prior to the "headworks" of the treatment plant on the other side of a parking lot and explaining the term "headworks"). The Region noted that the meaning of the term "headworks" has been explained in district court decisions adjudicating matters that involve wastewater treatment facilities. See Cent. Weber Sewer Imp. Dist. v. Ace Fire Underwriters Ins. Co., No. 1:12-CV-166, at *1 (D. Utah Feb. 6, 2014) (Memorandum Decision and Order on Pending Motions) ("The headworks of a wastewater treatment plant is the initial stage of a complex process * * * " that functions "to remove inorganics such as sticks, stones, grit, and sand from the wastewater stream to protect and reduce wear on the downstream process equipment."), quoted in RTC at 52; see also Water Pollution Control Auth. of City of Norwalk v. Flowserve US Inc., No. 3:14-cv-00549, at *1 (D. Conn. Mar. 28, 2018) ("The headworks include[] machinery to conduct the first stage of wastewater treatment, including the preliminary treatment, the screening, the

pumping, and grit removal.") (internal citation omitted); *Hull Permanent Sewer Comm'n v. Hartford Steam Boiler Inspection & Ins. Co.*, No. 15-11098, at *1 (D. Mass. Mar. 31, 2017) (explaining that "[i]n the headworks, the raw wastewater undergoes three stages of pretreatment").

The Region continued that the waste stream receives no treatment at the inlet structure prior to flows discharging from Outfall 042. RTC at 52 (stating that the mixing of waste streams is not by itself considered a form of treatment). This was a factor in the Region's consideration because under the CSO Control Policy the main distinction between a CSO and a CSO-related bypass is that a CSO occurs before the wastewater treatment facility and a CSO-related bypass occurs after flows receive at least "primary clarification, solids and floatables removal and disposal, disinfection (where necessary), and any other treatment that can reasonably be provided." CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693; see also RTC at 52; CSO Permit Writers' Guidance § 4.9.1, at 4-36, quoted in RTC at 52; Resp. at 41. The Region concluded that because the inlet structure "was not designed to nor does it provide any treatment, and it occurs before the headworks of the [Facility], discharges from [O]utfall 042 at the inlet structure are appropriately considered CSOs." RTC at 52.

(i) The Commission Fails to Confront the Region's Response to Comments

For all the Commission's arguments in its petition for review on the Region's classification of Outfall 042 as a CSO, nowhere in the petition does it address the Region's responses to its comments on the 2017 draft permit or attempt to explain why the Region's rationale for classifying Outfall 042 as a CSO constitutes clear error. *See, e.g.*, 40 C.F.R. § 124.19(a)(4)(ii); *City of Lowell*, 18 E.A.D. at 139; *Indeck-Elwood*, 13 E.A.D. at 43, 170, *quoted in In re Pio Pico Energy Ctr.*, 16 E.A.D. 56, 100-01 (EAB 2013). With this in mind, we examine below the Commission's primary arguments that Outfall 042 does not meet the definition of a CSO and that Outfall 042 was designed and has been continuously operated as a bypass that provides treatment.²⁷ Pet. at 27.

²⁷ The Commission cannot prevail with the argument, raised for the first time in its reply brief, that the EPA violated the Administrative Procedure Act ("APA"), 5 U.S.C. § 553, when the Region allegedly shifted its rationale for classifying Outfall 042 as a CSO between the draft permits and the final permit and thus deprived the Commission of notice and a meaningful opportunity to comment. *See* Reply Br. at 12, 14. As we explained in *Cape Wind*, "the Region's Response to Comments provided the [Commission] notice regarding the Region's analysis and the evidence added to the administrative record that

With respect to whether Outfall 042 meets the definition of a CSO, the Commission in its petition repeats its comments but does not address the Region's explanation for the designation of Outfall 042 as a CSO. The Commission argues that Outfall 042 was always intended to be an "emergency bypass," and that the Influent Structure serves as a "unit of operation" at the Facility that is able "to provide chemical additions and control influent flow," and further explains that chlorine "treatment" is being added at the Influent Structure for odor control. ²⁸ *Id*.

the Region relied upon in making its decision." *In re Cape Wind Assocs.*, *L.L.C.*, 15 E.A.D. 327, 336 (EAB 2011). The Commission then had the opportunity to file a petition for review to explain why the Region's analysis, here its decision to classify Outfall 042 as a CSO, was clearly erroneous. *See id.* at 337; *e.g.*, *In re ConocoPhillips Co.*, 13 E.A.D. 768, 780 (EAB 2008) (""[T]he response to comments document provides the Agency's final rationale for its decision,' and 'document[s] any changes between the draft and final permit []." (*quoting Dominion Energy*, 12 E.A.D. at 533)). We have previously made clear that a petitioner's "opportunity to express disagreement with the Region's final permit decision" is through an appeal to the Board. *NE Hub*, 7 E.A.D. at 587 n.14, *cited in Cape Wind*, 15 E.A.D. at 336.

Further, as we explained above in Part VI.A.2.a, we will not consider new arguments filed in a reply brief, here that the Region violated the APA. 40 C.F.R. § 124.19(c)(2); see, e.g., In re Los Alamos Nat'l Sec., L.L.C., 17 E.A.D. 586, 601-02 (EAB 2018), pet. for rev. dismissed for lack of juris. sub nom. Concerned Citizens for Nuclear Safety, Inc. v. EPA, No. 18-9542 (10th Cir. Apr. 23, 2020). The Commission's claim in its response to the Region's surreply that it did not intend to insert a new and independent APA claim, only to follow up on the Region's waiver argument, is unavailing. Springfield Water and Sewer Commission's Response to EPA's Surreply 3 (Feb. 17, 2021). The Commission does not once in its reply brief argument regarding the APA reference, cite, or otherwise indicate that its APA argument was in response to the Region's response brief. See Reply Br. at 11-15.

²⁸ In support of its contention the Commission discusses two exhibits to the petition—a flow diagram and the Facility's original operation and maintenance manual ("O&M Manual"), which is undated—claiming that the record plan "clearly" designates Outfall 042 as an emergency bypass, and that the O&M Manual described Outfall 042 as part of the Facility's "functional design features." *Id.*; Pet. at 27 exs. 12 (1978 Flow Diagram (A.R. G.24)), 13 (O&M Manual). The Region objects to the Commission's reliance on the O&M Manual in the petition because the Commission failed to raise it during the comment period. The Region argues that the Commission waived its argument that chlorine added to the influent structure to control odor constitutes treatment because the argument was raised for the first time in the petition for review. *See* Resp. at 41 nn.8&9.

The Commission's attempt to introduce the O&M Manual in support of its argument that Outfall 042 was part of the Facility's "functional design features," is barred because the O&M Manual was reasonably ascertainable information that the Commission could have submitted to the Region during the public comment period when the 2017 draft permit and 2018 revised draft permit identified Outfall 042 as a CSO. *E.g.*, *In re Penneco Envt'l Solutions L.L.C.*, 17 E.A.D. 604, 617 (EAB 2018). With respect to the

As a result, the Commission contends, the Influent Structure should be considered part of the plant headworks because the Influent Structure provides both flow control and treatment functions. *Id.* at 27, 28 (arguing that contrary to CSO discharge that occurs prior to POTW Treatment Plant, "the Influent Structure and Outfall 042 are an integral part" of Facility's headworks that function together as "plant protection line" during high flows to prevent overloads and floods, and that Influent Structure is part of Facility's headworks that "provides treatment and controls flow distribution" to Facility processes).

With respect to the Commission's arguments that the Region clearly erred because historically Outfall 042 was classified as a bypass in the Commission's previous permits, these also fail to address the Region's explanation on this issue. *Id.* at 29. The Commission asserts that the Region stated for the first time in its response to comments that "the inlet structure was not designed to nor does it provide any treatment, and it occurs before the headworks of the WWTP." *Id.* at 27 (quoting RTC at 52). The Commission claims that the Region's "new argument," that Outfall 042 must be classified as a CSO and not an emergency bypass because flows at the location do not receive at least primary treatment, "misses the point" because Outfall 042 has always been an emergency bypass. *Id.* at 29. It adds that the CSO-related sources the Region cites in support of its argument are "inapplicable." *Id.*

The response to comments contains a permit issuer's final rationale for its decisions and "ensures that interested parties have an opportunity to adequately prepare a petition for review and that any changes in the draft permit are subject to effective review." *In re City of Marlborough*, 12 E.A.D. 235, 245 (EAB 2005), *quoted in In re Indeck-Elwood*, *L.L.C.*, 13 E.A.D. 126, 147 (EAB 2006). In this

Commission's argument regarding chlorine as treatment, the Region's decision in the final permit to classify Outfall 042 as a CSO that does not provide any treatment is a logical outgrowth of the 2017 draft permit and 2018 revised draft permit. As we note above in Part VI.A.1, to determine whether the final permit is a logical outgrowth of the draft permit, the "essential inquiry" is whether interested parties reasonably could have anticipated the final permit condition from the draft permit. *In re D.C. Water & Sewer Auth.*, 13 E.A.D. 714, 759 (EAB) (quoting *NRDC v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002)), *pet. for review dismissed for lack of juris.*, No. 08 1251 (D.C. Cir. Dec. 12, 2008). Here, the 2017 draft permit, the fact sheet, and the 2018 revised draft permit made clear that Outfall 042 would be regulated as a CSO, so the Commission could have reasonably anticipated the Region's argument that no treatment occurs in the influent structure where Outfall 042 is located because a CSO, by definition, occurs at a point prior to the POTW Treatment Plant where treatment occurs. *See* CSO Control Policy § I.A, 59 Fed. Reg. at 18,689; CWA § 402(q), 33 U.S.C. § 402(q); 40 C.F.R. § 403.3(r).

instance, the 2017 draft permit, the accompanying fact sheet, *and* the 2018 revised draft permit made clear that Outfall 042 was to be regulated as a CSO, and thus any additional information or rationale the Region offered in the response to comments is appropriate. The Region "articulate[d] with reasonable clarity the reasons for its conclusion[]" and "adequately document[ed] its decision making" in the response to comments when it determined that Outfall 042 should be regulated as a CSO. *See, e.g., Indeck-Elwood*, 13 E.A.D. at 147. Changes between a draft and final permit, and a fact sheet and subsequent response to comments, are common elements in NPDES permitting. *E.g., In re ConocoPhillips Co.*, 13 E.A.D. 768, 780 (EAB 2008).

The fact remains that, after the review of the record in this case, nowhere in its petition for review does the Commission attempt to explain how the Region's decisionmaking process with respect to defining Outfall 042 as a CSO was in error. As we have stated before, a petitioner's failure to respond to the Region's explanation in its response to comments "leaves us with a record that supports the Region's approach." *City of Lowell*, 18 E.A.D. at 139 (quoting *In re Town of Westborough*, 10 E.A.D. 297, 311 (EAB 2002)).

(ii) The Region Provided a Reasoned Explanation for Its Decision to Classify Outfall 042 as a Combined Sewer Overflow Rather Than a Bypass

Even if we were to consider the Commission's claims with respect to the Region's regulation of Outfall 042 as a CSO, we find that, based on the statutory and regulatory scheme, the Region did not clearly err when it applied the definition of a CSO to Outfall 042. The Region examined the location and operation of Outfall 042 and determined that the Commission's late claim that Outfall 042 provides both "flow control and treatment," Pet. at 27, does not constitute primary treatment under the CSO Control Policy. See RTC at 52 (mixing of waste streams does not constitute treatment); Resp. at 41 n.9 (adding chlorine at the influent structure does not satisfy minimum treatment for a CSO-related bypass); CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693 (CSO-related bypass occurs after flows receive at least "primary clarification, solids and floatables removal and disposal, disinfection (where necessary), and any other treatment that can reasonably be provided"); Oral Arg. Tr. at 77 (mixing of raw sewage does not constitute treatment); id. at 78-79 (adding chlorine for odor control does not control pollutants in waste stream and does not provide disinfection as it does during full wastewater treatment process). Contrary to the Commission's claim on page 29 of its petition that the Region "misses the point" and that the CSO Control Policy, the CSO Permit Writers' Guidance, and the "CSO-related sources that EPA cites for reclassifying Outfall 042 are inapplicable," the Region's analysis properly considered the location of Outfall 042 and whether the functions that occur in the influent structure provide primary treatment. As noted above, under the CSO Control Policy the main distinction between a CSO and a CSO-related bypass is that a CSO occurs before the wastewater treatment facility and a CSO-related bypass occurs after flows receive at least "primary clarification, solids and floatables removal and disposal, disinfection (where necessary), and any other treatment that can reasonably be provided." CSO Control Policy § II.C.7, 59 Fed. Reg. at 18,693; *see also* Resp. at 41. In this instance, because the mixing of waste streams and addition of chlorine to control odors do not constitute primary treatment, the Region properly determined that Outfall 042 functions as a CSO.

As to the Commission's claim that the influent structure where Outfall 042 is located is "part of the headworks," Pet. at 27, we disagree. The record supports the Region's explanation and conclusion that the Region considers Outfall 042 a CSO rather than a bypass because "[t]he inlet structure [which contains Outfall 042] is located before the 'headworks' of the treatment plant, which is located on the other side of a parking lot" and the headworks contains the initial treatment of the waste stream. RTC at 52.

In addition, the Region explained in its response to comments that the Commission, not the Region, identified Outfall 042 as an emergency bypass in the Commission's 2014 integrated wastewater plan ("IWP") and that while "the IWP, which incorporates the 2012 [long-term control plan], has been reviewed by EPA, it has not been approved." *Id.* At oral argument, the Region elaborated that, per its standard practice, it has approved portions of the Commission's long-term control plan "as incorporated into their integrated wastewater plan," but the Region has not approved "the entire integrated wastewater plan," and that rather, "the Region has looked at it on a project-by-project basis" through its Enforcement Division. Oral Arg. Tr. at 84-85. On rebuttal, the Commission argued that, despite the Region's statement, there was an approval letter in the record stating that the Commission's "entire plan was consistent with the CSO Policy." *Id.* at 87; see also Letter from Susan Studlien, EPA Region 1, to Kathy Pedersen, SWSC (Sept. 18, 2014) (A.R. H.16) ("Studlien Letter"). The Commission argued that EPA "review[ed] the entire [CSO] plan" and then issued an administrative order directing the Commission to implement the first part of the plan, "[b]ut the cover letter in 2014 said that the analysis in the plan was consistent with the CSO [Control] policy, not pieces of the plan, the entire plan was consistent with the CSO [Control] policy and that plan did not call 042 a CSO, so there is clearly an inconsistency." Oral Arg. Tr. at 87; see also Pet. at 29, n.1 ("EPA has expressly stated that the analysis in the long-term control plan and integrated wastewater treatment plan is consistent with the CSO Policy.") (citing Studlien Letter at 1).

We disagree with the Commission's characterization of the letter. In our view, the cover letter to the administrative order that the Commission references does not state the Commission's entire long-term control plan or integrated wastewater plan is consistent with the CSO Control Policy. The relevant portion of the cover letter stated that the Region recognized that the Commission developed its proposed CSO controls "as part of an extensive analysis conducted as part of the Commission's efforts to establish an integrated wastewater plan ("IWP"). That work, including the Commission's financial capability assessment and affordability analysis, is consistent with EPA's CSO policy and integrated planning framework." Studlien Letter at 1. Rather than the express approval of the Commission's analysis in the long-term control plan and the integrated wastewater plan, these statements recognize that the Commission's work to develop these plans was consistent with the CSO Control Policy, not that the plans themselves were consistent with the CSO Control Policy.

Further, the Commission's argument in its petition for review that "the main reason" for bypass at Outfall 042 is the "plant's hydraulic capacity limitation," is, as the Region points out, a tautology. Pet. at 28; see Resp. at 40. The Commission cites the definition of bypass to assert that since a bypass is an intentional diversion of waste streams from any portion of a facility, see 40 C.F.R. § 122.41(m)(1)(i), the discharge from Outfall 042 is a bypass because it occurs when the Facility operators determine that flows may exceed the Facility's hydraulic capacity limit and then intentionally release flows from Outfall 042. Pet. at 28. However, as the Region points out in its response to the petition, the Commission fails to provide any "meaningful distinction between [Outfall] 042 and a CSO." Resp. at 40. The Commission argues that a CSO occurs "when combined storm water and wastewater is discharged directly to the receiving water precipitation-induced flows cannot be directed to the wastewater treatment facility and must be discharged directly to the receiving stream." Pet. at 28. Commission's reasoning here is circular because it claims the plant's hydraulic capacity limitations require it to intentionally release untreated flows into the Connecticut River, which is the same reason for a CSO discharge, mainly that the Facility downstream will be overwhelmed if portions of combined sewer flows during wet weather events are not released prior to reaching the Facility. See Resp. at 40.

Finally, with respect to the Commission's reliance on the past characterization of Outfall 042, the Region acknowledged in its response to

comments that it "has not consistently permitted [O]utfall 042 as a CSO" and explained that despite this history it was not precluded from now regulating Outfall 042 as a CSO "based on a detailed and explicit rationale of the application of EPA statute, regulations and guidance." RTC at 52-53. We agree. See Encino Motorcars, L.L.C. v. Navarro, 136 S. Ct. 2117, 2125-26 (2016) ("Agencies are free to change their existing policies as long as they provide a reasoned explanation for the change.") (citations omitted) (citing FCC v. Fox Television, 556 U.S. 502, 515 (2009) (holding that an agency may change its position so long as it provides reasoned explanation for its action and displays awareness that it is changing its position)), cited in RTC at 53. Here, the Region acknowledged its change in position and explained that it now "has significantly more information regarding the WWTF and its operations * * * than it did in prior permitting cycles" that has "helped inform EPA's understanding of outfall 042." RTC at 53; see also Oral Arg. Tr. at 81-82 (explaining that in a 2017 inspection of Commission's facility the Region "gained a better understanding of how exactly Outfall 042 works and where it is located relative to the influent structure"). The Commission's claim that EPA has provided no new facts that would support the reclassification of Outfall 042 cannot prevail here where the Commission fails to confront the Region's response to comments. E.g., City of Taunton, 17 E.A.D. at 111, 180, 182-83, 189.

The Board denies review of this issue.

b. The Time Allowed for Springfield to Provide Appropriate Treatment at Outfall 042

In comments on the 2017 draft permit, the Commission requested that should the Region continue to classify Outfall 042 as a CSO, the Region grant the Commission three years from the effective date of the final permit "to install solids and floatables control on any newly defined CSOs," including Outfall 042. Feb. 2018 Cmts. at 15. The 2020 final permit provides the Commission twelve months from the effective date of the final permit to control solids and floatable materials, *see* Final Permit pt. I.H.4.a, at 23-24, and the Region explained that, in its view, one year is a reasonable amount of time to install "basic controls such as baffles, screens, and racks" to control solids and floatable materials in CSOs. RTC at 58 (explaining that the final permit requires the Commission to control, rather than remove, solids and floatable materials in CSOs).

The Commission asserts that the Region's decision that "one year is sufficient to install" solids and floatable material controls at Outfall 042 "is not supported by any information in the record." Pet. at 30. We disagree. The Region clearly explained that to control, rather than remove, solids and floatable materials requires only basic control technology, *see* RTC at 58, and, as we have stated

previously, we generally defer to a permit issuer's determination that relies upon its technical expertise. See, e.g., In re Town of Newmarket, 16 E.A.D. 182, 214 (EAB 2013) (explaining that Region's responses to petitioner's arguments were rational, soundly based, and persuasive). The Commission has failed to demonstrate that the Region clearly erred, and at most has demonstrated a difference of opinion between the Commission and the Region. As we have stated before, when issues raised on appeal challenge a Region's technical judgments, clear error is not established simply because petitioners express a difference of opinion or an alternative theory regarding a technical matter. In re NE Hub Partners, L.P., 7 E.A.D. 561, 567 (EAB 1998), pet. for rev. denied sub nom. Penn Fuel Gas, Inc. v. EPA, 185 F.3d 862 (3d Cir. 1999), quoted in Town of Newmarket, 16 E.A.D. at 214, and Dominion Energy, 12 E.A.D. at 510.

Accordingly, the Board denies review of the Commission's challenges related to the classification of Outfall 042 as a CSO.

3. The Commission Has Not Demonstrated That the Region Clearly Erred When It Established the Requirements for the CSO Public Notification Plan in the Final Permit

Public notification is one of the Nine Minimum Controls ("NMCs") that the CSO Policy requires municipalities to implement as the minimum technology-based requirements to be imposed on combined sewer systems that have CSOs; this particular requirement ensures that the public receives timely, adequate notification about CSO occurrences and impacts. CSO Control Policy § II.B, 59 Fed. Reg. at 18,691; U.S. EPA, Doc. No. EPA 832-B-95-003, Combined Sewer Overflows Guidance for Nine Minimum Controls, § 9.1, at 9-1 to -2 (May 1995) (A.R. H.10) ("NMC Guidance"); RTC app. B at 1-2; see also Final Permit pt. I.B.2.a, at 11 (stating NMCs and NMC Minimum Implementation Levels "are requirements of this permit"); Fact Sheet Suppl. at 5.

The CSO Control Policy established the NMCs as the minimum technology-based requirements to be imposed on combined sewer systems. *See* CSO Control Policy § II.B, 59 Fed. Reg. at 18,691 (incorporating CWA § 301(b) requirement to impose best practicable control technology); 40 C.F.R. § 125.3; Fact Sheet at 27-28 (stating that the CSO Control Policy sets forth the minimum

²⁹ In addition, the Region explained that should Springfield encounter any unanticipated difficulties in achieving timely compliance with this requirement, Springfield can contact the Region's Enforcement Compliance and Assurance Division to request compliance assistance. RTC at 58.

technology-based limits that represent the best professional judgement of the Agency on a consistent, national basis). Importantly, selection and implementation of the nine minimum controls should be based on site-specific considerations including the characteristics of each individual combined sewer system. CSO Control Policy § II.B, 59 Fed. Reg. at 18,691; see also NMC Guidance § 1.2, at 1-3. Finally, because implementation of the nine minimum controls "is among the first steps a municipality is expected to take in response to" the CSO Control Policy, the nine minimum controls represent the minimum, or the floor, in terms of permit requirements designed to ensure that combined sewer systems comply with the CWA's technology-based controls. NMC Guidance § 1.6, at 1-7; see also id. § 1.8, at 1-8; CSO Control Policy § II.B, 59 Fed. Reg. at 18,691; Resp. at 42.

Public notification, referenced as NMC #8, not only informs the public of CSO locations and occurrences, but also of the potential impacts to public health and the environment, as well as recreational or commercial activities that may be curtailed because of a CSO. See NMC Guidance at 9-1. The most appropriate public notification mechanism will likely vary based on local circumstances, such as the size and specific character of the use area, as well as the means of public access. Id. Here, the Commission contends that the Region clearly erred when it included in the final permit certain requirements for the CSO Public Notification Plan. In particular, the Commission objects to the terms in the final permit that establish: (1) dates by which the Commission must submit and implement the Public Notification Plan for CSO events; (2) an initial notice requirement to inform the public that a CSO discharge has occurred as soon as possible, but no later than two hours after becoming aware of the CSO discharge; (3) a supplemental notice to inform the public that a CSO discharge(s) has terminated as soon as possible, but no later than twenty-four hours after becoming aware of the CSO termination; and (4) the requirement to include the specific location of a CSO discharge. See Pet. at 30-35. The Commission claims these final permit provisions contain "new,

³⁰ As noted above in Part IV.D, CSOs are point sources subject to NPDES permit requirements for both water-quality based and technology-based requirements. Section 301(b)(1)(C) of the CWA of 1977 mandated compliance with water quality standards by July 1, 1977. Technology-based permit limits must be established for best conventional pollutant control technology ("BCT") and best available technology economically achievable ("BAT") based on best professional judgment in accordance with sections 301(b) and 402(a) of the Water Quality Act Amendments of 1987. Fact Sheet at 27; see also NMC Guidance § 1.6, at 1-6 (stating that at minimum, BAT/BCT should include nine minimum controls as determined by NPDES permitting authority exercising its best professional judgment); RTC app. B, at 1 (same).

detailed requirements" that will result in the accretion of substantial costs to the Commission and its ratepayers "without any added protection for public health." *Id.* at 30 (arguing that the Region has never objected to the Commission's current Public Notification Plan or determined that it does not meet the CSO Control Policy requirements). The Commission claims the Region clearly erred when it included in the final permit public notification requirements that "far exceed the NMC provision," and requests that the Board remand the final permit to allow the Region to delete the new Public Notification Plan requirements. *Id.* at 30-31. We address each of the Commission's arguments below.

a. The Final Permit's CSO Public Notification Requirements and Timeframe Provided for the Commission to Develop and Implement the Notification Plan

The 2017 draft permit required the Commission to submit within ninety days of the permit's effective date a Public Notification Plan to the Region and MassDEP, and to implement within 180 days of the permit's effective date the Public Notification Plan along with the notification procedures it contained. See Draft Permit pt. I.B.g.3, at 12. In comments on the 2017 draft permit the Commission requested that the permit be revised to allow the Commission to develop and implement the Public Notification Plan as a combined, single activity within thirty-six months of the effective date of the permit. See Feb. 2018 Cmts. at 14 (noting that New Jersey CSO owners and collocated communities are required to develop and implement Public Notification Plan within thirty-six months). The 2018 revised draft permit required the Commission to both submit the Public Notification Plan to the Region and MassDEP and implement the Plan within 180 days of the permit's effective date. See Rev'd Draft Permit pt. I.B.3.g, at 12-13. The Region explained that the CSO notification requirements, among other things, differed from those in the 2017 draft permit due to the need to protect water quality in the Connecticut River and Long Island Sound and to protect recreational uses in the Connecticut River. Fact Sheet Suppl. at 3.

In comments on the 2018 revised draft permit, the Commission stated the 180-day timeframe to submit and implement the Public Notification Plan was "simply not feasible," and reiterated its request for "a minimum of 36 months" to develop and implement a "meaningful" Public Notification Plan due to procurement requirements unique to Massachusetts. Oct. 2018 Cmts. at 3 (citing "significant degree of effort" required to develop web-based notification system, including bidding and procurement procedures that must all be completed prior to working on notification system itself); see also RTC at 113.

The Region recognized the Commission's request for additional time and changed the final permit to allow the Commission twelve months from the effective date to develop and submit its Public Notification Plan, and twenty-four months from the effective date to implement the plan. RTC at 119. However, the Region also explained that it needed to balance the Commission's request for more time with the Region's duty to provide the public with information related to CSO discharges as soon as possible given concerns for human health and the environment associated with such discharges. *Id.* (stating Region did not believe Commission's thirty-six-month proposal was necessary given that Region had previously required other CSO communities in area to develop such plans in twelve months "without issue"), *cited in* Resp. at 43 ("Petitioner's claim that 36 months are necessary to comply with requirements unique to Massachusetts is undercut by the fact that other Massachusetts CSO communities have complied with a requirement to develop and implement a plan in 12 months").

The Commission offers little in its petition to demonstrate why the Region's response to its comments was in error. In fact, the Commission merely cites repeatedly to its comments on the 2017 draft permit and the 2018 revised draft permit, and repeats portions of those previous comments almost verbatim. *Compare* Pet. at 31, *with* Feb. 2018 Cmts. at 14; *compare* Pet. at 31-32, *with* Oct. 2018 Cmts. at 3. The Commission's central argument is that it requires thirty-six months to develop, submit, and implement its Public Notification Plan, and despite acknowledging the Region's responses to its comments, the Commission nonetheless does nothing more than repeat its own comments from the draft permits.³¹ *See* Pet. at 31-32. At most, the Commission has demonstrated a

³¹ The Commission's argument that the Region should give the Commission thirty-six months from the final permit effective date to develop and implement a public notification plan because that is the requirement for New Jersey CSO owners and collocated communities is inapposite. *See* Pet. at 31, 32. As we have held before, "'a disparity in requirements imposed on [publicly owned treatment works]' is 'legally irrelevant' to a permit challenge because 'permits are issued on an individual basis, taking into account individual differences where appropriate." *In re City of Port St. Joe*, 7 E.A.D. 275, 304 n.44 (EAB 1997), *quoted in City of Lowell*, 18 E.A.D. at 160; *see also* Resp. at 24-25, 43.

The Commission's challenge to the twenty-four-month timeframe to develop and implement its Public Notification Plan is also surprising given that the 2009 CSO Permit the Commission has operated under explicitly required the Commission to develop and update a public notification plan. The 2009 CSO Permit required the Commission to submit its first annual report no later than March 31, 2010, and, among other things, "submit/update a public notification plan describing the measures actively being taken to meet" the NMC that addresses public notification. 2009 CSO Permit pt. I.A.3.d, at 6; see also id. pt. I.A.3 (permittee shall submit an annual report to Region and MassDEP by

difference of opinion between the Commission and the Region on a matter that required the Region's technical judgment, which is not sufficient to demonstrate clear error. *E.g.*, *In re Town of Newmarket*, 16 E.A.D. at 214 (citing *Upper Blackstone*, 14 E.A.D. at 608, and *Dominion*, 12 E.A.D. at 510). The Board denies review of this issue.

b. The Final Permit Requirement That the Commission Provide Initial Notification of a CSO Discharge No Later Than Two Hours After Becoming Aware of It

The 2017 draft permit provided that within twenty-four hours of the initiation of any CSO discharge(s) the Commission would provide electronic notification to any interested party and make an announcement on its website. Draft Permit pt. I.B.3.g., at 12; see also Fact Sheet at 28 ("[T]he draft permit includes more specific public notification implementation level requirements to ensure that the public receives adequate notification of CSO occurrences and CSO impacts."); Feb. 2018 Cmts. at 12-13 (stating the Commission believed the specific public notification requirements were "excessive" and went "far beyond any controls EPA considered in the NMC guidance"). Several commenters on the 2017 draft permit, including the downstream State of Connecticut, argued the 24-hour initial notification requirement would not sufficiently protect recreational uses in the Connecticut River both in the Massachusetts and Connecticut affected reaches. Fact Sheet Suppl. at 5; see RTC at 169 (citing April 27, 2018 comments from CT DEEP). As a result, the Region proposed in the 2018 revised draft permit that the Commission provide initial CSO notification to the public no later than two hours after becoming aware of a likely CSO discharge. Rev'd Draft Permit pt. I.B.3.g.2, at 12-13.

The Commission submitted comments on the 2018 revised draft permit requesting that in lieu of the two-hour initial CSO notification requirement, the Region include a four-hour initial CSO notification requirement in the final permit,

March 31 of each year). The 2020 final permit requires the Commission to issue web-based notifications, which is a new requirement. Yet the Region made clear in the response to comments that in its technical judgment, based on its experience with other CSO communities developing similar notification plans, twenty-four months was sufficient to develop the web-based notification plan even when accounting for anticipated "procurement and logistical issues." RTC at 119. The record supports the Region's determination that twenty-four months is a reasonable time frame to comply. See Conn. River Conservancy Amicus Curiae Brief in Support of Permitting Agencies at 7 (Dec. 16, 2020) (noting that the Commission has been subject to this permit condition requiring a notification plan since at least 2009).

citing the significant number and various locations of the CSOs within the Commission's wastewater treatment system, as well as staffing and resource constraints. Oct. 2018 Cmts. at 5. In support of its request, the Commission explained the four-hour timeframe for initial CSO notification would be consistent with the initial CSO notification timeframe EPA approved for CSO dischargers to the Great Lakes Basin. *See* Public Notification Requirements for Combined Sewer Overflows to the Great Lakes Basin, 83 Fed. Reg. 712, 725 (Jan. 8, 2018) (codified at 40 C.F.R. § 122.38(a)(2)(i)) ("Great Lakes Basin CSO Rule"), *cited in* Oct. 2018 Cmts. at 5.

The Region retained the two-hour initial CSO notification requirement in the final permit, and explained in its response to comments that it believed the two-hour notification requirement was reasonable given the uses of the receiving water, the proximity of discharges to the Connecticut border, and because the estimated time of travel from the CSO discharges to the Connecticut border is approximately two hours under average flow conditions. RTC at 120. The Region explained that the State of Connecticut, immediately downstream from Springfield, has a statutory "real-time" notification requirement and has developed a state-sponsored website for public use to identify likely active CSOs. *Id.* Timely notice of CSO discharges also allows the public to take proactive steps to reduce potential exposures to pathogens associated with untreated wastewater. *Id.* at 121.

In its petition, the Commission cites back to its comments on the 2017 draft permit that claim the large number and various location of CSOs and staffing and resource constraints augur in favor of a four-hour initial CSO notification requirement. Pet. at 32 (citing Oct. 2018 Cmts. at 5-6). The Commission challenges the Region's rationale that proximity to the state border should be a factor when deciding the time allowed for an initial CSO notification, and argues that instead of distance to the state border, the Region should consider "more appropriate factors" such as whether the length of time for initial CSO notification is long enough to allow permittees to initiate notification and also to allow the public to make informed decisions. *Id.* at 33 (quoting Great Lakes Basin CSO Rule, 83 Fed. Reg. at 725). The Commission contends there is no reason that EPA's determination "regarding how long public notification takes in the Great Lakes would be any different in Massachusetts." *Id.*

The Commission has not met its burden to demonstrate clear error by the Region on this issue. First, the Commission has not addressed the Region's response to comments explaining its decision to include the two-hour CSO notification requirement. The Region explained its decision was based, in part, on the Region's concern for the designated uses of the receiving waters, the fact that

the CSO discharge only takes approximately two hours to reach the Connecticut border, and that timely notification of CSO discharges allow the public to reduce potential exposures to pathogens associated with untreated wastewater. *See NMC Guidance* § 9.2, at 9-2 (stating public notification "will diminish the potential risk of adverse public health effects"); RTC at 120-21. The Commission's failure to address the Region's substantive responses is grounds for denial of review. 40 C.F.R. § 124.19(a)(4)(ii); *see also City of Taunton*, 17 E.A.D. at 111, 180, 182-83, 189.

Second, as we explained above, disparities in requirements between publicly owned treatment works is legally irrelevant because permits are issued on an individual basis and account for factors specific to each individual permittee. See City of Lowell, 18 E.A.D. at 160; In re City of Port St. Joe, 7 E.A.D. 275, 304 n.44 (EAB 1997). Here, the Region explained the individual factors that contributed to it setting the two-hour initial CSO notification limit, and the Commission has done no more than indicate a difference in opinion with the Region, which cannot sustain a challenge to the Region's technical determination. E.g., In re Town of Ashland Wastewater Treatment Facility, 9 E.A.D. 661, 667 (EAB 2001). The Board denies review of this issue.

c. The Requirement That the Commission Provide Supplemental Notification of a CSO Discharge No Later Than Twenty-Four Hours After Cessation of All CSOs

The supplemental CSO notification included in the 2017 draft permit required the Commission to provide "within 24 hours of the termination of any CSO discharges(s)" an update on their website and in a follow-up electronic communication information including the CSO number and location, confirmation of a CSO discharge, total CSO discharge volume, date of the discharge, and start and stop time of the discharge. Draft Permit pt. I.B.3.g, at 12; *see also* Fact Sheet at 28. The Commission objected to these requirements in its comments on the 2017 draft permit, stating that "[t]he requirements of flow duration, and starting and stopping times, go far beyond any controls EPA considered in the NMC guidance." Feb. 2018 Cmts. at 13 (quoting *NMC Guidance* § 1.6, at 1-7 & 9-1); *id.* at 17-18 (objecting to additional data collection for CSO discharges including hours of discharge and volume of discharge as "requirements going far beyond those necessary to comply with the NMC").

The 2018 revised draft permit made no substantive change to the information the Commission must disseminate in the CSO supplemental notification requirement, although language was added to ensure the timing of the supplemental CSO notification occurred "as soon as practicable, but no later than,

twenty-four (24) hours after becoming aware of the termination of any CSO discharge(s)." Rev'd Draft Permit pt. I.B.3.g.3, at 13. The Commission again objected to both the twenty-four hour "infeasible timeframe" and the "extensive and excessive content" required by the supplemental CSO notification requirement, which the Commission claimed went "far beyond" EPA's CSO Guidance for NMCs, which provides "specific examples of what is expected for notification at a CSO outfall." Oct. 2018 Cmts. at 6-7 (quoting NMC Guidance at § 1.6, at 1-7 & § 9.1, at 9-1). Among other things, the Commission objected that: notice of a CSO cessation would give the public a "false sense of security" that the water was "safe" to use when water impairments that impact human health may still exist; the Commission had not been able to consistently measure CSO flow volumes due to various technical challenges; notification requirements "are costly in relationship to benefit" and the Region has failed to establish "what additional benefit is provided in terms of public notification and health" by estimating and publishing CSO volumes within twenty-four hours versus the significant costs the Commission would incur and the inherent unreliability of such numbers; requirements to include flow duration, volume, and stop/start times would be more appropriately considered part of an annual CSO report; and, because CSO discharges are often discontinuous, more than twenty-four hours are necessary to determine if a CSO event has ended. Id. at 7-8. Instead, the Commission requested that the Region change the 2018 revised draft permit to provide for supplemental CSO notification in two stages, wherein the first stage would provide supplemental CSO notification within seven days following cessation of all CSOs and provide the public with the CSO number and location as well as confirmation of a CSO discharge. *Id.* at 8. The second stage of the Commission's proposed supplemental CSO notification would occur in the Commission's annual report, wherein the Commission would report the total estimated volume discharged from the CSO and the estimated date, start time, and stop time of the CSO discharge. Id. at 8-9.

The Region's response to the Commission's comments first explained that EPA's CSO Guidance for NMCs "provides examples of measures" to notify "the public of CSO discharge events," and that "the list of potential measures" to notify the public "is not an all-inclusive," exhaustive list of measures that a wastewater treatment facility can use to notify the public of CSO discharges. RTC at 120 (emphases in original); see also NMC Guidance at 9-1 ("The most appropriate mechanism for public notification will probably vary with local circumstances, such as the character and size of the use area and means of public access."); NMC Guidance § 1.5, at 1-6 (stating that "[a]ppropriate control measures will be site-specific"). Further, the Region disagreed with the Commission that notifying the public of CSO discharge(s) cessation will provide a false sense of security that the water is safe, and explained that in the Region's experience, supplemental

notice within twenty-four hours provides "important information necessary to inform the public of ongoing public health risks" regarding termination of CSO events. RTC at 120-21. In fact, contrary to the Commission's claim that the Region did not respond to its comment about the unreliability of estimating flow volume within twenty-four hours, the Region removed from the final permit the requirement that the Commission include CSO discharge volumes in the supplemental notification. See Pet. at 34; RTC at 121. The Region recognized the Commission's concerns regarding the amount of time needed to validate and process flow data and will now require this information in the annual CSO report rather than the supplemental notification. See RTC at 121.

In its petition for review, the Commission acknowledges that the Region "disagreed" with the Commission's recommendation to change the supplemental CSO notification requirement from within twenty-four hours to seven days. Pet. at 33. The Commission continues that the Region "fails to explain why the 7-day timeframe would not provide the public with sufficient information regarding ongoing health risks." Id. at 34. In fact, the Region explained its determination on the public health benefits of the twenty-four-hour requirement in its response to comments. RTC at 120-21. The Region made a technical determination based on its experience that the appropriate supplemental CSO notification timeframe is as soon as practicable, but no later than twenty-four hours after becoming aware that a CSO discharge has terminated, and adequately explained in the record its rationale that this timeframe was required to keep the public aware of ongoing potential public health risks. E.g., In re Russell City Energy Ctr., L.L.C., 15 E.A.D. 1, 12, 39-42, 66 (EAB 2010), pet. for review denied sub nom. Chabot-Las Positas Cmty. Coll. Dist. v. EPA, 482 F. App'x 219 (9th Cir. 2012); Town of Ashland, 9 E.A.D. at 667; see also RTC at 120-121; Final Permit pt. I.B.3.g.3, at 14. Nowhere in its petition for review does the Commission confront the Region's rationale set forth in the response to comments. See, e.g., In re Indeck-Elwood, L.L.C., 13 E.A.D. 126, 143, 170 (EAB 2006), quoted in In re Pio Pico Energy Ctr., 16 E.A.D. 56, 100-01 (EAB 2013). In addition, as we have previously explained, "clear error * * * is not established simply because petitioner[] document[s] a difference of opinion or an alternative theory regarding a technical matter." Russell City, 15 E.A.D. at 12 (quoting In re NE Hub Partners, L.P., 7 E.A.D. 561, 567 (EAB 1998), review denied sub nom. Penn Fuel Gas Inc. v. U.S. EPA, 185 F.3d 862 (3rd Cir. 1999); see also Resp. at 44. The Board denies review of this issue.

d. The Final Permit Requirement That the Commission Notify the Public of the Specific Location of Each CSO Discharge

The 2018 revised draft permit included requirements that, for both the initial and supplemental CSO notifications, the Commission include the CSO number and location. Rev'd Draft Permit pt. I.B.3.g.2-.3, at 12-13; *see also* Draft Permit pt. I.B.3.g, at 12 (requiring Commission to include CSO number and location in supplemental CSO location, but not initial CSO location). In their comments on the 2018 revised draft permit, the Commission requested that when reporting CSO locations, it be allowed to proceed pursuant to the Great Lakes rule:

Where CSO discharges from the same system occur at multiple locations during the same precipitation-related event, * * * the CSO permittee may provide a description of the area in the waterbody where discharges are occurring * * * and the permittee is not required to identify the specific location of each discharge.

See Great Lakes Basin CSO Rule, 83 Fed. Reg. at 719-20; Oct. 2018 Cmts. at 5-6.

The Region explained in its response to the Commission's comment that merely providing a description of the area in the waterbody where CSO discharges are occurring, as opposed to providing the specific CSO location, would be inappropriate in this instance due to the number of CSO outfalls located within a relatively small geographic area. RTC at 120. The Region cited "the uses of the receiving water which may be negatively impacted by discharges of untreated combined wastewater." *See id.* The Region also explained that the final rule governing CSO discharges into the Great Lakes Basin does not apply to dischargers outside of that area, and that local considerations, including the State of Connecticut's "real time" notification statute, require a different approach. *Id.* at 118-19 (citing Great Lakes Basin CSO Rule, 83 Fed. Reg. 712). Finally, the Region cites the proximity of the downstream State of Connecticut as a factor in its decision to require CSO notifications to include the CSO location. *Id.* at 120.

The Commission has not demonstrated that the Region clearly erred when it included in the final permit the requirement that the Commission include the CSO number and location in any initial or supplemental CSO notification. The Commission does not confront the Region's response to its comments, and claims that the Region's justification for maintaining the final permit requirement that the Commission identify CSO numbers and locations in CSO notifications "is not rational given the information in the record." Pet. at 35; *id.* at 34-35. We disagree. The Region provided its rationale for keeping the CSO location requirement, yet rather than explain why the Region clearly erred based on its response to comments,

the Commission states, without support or citation, that identifying CSO locations in public notifications "provides no added benefit or additional useful information," and that providing a description of the waterbody where the CSOs are located would "provide the same general information without the unnecessary burden of specifying" individual CSO locations. *Id.* at 35; *see also* Resp. at 44-45. The Commission's failure to address the Region's response to comments in its petition is grounds for denial of review. 40 C.F.R. § 124.19(a)(4)(ii); *see, e.g., City of Pittsfield v. EPA*, 614 F.3d 7, 11-13 (1st Cir. 2010), *aff'g In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009) (Order Denying Review).

The Commission has not met its burden to demonstrate that review of the challenged Public Notification Plan permit terms is warranted. Accordingly, the Board denies review.

4. The Commission Has Not Demonstrated That the Region Clearly Erred When It Prohibited Septage Discharges to the Combined Sewer Collection System During Wet Weather

The Commission next contends that the Region clearly erred when it included in the final permit a prohibition against the discharge of septage and other materials (collectively referred to here as septage) to the combined collection system during wet weather.³² See Pet. at 35-36. The 2017 draft permit included a provision that prohibited discharges to the combined system of septage, holding tank wastes, or other material that may cause a visible oil sheen, or contain floatable material, during wet weather when CSO discharges may be active. See Draft Permit pt. I.B.3.c, at 11. The Region did not alter this permit term in the 2018 revised draft permit. See Rev'd Draft Permit pt. I.B.3.c, at 11.

The Commission provided comments on the 2017 draft permit requesting that the Region remove the prohibition against septage in the final permit. *See* Feb. 2018 Cmts. at 20-21. Specifically, the Commission objected to the inclusion of floatable material in the prohibition, stating that "wastewater (separate as well as combined) typically contains floatable material." *Id.* at 20. The Commission also objected to the prohibition on the grounds that it was "unreasonable" given there is no way to manage such discharges into the combined systems through sanitary sewer connections. *Id.*

³² Septage is the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or from a holding tank when the system is cleaned or maintained. Final Permit pt. II, at 17.

In its response to comments, the Region recognized the Commission's comment that the Commission cannot manage discharges from domestic sanitary sewer connections and explained that it had modified the final permit to clarify that the prohibition does not apply to domestic discharges to the sanitary sewer system. See RTC at 68; Final Permit pt. I.B.3.c, at 12. The Region continued that while the Commission may have limited ability to control the addition of floatable materials from domestic discharges to the sanitary sewer, that is not the case for commercial or industrial sources, whose discharges may be controlled through implementation of the Commission's pretreatment program. RTC at 68. Finally, the Region explained that the permit provision constitutes the minimum implementation level for complying with the NMCs that require the Commission to review and modify its pretreatment program to assure it minimizes CSO impacts, control solids and floatable materials in CSOs, and incorporate pollution prevention programs that focus on contaminant reduction activities. Id.; see also Final Permit pts. I.B.2.a.3, .6, .7, at 11 (NMCs 3, 6, and 7); CSO Control Policy § II.B, 59 Fed. Reg. at 18,691.

Despite the Region's modification to the final permit, which clarifies that the prohibition does not apply to domestic sources to the sanitary system, the Commission asserts in its petition for review that the revision does not address its initial concern that it cannot "practically manage" such discharges to the combined sewer system through sanitary sewer connections, and continues that it is "not rational" for the Region to require the Commission to prohibit industrial discharges during wet weather. Pet. at 36. The Commission also asserts that the provision prohibiting septage to the combined collection system "does not ensure, or even promote, compliance with the NMCs," and that the Region has not offered a regulatory basis for this prohibition. *Id*.

The Commission has not demonstrated that the Region clearly erred when it included the prohibition against septage discharges to the combined collection system during wet weather. First, the Commission fails to confront the Region's explanation in the response to comments that commercial and industrial discharges can be controlled through implementation of the Commission's pretreatment program and that the Commission is required to control these discharges. See RTC at 68; NMC Guidance at 4-1; 40 C.F.R. § 124.19(a)(4)(i)-(ii); see, e.g., City of Pittsfield, 614 F.3d at 11-13, aff'g City of Pittsfield, NPDES Appeal No. 08-19. The Commission appears to misunderstand the scope of the prohibition, claiming it is not rational to prohibit industrial discharges during wet weather. The Region explained that the provision is more limited, only applying to certain types of industrial discharges and that such industrial discharges could be effectively controlled using the pretreatment requirements already present in the final permit. See Final Permit pt. I.G, at 21-22; Resp. at 45-46 (explaining that prohibition

applies only to industrial discharges that may cause an oil sheen or contain floatable material). Second, the Commission's bald statement that the prohibition against septage discharges to the combined collection system during wet weather does not ensure or promote compliance with the NMCs merely contests but does not supplant the Region's reasoned technical determination that including this permit provision was appropriate to protect human health and the environment when CSOs are active during wet weather. See RTC at 68; see, e.g., In re Town of Newmarket, 16 E.A.D. 182, 214 (EAB 2013); see also CSO Permit Writers' Guidance at 3-4 (stating EPA encourages holistic approach to addressing NMCs and does not expect separate control measures to meet each NMC). Accordingly, the Board denies review of this issue.

5. The Commission Has Not Demonstrated That the Region Clearly Erred When It Established Monitoring Requirements Pursuant to the Nine Minimum Controls

The Commission claims the Region erred when it established "extensive" and "over-reaching" monitoring requirements in the final permit that require the Commission to measure and later report, for all CSO discharge events, the duration of the discharge in hours, and the volume of discharge in gallons, and to quantify that data through direct measurement. Pet. at 36-37; *see also* Final Permit pt. I.B.3.e, at 13; *id.* pt. I.B.4, at 14-15 (CSO monitoring for duration and volume will be included in report the Commission must submit annually). Two elements, duration and volume, have remained unchanged throughout this permit proceeding, although the contested permit provision includes monitoring requirements that the Region has modified during this permit proceeding but are not challenged in this appeal. *Compare* Draft Permit pt. I.B.3.e, at 11, *and* Rev'd Draft Permit pt. I.B.3.d, at 11-12, *with* Final Permit pt. I.B.3.e, at 13.³³ For the reasons set forth below, review of this issue is denied.

The Commission commented that while it understood recording CSO events was necessary to comply with the NMCs that implement the CSO Control Policy, it nonetheless objected to the requirement that it collect data on the duration

The 2018 revised draft permit contains a numbering error such that two provisions—marked as parts I.B.3.c and I.B.3.d, at 11, in the 2017 draft permit—were both numbered as part I.B.3.c in the 2018 revised draft permit. The provision at issue here, regarding the requirement to quantify and record all CSO discharges, was misnumbered in the 2018 revised draft permit as part I.B.3.d, at 11-12. The Region corrected the error in the final permit, although the Commission's comments on the 2018 revised draft permit reference the erroneously numbered part I.B.3.d. *See* Oct. 2018 Cmts. at 10.

and volume of each CSO discharge, alleging it would result in "excessive costs," Feb. 2018 Cmts. at 17, that such requirements went "far beyond those necessary to comply with the NMC," id., and that these requirements "represent a significant expense with limited benefit." Oct. 2018 Cmts. at 10. To illustrate its point, the Commission quoted EPA's guidance for the NMCs, which states that NMCs "do not require significant engineering studies or major construction, and can be implemented in a relatively short period * * *." NMC Guidance § 1.6, at 1-7, quoted in Feb. 2018 Cmts. at 17. The Commission also quoted several statements from the Agency's NMC Guidance that, the Commission claimed, "prescribe[] the following levels of monitoring as being in compliance with the [CSO Control Policy]," including: "visual inspection and other simple methods" to determine the occurrence and impacts of CSO discharges, NMC Guidance at 10-1; recording the number of CSOs "at as many outfalls as feasible," id. § 10.1.2, at 10-2; where a calibrated model of the combined sewer system exists, "model projections may be used to determine the frequency and location of overflow events," id.; and, to detect overflows, measures including visual inspection, a chalk mark, wood blocks, a mechanical counting device, etc., can be used. Id. § 10.1.2, at 10-3, quoted in Feb. 2018 Cmts. at 17-18.

In comments on the 2018 revised draft permit, the Commission also objected to the requirement that it "shall quantify and record all discharges from CSOs" through direct measurement for its annual reporting requirements, Rev'd Draft Permit pt. I.B.3.d, at 11-12, and noted that this was "not consistent" and "creates a conflict" with the requirement to provide initial CSO notification using "monitoring, modeling or other means." Id. pt. I.B.3.g.2, at 12; see Oct. 2018 Cmts. at 10. The Commission argued in its comments that "it is clear that EPA will accept the use of a model to determine CSO discharge events, rather than actual CSO discharge measurements." Oct. 2018 Cmts. at 10 (emphasis omitted); see also Fact Sheet Suppl. at 5 (stating initial notification of probable CSO discharge "may be based on modeling estimates of discharge(s) based on rainfall (or other predictive modeling methodologies) rather than on actual CSO discharge measurements"), quoted in Oct. 2018 Cmts. at 9-10. The Commission requested that the Region modify the permit in accordance with the NMC Guidance quoted above such that the Commission could report CSO discharge information in discharge monitoring reports according to model predictions, or, if that was unacceptable to the Region, to allow the Commission to use wood blocks, chalk lines, and mechanical counting devices, as well as any flow meters available.³⁴ *See* Feb. 2018 Cmts. at 18.

The Region responded to the Commission's comments and explained that, pursuant to the Agency's NMC Guidance, the implementation of NMC #9 that corresponds to monitoring to characterize CSO impacts and the efficacy of CSO controls represents a "starting point," and that extensive monitoring should be conducted as part of the Commission's long-term control plan ("LTCP"). RTC at 63, 123; see also NMC Guidance at 10-1 ("This minimum control is the precursor to the more extensive characterization and monitoring efforts to be conducted as part of the LTCP to assess changes in pollutant loadings or receiving water conditions."); Oral Arg. Tr. at 85 (Commission has submitted its LTCP and is working to implement it even though the Region has not yet approved all portions of the LTCP). With respect to the alleged inconsistencies in the final permit's terms regarding what measurements may be used, i.e., modeling for initial CSO notification versus direct measurement for annual reporting of duration and volume of CSO discharges, the Region explained that these "distinct requirements" were "developed to achieve different objectives." RTC at 122 (stating "type(s) of information and data that is collected and reported under these provisions differs in the level of refinement" necessary to achieve objectives of these permit conditions). Specifically, the Region explained that it allowed for modeling for the initial CSO notification "in light of the import of providing notice as expeditiously as possible and the advantages that modeling can provide to serve that purpose." *Id.* at 123; see also id. at 124 (modeling or use of other estimation methods to predict probable CSO discharges is appropriate to provide timely public notice that allows public to take steps to reduce potential exposure to pathogens associated with untreated wastewater). The Region continued that the purpose for the required direct monitoring under the NMCs is to "provide data that can be used to evaluate compliance with the technology[-]based effluent limitations for CSOs (i.e., the

³⁴ The Commission explained that it had flow meters placed within the combined sewer system, but they were placed temporarily and "used solely to characterize flows throughout the system to inform and calibrate the models used" to implement the Commission's integrated wastewater plan ("IWP"). Feb. 2018 Cmts. at 17; *see also id.* at 13 (requirement to measure flow duration, among other things, goes "far beyond" controls EPA considered in NMC guidance, and are IWP characterization requirements). The contract covering the flow meters' use was set to expire in October 2020, and the Commission stated the continued use of flow meters would be an "excessive and burdensome cost," such that it requested the Region instead allow CSO monitoring "in the manner that is prescribed in the NMC guidance document." *Id.* at 17; *see also id.* at 13 (stating that requirement to monitor flow volume "is simply not consistently implementable").

[NMCs]) that are set forth in the permit, the efficacy of the CSO controls that have been implemented[,] and to validate the assumptions set forth in the Permittee's LTCP." *Id.* at 123. In both the Region's and MassDEP's experience, "direct measurement provides the most accurate indication of CSO activations," and thus, collecting data using direct measurement "is essential" for both agencies to evaluate a facility's compliance with technology-based effluent limits and the efficacy of a facility's CSO controls. *Id.* (stating that direct measurement can include, but is not limited to, metering of flows at each CSO outfall). Finally, the Region stated it was "unclear" how the requirement to monitor the duration and volume of CSO events would result in excessive costs to the Commission, but recognized the Commission's need for additional time to validate and refine CSO data collected through direct measurement, and thus the Region modified the final permit to only require this information in the Region's annual report rather than requiring it in discharge monitoring reports. *Id.* at 64.

The Commission has not met its burden to demonstrate that the Region clearly erred by requiring it to include the duration and volume of each CSO discharge in its annual report. After recounting its comments and the Region's response, the Commission argues that the Region "[f]inding that the costs of such reporting are not excessive does not justify how the requirement falls within the scope of the NMC." Pet. at 37 (stating that Region "failed to justify any regulatory basis for" retaining permit requirements that Commission report duration and volume of CSO discharges). We disagree. The Region made clear in its response to the Commission's comments that it relies on direct measurement of the duration and flow of CSO discharges to evaluate the Commission's compliance with the technology-based effluent limits that the NMCs implement as part of the CSO Control Policy. As noted above in Part IV.D of this decision, the CSO Control Policy was codified at CWA § 402(q), 33 U.S.C. § 1342(q), such that the CSO Control Policy is part of NPDES permitting law. In addition, as the Region states in its response, the Commission misapprehends the NMCs, which are meant to serve as a starting point for a facility to reduce its CSO discharges and corresponding impacts on receiving waters, rather than as a maximum or ceiling for such CSO controls. See, e.g., NMC Guidance § 1.6, at 1-7 ("Implementation of the NMC is among the first steps a municipality is expected to take in response to EPA's CSO Control Policy."); id. § 1.8, at 1-8 (same). Permittees with CSOs are "responsible for developing and implementing long term CSO control plans," CSO Control Policy § II.C, 59 Fed. Reg. at 18,691, that include, among other things, "a comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters." *Id.* § II.C.1, 59 Fed. Reg. at 18,692, quoted in Resp. at 46 (emphases added). As the Region points out, the

CSO Control Policy mandates comprehensive monitoring of CSO discharges for, among other things, duration and volume, for permittees like the Commission that are developing or that have developed a long-term control plan. Resp. at 46. The Commission did not provide any analysis in support of its claim that the Region clearly erred when it required the Commission to submit direct measurements of the volume and duration of each CSO discharge in its annual report. As stated above in Part VI.B.1, we generally defer to the Region's technical determinations on matters related to the monitoring required to protect receiving waters, and the Commission has not provided any information that would cause us to depart from that general principle in this instance. See, e.g., In re Evoqua Water Techs., L.L.C., 17 E.A.D. 795, 828-29 (EAB 2019) (deferring to Region's judgment on amount of monitoring required), cited in City of Lowell, 18 E.A.D. 115, 190 (citing cases). Accordingly, the Board denies review of this issue.

6. The Commission Has Not Demonstrated That the Region Clearly Erred by Including the Definition of Dry Weather in the Final Permit

The Commission next contends that the Region clearly erred when it included "unnecessary and unjustified" references to "dry weather" in the final permit. The final permit. Pet. at 37-38. As noted above, dry weather CSOs are prohibited by the CWA and are addressed by the CSO Control Policy's nine minimum controls. See Part IV.D, above; CSO Control Policy § II.B, at 18,691. The final permit includes three references to dry weather: (1) requiring the Facility to maintain a minimum of eighty-five percent removal of both total suspended solids and biochemical oxygen demand during dry weather, Final Permit pt. I.A.1.e, at 9; and (2)-(3) prohibition of dry weather overflows from CSOs. *Id.* pt. I.B.2.5, at 11 (NMC #5); *id.* pt. I.B.3.d, at 12 (NMC Minimum Implementation Level). Both the 2017 draft permit and the 2018 revised draft permit contained the same three references to dry weather.

In comments on the 2017 draft permit, the Commission noted that although part I.B.3.d stated that "[d]ry weather overflows are prohibited (NMC #5)," part I.B.3.d of the permit did not define "dry weather," whereas part I.A.1.e did define dry weather as "any calendar day on which there is less than 0.1 inch of rain and snow melt." Feb. 2018 Cmts. at 19. In addition, the Commission stated it is "not uncommon for a CSO to discharge with 0.1 inches of rain, depending on the intensity of the storm, and the location of the rain measurement gauge in

³⁵ Dry weather is defined as any calendar day on which there is less than 0.1 inch of rain and no snow melt. Final Permit pt. I.A.1.e, at 9.

relationship to the CSO discharge." *Id.* The Commission made clear that it "[could not] at this time determine that a CSO event would not be triggered by 0.1 inches of rainfall, relative to intensity and duration and in combination with a snow melt event." *Id.* The Commission also objected to the definition of dry weather included in the 2017 draft permit because it claimed that the measurement of snow melt was not clearly defined or determined. *Id.* The Commission requested that the Region remove the definition of dry weather from the permit, "to avoid any confusion as it relates to [dry weather overflows]." *Id.*

The final permit included the definition for dry weather referenced above in parts I.A.1.e and I.B.3.d, to clarify that the same definition of dry weather applies to all parts of the final permit. *See* Final Permit at 9, 12; RTC at 66. The Region explained that it is necessary to define dry weather in the context of a combined collection system that conveys both sanitary wastewater and storm water to a POTW. RTC at 65. The CSO Control Policy defines dry weather flow as "flow in a combined sewer that results from domestic sewage, groundwater infiltration, commercial and industrial wastewaters, and any other non-precipitation related flows (e.g., tidal infiltration)." 59 Red. Reg. at 18,689, *quoted in* RTC at 65. The Region explained that the definition of dry weather included in the final permit is consistent with the CSO Control Policy and distinguishes dry weather from precipitation-related events such as rainfall, snowfall, and snowmelt. RTC at 65-66 (stating that final permit does not require snowmelt to be measured, only its presence or absence noted).

The Commission has not demonstrated that the Region clearly erred when it included the prohibition against dry weather overflows in the final permit. The provision included in the final permit prohibits CSO discharges during dry weather, whereas the Commission's concerns about snowmelt and rainfall concern precipitation-related events that would be covered by the CSO Control Policy. See CSO Control Policy § I.B, at 18,689 ("The permitting provisions of this Policy apply to all CSSs that overflow as a result of storm water flow, including snow melt runoff (40 C.F.R. § 122.26(b)(13))."). To the extent the Commission raises concerns about whether there may be precipitation that would not exceed 0.1 inches of precipitation but nonetheless trigger a CSO discharge such that it would be considered a dry weather overflow, the Commission has offered no facts or technical analysis to confirm its contentions. See Resp. at 47. In fact, the exact same permit term was included in the 2009 CSO Permit. Compare 2009 CSO Permit pt. I.A.2.c, at 4, with Final Permit pt. I.B.3.d, at 12. The Commission fails to respond to the Region's explanation that the final permit prohibits dry weather CSO overflows to ensure a combined sewer system such as the Commission's, which conveys both sanitary and storm water flows to a POTW, does not overflow

when there is little to no storm water in the system. See NMC Guidance at 6-1 (stating that "[s]ince the NPDES program prohibits dry weather overflows (DWOs), the requirement for DWO elimination is enforceable independent of any programs for the control of CSOs."); see also CSO Control Policy § V.B, 59 Fed. Reg. at 18,697 ("Discharges during dry weather have always been prohibited by the NPDES program"). The Commission has not presented more than a difference of opinion over a technical matter, which as we have previously made clear, is not sufficient to overcome the particularly high burden a petitioner has to demonstrate that review of a technical matter is warranted. See, e.g., In re Scituate Wastewater Treatment Plant, 12 E.A.D. 708, 718 (EAB 2006), pet. for review vol. dismissed, No. 06-1817 (1st Cir. 2006) (explaining clear error not "established simply because the petitioner presents a different opinion or alternative theory regarding a technical matter, particularly when the alternative theory is unsubstantiated") (citation omitted), quoted in City of Taunton, 17 E.A.D. 105, 163 (EAB 2016), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019). Accordingly, the Board denies review of this issue.

C. Co-Permittee Issues

1. The Commission Failed to Confront the Region's Rationale for Including Satellite Collection Facilities as Co-Permittees, and Including the Satellite Collection Facilities as Co-Permittees Is Not Clearly Erroneous

The Commission alleges that the Region clearly erred by including six upstream municipalities—the Towns of Agawam, Longmeadow, East Longmeadow, Ludlow, West Springfield, and Wilbraham—as co-permittees for a discrete subset of activities required by the final permit. *See* Pet. at 23-24; Final Permit at 1. We again note that the towns have not appealed the Region's permitting decision in this case including them as co-permittees. Each of these towns owns and operates a satellite sewer collection system that contributes wastewater effluent to the Facility, where it is treated and discharged through the Facility's permitted outfall on the Connecticut River. *See* Final Permit pt. I.A.1, at 3. The Commission does not dispute that these discharges need to be regulated; it simply contends that the CWA does not authorize EPA to include satellite communities as named co-permittees in a single NPDES permit issued to the owner/operator of a POTW. Pet. at 23-24.

In so arguing, the Commission explicitly recognizes that the Board has previously upheld the Region's approach to co-permitting of satellite communities. *Id.* at 24. In *In re Charles River Pollution Control District*, the Board ruled that municipal satellite collection systems are subject to the NPDES program and may be included, as co-permittees, with a regionally integrated plant such as, in this

case, the Facility.³⁶ 16 E.A.D. 623, 632-44 (EAB 2015). The Commission summarily repudiates *Charles River*, noting that the Board's reasoning in that case has not been subject to judicial review and that the Region's approach constitutes clear error and should be reversed. Pet. at 24.

The Commission presented its arguments in comments and the Region provided a detailed factual and legal rebuttal in its response to comments. *See* RTC at 34-42. On appeal, the Commission at best repeats its comments and fails in any way to engage the Region's rebuttal. As the Region points out, the Commission does not dispute that these municipal satellite collection systems comprise a portion of a POTW, nor that they operate point sources, nor that they discharge pollutants to navigable waters. Resp. at 48; *see* RTC at 39 (noting that SWSC "conceded" in its comments that Towns' satellite collection systems are part of POTW because they "contribute to a combined system" and discharge pollutants to waters of the United States through the Facility's outfall). With respect to the legal issue, the Commission simply states, "This rationale misses the point." Pet. at 24. Under the Commission's narrow contention, it would seem that the Region must issue a separate NPDES permit to each town. *See id*.

In fact, the Region, in its response to comments, addressed the points made by the Commission's comments, including on the legal basis for regulating the satellite communities under a single NPDES permit with the Facility. RTC at 38-42. The Commission's wholesale failure to confront the Region's response provides no basis for a grant of review. *See, e.g., In re City of Taunton Dep't of Pub. Works*, 17 E.A.D. 105, 111 (EAB 2016), *aff'd*, 895 F.3d 120 (1st Cir. 2018), *cert. denied*, 139 S. Ct. 1240 (2019); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000). Consequently, the Commission fails to demonstrate that the Region's inclusion of satellite facilities as co-permittees in the permit issued to the Facility is clearly erroneous.

Even if this issue were properly before the Board in this matter, we would reaffirm our legal conclusion in *Charles River* that neither the CWA nor the NPDES regulations prohibit the Region from regulating the satellite communities under a single NPDES permit with a regionally integrated plant. The record in this case

³⁶ A "regionally integrated plant" is a POTW composed of municipal satellite sewage collection systems owned by one or more entities and a wastewater treatment facility owned by another. *In re Charles River Pollution Ctrl. Dist.*, 16 E.A.D. 623, 628-29 (EAB 2015).

supports applying the legal reasoning in *Charles River* to the Region's permit decision here.

In the response to comments on the SWSC permit, the Region explained that, consistent with the Board's decision in Charles River, it construed the CWA and its implementing regulations to define "POTW" as including the wastewater treatment plant and the satellite collection systems that conveyed wastewater to the plant; and that these components of the POTW discharge to waters of the United States. RTC at 38-40. It explained that nothing in the CWA or regulations "restrict the reach of an NPDES permit for a point source discharge to a single owner or operator where there are multiple contributing dischargers." Id. at 40. specifically rebutted the Commission's reliance on the use of the singular in the definitions of "point source" and "person," noting that the Commission's interpretation is unsupported by the text, structure, and legislative history of the statute and inconsistent with the reasoning in a long line of federal court and Board precedents. Id. (citing cases). The Region also provided examples of ways the Commission's interpretation would lead to nonsensical results and "compromise orderly and efficient implementation" of the NPDES program. *Id.* at 41. The Region concluded that a "more natural reading" of the CWA, "grounded in canons of statutory construction, is simply that the singular includes the plural, and vice versa." Id. The Commission's petition is silent in response to this detailed, substantive explanation and conclusion, providing no basis for Board review. The Commission fails to sustain its burden of showing the Region's conclusion in the response to comments and its permitting decision are clearly erroneous. The Board denies review of this issue.

2. The Commission Failed to Confront the Region's Response to Comments on Two Operation and Maintenance Requirements Applicable to Co-Permittees

Next, the Commission objects to two aspects of the operation and maintenance requirements in the final permit. The Commission contends that the Region erred by declining to: (1) delineate the reach of each co-permittee's municipal sewage collection system so that all parties would know who "owns which treatment works"; and (2) alter the requirement that each co-permittee "maintain an ongoing preventative maintenance program to prevent overflows and bypasses" by making such prevention a "goal" rather than an absolute duty. *See* Pet. at 38-39; RTC at 68-69. In its response to comments, the Region explained its view that the municipalities were in the best position to perform the delineation task and that the preventative maintenance requirement should not be "weakened through the introduction of precatory or subjective terms." RTC at 70-71.

The Commission simply references its comments without substantively engaging the Region's response to those comments. This approach fails to confront the Region's position and provides no basis for review. *See, e.g., In re City of Lowell,* 18 E.A.D. 115, 157, 165-66 (EAB 2020) (denying review where petitioner failed to confront permit issuer's responses to comments); *In re Dominion Energy Brayton Point, L.L.C.,* 12 E.A.D. 490, 509-11 (EAB 2006), *pet. for review vol. dismissed,* No. 07-2059 (4th Cir. Jan. 4, 2008).

3. The Commission Failed to Confront the Region's Response Denying Additional Time to Complete Sewer Collection System Mapping

Finally, the Commission claims that the Region erred by declining to extend the timeframe for submitting sewer collection system mapping from thirty to thirty-six months. Pet. at 39. Both the Commission and the Town of Agawam submitted comments requesting this additional time, and the Region responded in the negative to both sets of comments. See RTC at 72, 152. On appeal, the Commission merely repeats portions of the comments and claims that the Region "provided no regulatory basis, beyond its own anecdotal observation, to impose a shorter deadline for implementation." Pet. at 39. In this context, this argument must be turned around: To succeed in an appeal to the Board, the Commission should have provided a regulatory basis justifying an extension of time to complete mapping, or provided other legal or factual support to establish the Region's supposed error. By failing to do so, the Commission provides the Board no basis for review. See, e.g., Lowell, 18 E.A.D. at 157, 165-66; Dominion, 12 E.A.D. at 509-11; see also Conn. River Conservancy Amicus Curiae Br. in Support of Permitting Agencies at 7-8 (Dec. 16, 2020) (arguing that SWSC has been compiling mapping data for over ten years and thus it is unclear why Commission needs more time).

Accordingly, the Board denies review of the Commission's challenges to the permit provisions that address co-permittees.

D. Other Issues

1. The Commission Has Not Demonstrated That the Region Clearly Erred When It Provided Two Years for the Commission to Develop a Collection System Operation and Maintenance Plan

The Commission claims the Region clearly erred when the Region included in the final permit six months for the Commission to submit a report describing various aspects of the collection system and a schedule to develop and implement a full collection system operation and management plan, and a total of twenty-four months to complete, implement, and submit to the Region and MassDEP a full

collection system operation and maintenance plan. Pet. at 40; *see also* Final Permit pts. I.D.5.a-.b, at 17-18. This permit provision has remained the same throughout this permitting process. *Compare* Draft Permit pt. I.D.5.a-.b, at 15-16, *and* Rev'd Draft Permit pt. I.D.5.a-.b, at 16-17, *with* Final Permit pt. I.D.5.a-.b, at 17-18.

In its comments on the 2017 draft permit, the Commission stated that six months was an insufficient amount of time for it to research, analyze, and report on the required items listed in part I.D.5.a, and continued that each municipality (permittee and co-permittees) had their own procurement, funding, and selection process to choose a consultant to conduct the required research and analysis. See Feb. 2018 Cmts. at 23 (stating that it typically takes nine to twelve months to obtain approval to hire and conduct hiring process for consultant). Similarly, the Commission contended that to complete, implement, and submit to the Region and MassDEP a "comprehensive [o]peration and [m]aintenance [p]lan" is a "tremendous undertaking" that would require extensive resources, and also referenced the need for each municipality to proceed through its own approval, funding, and hiring processes to hire a consultant to prepare the plan. (reiterating that it typically takes nine to twelve months to obtain approval to hire and conduct hiring process for consultant). In light of the Commission's stated need for more time to develop, implement, and submit the collection system operation and maintenance plan, the Commission requested that the Region modify the permit to allow eighteen months for the Commission to complete its obligations under part I.D.5.a, and thirty-six months for the Commission to complete the full operation and maintenance plan pursuant to part I.D.5.b. Id.

The Region responded that based on its technical judgment and experience permitting other municipal sources in Massachusetts, the allotted six and twenty-four months to comply with parts I.D.5.a and I.D.5.b of the final permit, respectively, were reasonable timeframes to comply with these permit provisions. Specifically, the Region explained that it has been including these collection system operation and maintenance plans as well as "Capacity, Management, Operation and Maintenance (CMOM) requirements in municipal permits in Massachusetts" for several years "and permittees and co-permittees have been able to fulfill these requirements within this timeframe, utilizing available resources and expertise." RTC at 74. The Region further explained that, in its experience, these plans generally do not entail lengthy procurement processes or the need to rely significantly on outside consultants. *Id.* Importantly, the Region made clear that these collection system operation and maintenance plans are "iterative" and intended to be improved from one permit cycle to the next. Id. As such, the Region encouraged the Commission and co-permittees to "provide the best information available within the timeframes designated in the permit." *Id.*

The Commission has not overcome its burden to demonstrate that the Region clearly erred when it decided not to modify the timeframes in the final permit for the description and subsequent development and implementation of the collection system operation and maintenance plan. The Commission alleges that beyond the Region's own "anecdotal observations," the Region has failed to provide any regulatory basis for maintaining the timeframes in the final permit. Pet. at 41. In fact, the Commission failed to present facts or analysis that rebut the Region's conclusion based on its experience and analysis. The Region made clear in its response to comments that it exercised its technical judgment to determine that the six- and twenty-four-month timeframes are sufficient for the Commission to comply with the requirements for the collection system maintenance and operation plan. The Region's position is rational in light of all of the information in the record, and thus we defer to the Region's decision. See, e.g., In re City of Taunton Dep't of Pub. Works, 17 E.A.D. 105, 131-32 (EAB 2016) (citing cases), aff'd, 895 F.3d 120 (1st Cir. 2018), cert. denied, 139 S. Ct. 1240 (2019).

2. The Commission Has Not Demonstrated That the Region Clearly Erred When It Provided One Hundred and Twenty Days for the Commission to Determine Whether It Needs to Revise the Facility's Pretreatment Requirements

The Commission next contends that the Region clearly erred when it included in the final permit the requirement that the Commission prepare and submit a technical evaluation analyzing the need to revise local limits for industrial dischargers within 120 days after the final permit becomes effective. Pet. at 41-42. The 2017 draft permit and the 2018 revised draft permit included the 120-day timeframe for the Commission to submit the technical evaluation analyzing local limits, and also required the Commission to complete any required revisions to local limits within 120 days of notification by EPA and submit the revisions to EPA for approval. See Draft Permit pt. I.G.1, at 19; Rev'd Draft Permit pt. I.G.1, at 20. The Region modified the final permit to allow the Commission to complete any required revisions to local limits within eighteen months of notification by EPA and submit the revisions to EPA for approval. Final Permit pt. I.G.1, at 21. The Commission challenges the Region's decision not to extend the timeframe for it to submit its technical evaluation of local limits, stating that even though the Region agreed to extend the timeframe to revise and finalize local limits, eighteen months was not enough to complete both the technical evaluation and the revision of local limits. Pet. at 42.

In its comments on the 2017 draft permit, the Commission stated that 120 days to prepare and submit a technical evaluation analyzing the need to revise local limits was "entirely insufficient" given that the Commission's procurement

process to obtain approval for funding, select a consulting firm, and begin work typically takes between nine and twelve months. Feb. 2018 Cmts. at 23. Similarly, the Commission stated that 120 days to complete revisions to local limits was insufficient. *Id.* at 24. The Commission requested that the Region modify the permit to provide it with eighteen months to complete the technical analysis analyzing the need to revise local limits, and another eighteen months to revise local limits, if necessary. *Id.*

The Region responded that the technical evaluation analyzing the need to revise local limits "simply consists of completing and submitting" a form that was included as an attachment to the final permit, along with a concise explanation of whether, based on that assessment, there is a need (or not) to revise local limits. RTC at 75. The Region's permitting staff conferred with compliance staff and determined that, in the Region's experience with other municipal permittees, 120 days is sufficient to complete the form and accompanying explanation of whether there is a need to revise local limits. *Id.* The Region added that the needs assessment should be largely within the ambit of the Commission's plant operators and staff. *Id.* As noted above, the Region recognized that the Commission may need more time than what was proposed in the 2017 draft permit to revise, or develop and finalize, local limits, and revised the final permit to allow for eighteen months to do so. *Id.*

The Commission fails to carry its burden of demonstrating clear error by the Region. The petition for review baldly states that the Region's refusal to modify the Commission's timeframe to submit the technical evaluation is "not rational and clearly erroneous." Pet. at 42. We disagree. The Region explained that the technical evaluation was not meant to require the significant resources the Commission believed it did, and that the form and concise explanation the Region requires for the technical evaluation should be easily within the expertise of plant operators. *See* RTC at 75. The requirement was simply to determine the *need* to revise pretreatment requirements, not to revise the requirements themselves. *See* Resp. at 50. The Region made a technical determination that the evaluation of whether there is a need to revise local limits does not require more than one hundred and twenty days, and the Commission's disagreement with the Region's determination is not enough to warrant review. *See*, *e.g.*, *City of Taunton*, 17 E.A.D. at 131-32 (citing cases).

3. The Commission Failed to Confront the Region's Explanation for Requiring a Twelve-Month Schedule for Compliance with New E. coli Limits

The Commission requested eighteen months to comply with new effluent limits for *Escherichia coli* bacteria, but the final permit requires compliance within twelve months. RTC at 75. The Region explained that, under the NPDES regulations, schedules must lead to compliance "as soon as possible." *Id.* (quoting 40 C.F.R. § 122.47(a)(1)). A one-year compliance schedule, the Region noted, will allow the Commission to "observe and analyze plant performance under a full range of weather conditions—a primary concern of the commenter—and during this time, to adjust and optimize treatment."³⁷ *Id.*

On appeal, the Commission claims that twelve months is not enough time and asks the Board to find the limit unsupported and clearly erroneous. In the absence, however, of any attempt by the Commission to confront the Region's explanation and address, with substantive reasons and legal/factual support, why the Region's rationale is clearly erroneous, it is not appropriate under the governing regulations for the Board to do what the Commission asks. *See, e.g., In re City of Pittsfield*, NPDES Appeal No. 08-19, at 7 (EAB Mar. 4, 2009) (Order Denying Review) (noting that "long and consistent line of Board authority" interpreting permitting regulations "has required that petitioners do more than cite, attach, incorporate, or reiterate comments previously submitted on the draft permit"; instead, petitioners must *explain why* permit issuers' responses to those comments are clearly erroneous), *pet. for review denied*, 614 F.3d 7 (1st Cir. 2010). Accordingly, the Board denies review of this issue.

³⁷ The Connecticut River Conservancy states that Massachusetts Surface Water Quality Standards have been based on *E. coli* rather than fecal coliform bacteria since 2006, and thus all NPDES permits renewed since that time have included effluent limits for *E. coli*. Conn. River Conservancy Amicus Curiae Brief in Support of Permitting Agencies at 8 (Dec. 16, 2020) (referencing Holyoke and Northampton permits issued in 2009 and 2008, respectively, which each included twelve-month compliance periods). The Conservancy observes that "[t]welve months compliance period has been par for the course for the last 15 years, with Springfield being the only municipal permit in the [Massachusetts] part of the watershed still left to update." *Id*.

4. The Commission Has Not Demonstrated That the Region Clearly Erred by Declining to Reopen the Public Comment Period to Accept Comments on Phosphorus Monitoring Requirements

The Commission claims that the Region clearly erred by failing to reopen the comment period to allow for public input on monitoring requirements for total phosphorus. Ret. at 43. The requirements are straightforward: For seven months a year, from April through October, the Commission must monitor the concentration of total phosphorus in its effluent on a twice monthly basis, using a composite of twenty-four grab samples taken during one consecutive twenty-four hour period, and report the results as average monthly and maximum daily concentrations. Final Permit pt. I.A.1, at 6 n.6. The Commission also must monitor ambient phosphorus content in the Connecticut River upstream of the Facility, once a month from April through October of odd-numbered years, and similarly report the results as average monthly and maximum daily concentrations, for comparison to the effluent concentrations. It I.H.3, at 23.

The Region explains that it added the requirements to the final permit in response to the Connecticut River Conservancy's recommendation that phosphorus be monitored, due to the presence of Eurasian water milfoil (*Myriophyllum spicatum*) in the Connecticut portion of the Connecticut River. RTC at 177. The Conservancy commented that "[u]nderstanding both the phosphorus and nitrogen inputs in the Connecticut River is important to understanding the spread of weeds like milfoil, as well as cyanobacteria outbreaks, if and when they occur." *10 Id. The

³⁸ As we recently noted, phosphorus limits are commonly written in terms of total phosphorus, which includes elemental phosphorus as well as phosphate phosphorus. *See In re City of Lowell*, 18 E.A.D. 115, 125 n.4 (EAB 2020) (citing Office of Water, U.S. EPA, Doc. No. EPA 440/5-86-001, *Quality Criteria for Water 1986*, at 241-42, 246 (May 1, 1986), https://www.epa.gov/sites/production/files/2018-10/documents/quality-criteria-water-1986.pdf.

³⁹ Phosphorus, like nitrogen, stimulates plant and algal growth, so excess levels of this nutrient are cause for concern. *See* RTC at 24, 27, 177; *City of Lowell*, 18 E.A.D. at 151-52. While nitrogen impacts predominate in marine ecosystems such as Long Island Sound, phosphorus impacts predominate in freshwater ecosystems such as the Connecticut River. *See In re City of Attleboro Wastewater Treatment Plant*, 14 E.A.D. 398, 407 n.10, 428 (EAB 2009).

⁴⁰ In its amicus brief, the Conservancy explains that invasive aquatic plants such as milfoil "can block navigation channels" and "reduce aesthetic and recreational value of water bodies, affecting tourism and real estate values." Conn. River Conservancy Amicus Curiae Brief in Support of Permitting Agencies at 6 (Dec. 16, 2020). It notes that, in addition to milfoil, hydrilla (*Hydrilla verticillata*) and curlyleaf pondweed (*Potamogeton crispus*), two other invasive species, were detected in the Connecticut River downstream

Region agreed with that rationale and further noted that, at present, existing phosphorus data are insufficient to determine whether the Facility's discharge has a reasonable potential to cause or contribute to an excursion of phosphorus-related water quality standards in the receiving waters. *Id.* Looking ahead, the Region explained that the phosphorus data will be useful in conducting a reasonable potential analysis in the next permit reissuance. *Id.*

In Part VI.A.1 above, we noted that the Board's review of a permit issuer's decision on whether to reopen a comment period is deferential. *In re Town of Concord Dep't of Pub. Works*, 16 E.A.D. 514, 531-33 (EAB 2014); *In re City of Palmdale*, 15 E.A.D. 700, 713-14 (EAB 2012), *pet. for review vol. dismissed sub nom. Simpson v. EPA*, No. 12-74124 (9th Cir. Oct. 28, 2013). In this instance, the Commission merely alleges error without making any attempt to challenge the facts or law underlying the Region's rationale for imposing phosphorus monitoring requirements. *See* Pet. at 43. The Region responds by noting that nutrient issues were on the table in these permit proceedings. Resp. at 51. The Region further notes that EPA possesses broad authority under the CWA to impose monitoring requirements. *Id.* at 39, 52 (referencing *In re City of Port St. Joe*, 7 E.A.D. 275, 306 (EAB 1997)).

In the absence of any substantive challenge to the Region's explanations, despite those explanations being sufficient to allow the petitioner to develop arguments on appeal, the Board concludes there is no clear error and instead defers to the Region's reasonable decision to proceed without a third comment period. See Town of Concord, 16 E.A.D. at 532-33 (deferring to permit issuer's decision not to reopen comment period); see also City of Lowell, 18 E.A.D. at 139 (denying review where petitioner failed to confront permit issuer's responses to comments on phosphorus). Accordingly, the Board denies review of this issue.

VII. CONCLUSION AND ORDER

For the foregoing reasons, the Board denies the petition for review.⁴¹ So ordered.

of the Facility in 2019-2020 surveys, heightening concerns about potential phosphorus contamination of this waterway. *See id.* at 5-6.

⁴¹ We have considered all the allegations in the petition and deny review as to all of them, whether or not they are specifically discussed in the opinion.