

**BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

In the Matter of:)	
)	
City of Cambridge, DPW)	NPDES Appeal No. 09-17
Combined Sewer Overflows)	
)	
NPDES Permit No. MA 0101974)	
)	
)	

**REGION 1'S MEMORANDUM IN OPPOSITION
OF PETITION FOR REVIEW**

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The central dispute over this National Pollutant Discharge Elimination System (“NPDES”) permit is whether the U.S. Environmental Protection Agency, Region 1 (“the Region”) imposed sufficient limitations on the City of Cambridge (“City” or “permittee”) related to the evaluation and control of alleged inflow from floodwaters in the Alewife Brook watershed into the City’s combined sewer system.

In his petition for review, Stephen Kaiser (“petitioner”) argued that the Region should have included additional requirements in the mandated inflow study contained in the permit. Because the petitioner has not demonstrated clear error or abuse of discretion by the Region, the Environmental Appeals Board (“Board”) should deny review of the permit.

I. STATEMENT OF THE CASE

A. The Applicable Legal Standards

The Clean Water Act (“CWA”) prohibits the discharge of pollutants to waters of the United States without an NPDES permit, unless the CWA otherwise authorizes such a discharge. The CWA provides for two types of effluent limitations to be included in NPDES permits: “technology-based” limitations and “water quality-based” limitations. *See* CWA §§ 301, 303, 304(b), 33 U.S.C. §§ 1311, 1313, 1314(b); 40 C.F.R. Parts 122, 125, 131. Technology-based limitations reflect a specified level of pollutant-reducing technology available and economically achievable for the type of facility being permitted. *See* CWA §§ 301(b)(1)(A), (B); 301(b)(2), 33 U.S.C. §§ 1311(b)(1)(A), (B); 1311(b)(2). Water quality-based effluent limitations are designed to ensure that state water quality

standards are met in the event that technology-based limitations are not sufficiently stringent. *See* CWA § 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C). Pursuant to Section 502 of the CWA, combined sewer overflows (“CSO”) constitute point source discharges subject to both technology-based and water quality-based effluent limitations in NPDES permits.

On April 19, 1994, EPA published the National CSO Control Policy (“CSO Policy”), which sets forth three primary goals focused on ensuring that CSO discharges only result from wet weather; bringing CSO discharges into compliance with technology-based requirements under the CWA, as well as applicable water quality standards; and minimizing water quality, aquatic biota, and human health impacts from wet weather flows. *See* 59 *Federal Register* (“*Fed. Reg.*”) 18688, 18688-18692, Vol. 59, No. 75 (April 19, 1994). To achieve these goals, the CSO Policy recommends technology-based effluent limitations developed using best professional judgment and recommends that each combined sewer system develop and implement a long-term CSO control plan. *See Id.* The CSO Policy establishes the minimum technology-based requirements as the implementation of nine minimum controls.¹ *See* 59 *Fed. Reg.* 18688 at 18690-18691. Pursuant to Section 402(q) of the CWA, NPDES permits issued after 2001 for discharges from municipal combined storm and sanitary sewers must conform to the CSO Policy.

In addition to the CWA technology-based requirements, Section 301(b)(1)(C) of the CWA requires achievement of “any more stringent limitation [than the technology-

¹ The nine minimum controls include: (1) proper operation and regular maintenance programs for sewer systems and CSOs; (2) maximization of use of the collection system for storage; (3) review and modification of pretreatment requirements to assure minimization of CSO impacts; (4) maximization of the flow to the publicly-owned treatment works treatment plant; (5) prohibition of CSOs during dry weather; (6) control of solid and floatable material in CSOs; (7) pollution prevention; (8) public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and (9) monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

based requirements set forth in Sections 301(b)(1)(A) and (B) and 301(b)(2)], including those necessary to meet water quality standards...established pursuant to any State law or regulation.” The Region, accordingly, develops water quality-based effluent limitations to comply with numerical and narrative standards adopted under state law. Water quality standards under the CWA consist of three elements, including (1) designated “uses” of the water, such as for public water supply, aesthetics, recreation, propagation of fish, or agriculture; (2) “criteria,” expressed either in numeric for narrative form, sufficient to protect the designated uses; and (3) “antidegradation” requirements to protect against the degradation of waters. *See* CWA § 303(c)(2)(A), 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 130.3, 131.6, 131.10, 131.11, and 131.12.

Under Section 303 of the CWA, a state may, with EPA approval, issue a water quality standards variance. A variance typically is a short-term revision to an otherwise applicable water quality standard. *See* 63 *Fed. Reg.* 36742, 36759, Vol. 63, No. 129 (July 7, 1998). EPA generally will only approve a state’s variance where there is a demonstration that one of the factors that would justify removal of a designated use or establishment of a subcategory of use has been satisfied, specifically the factors published at 40 C.F.R. § 131.10(g). *See Id.* In addition, a variance typically applies to individual dischargers for specific pollutants and does not otherwise modify the applicable water quality standards. *See Id.* Under Section 303(c)(1) of the CWA and 40 C.F.R. § 131.20(a), a variance should be reviewed, at a minimum, every three years, and extensions are warranted only where the conditions for granting the variance still apply. In the case of a variance for a CSO discharge, the state determines the appropriate level of CSO control for the affected waters, subject to EPA review and approval.

B. Factual Background

1. Description of Discharges

The City owns and operates a combined sewer system, which collects wastewater from a portion of the City and transports it to the Massachusetts Water Resource Authority's ("MWRA") Deer Island Wastewater Treatment Plant. *See Fact Sheet*, (Ex. 1, AR 7) at 2. The City owns and operates twelve CSOs that discharge from the combined sewer system under certain wet weather conditions. *See Id.*

A combined sewer system is a wastewater collection system owned by a state or municipality, as defined in Section 502 of the CWA, that conveys sanitary wastewaters and stormwater through a single-pipe system to the treatment plant of a publicly-owned treatment works ("POTW"), as defined in 40 C.F.R. § 403.3(p). *See 59 Fed. Reg.* 18688 at 18689. A CSO constitutes the discharge from a combined sewer system at a point prior to the POTW treatment plant, which occurs during certain wet weather conditions when the flow in the combined sewer system exceeds the system's capacity. *See Id.*

During the 1970s, the City began separating its combined collection system, building separate sanitary sewage and stormwater systems. *See Fact Sheet* at 2. Pursuant to a federal court order, the City continues to abate CSOs through additional sewer separation, hydraulic relief projects, and floatable control structures. *See U.S. v. Metropolitan District Commission ("MDC"), et al.*, No. 85-0489, 2005 WL 2542921 (D. Mass 2005), as amended by the *Second Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control ("Second Stipulation")* (April 27, 2006); *Final Permit ("Permit")* (Ex. 3, AR 12) at Attachment E. While the abatement projects will reduce

CSO discharges, they are not expected to eliminate CSO discharges entirely. *See Fact Sheet* at 2.

2. Description of Receiving Waters

The Massachusetts surface water quality standards list Alewife Brook (Segment MA71-04) as a Class B warm water fishery. The designated uses for Alewife Brook include habitat for fish, other aquatic life, and wildlife, as well as for primary (*e.g.*, swimming) and secondary (*e.g.*, fishing and boating) contact recreation. *See* 314 C.M.R. §§ 4.05(3)(b) and 4.06. Such waters must have consistently good aesthetic value. *Id.* at § 4.05(3)(b). As discussed further below, MassDEP has issued a variance for CSO discharges to Alewife Brook.

3. Description of CSO Control Plan and Water Quality Standards Variance

In order to facilitate compliance with water quality standards, the CSO Policy recommends that each combined sewer system develop and implement a long-term CSO control plan. *See* 59 *Fed. Reg.* 18688 at 18690-18692. In 1987, MWRA stipulated to responsibility and legal liability for all combined sewer overflows hydraulically connected to its collection system, which includes CSOs owned and operated by the City. *See* *Second Stipulation*, No. 85-0489 at 2; *Permit* at Attachment E; *Fact Sheet* at 8-9. In 1997, MWRA completed its Final CSO Facilities Plan, which recommended CSO control projects for Cambridge CSOs involving sewer separation, hydraulic relief, and floatable control projects. *See* *Fact Sheet* at 8; *Notice of Project Change for the Long Term CSO Control Plan for Alewife Brook* (“NPC”), EOEA No. 10335, MWRA (Ex. 7, AR 23), Chapter 1 (April 30, 2001).

In the Final CSO Facilities Plan, MWRA included information in its use attainability analysis to show that the City could not entirely eliminate its CSOs based on criteria such as costs and impacts associated with attaining a higher level of CSO control. *See Fact Sheet* at 9; *NPC* at Chapters 1-2; 40 C.F.R. § 131.10(g). In 1998, EPA approved MWRA's Final CSO Facilities Plan, including its use attainability analysis, as well as a tentative determination for the issuance of a water quality standards variance for CSO discharges to Alewife Brook. *See Fact Sheet* at 9; *NPC* at Chapters 1-2. On March 5, 1999, MassDEP issued a water quality standards variance for CSO discharges to the Alewife Brook/Upper Mystic River, which EPA approved. *See Fact Sheet* at 9-10, Attachment D; *NPC* at Chapter 2.

Based on additional information collected by MWRA and the City of Cambridge pursuant to the variance requirements, MWRA revised the Final CSO Facilities Plan with regard to the appropriate and feasible level of CSO control by the City in 2001. *See Fact Sheet* at 9; *NPC*. The level of CSO control detailed in the revised plan remains in accordance with the terms of the federal court order issued in an enforcement action taken by the United States against MWRA. *See Fact Sheet* at 9; *NPC* at Chapters 3-4, 8; *U.S. v. MDC*, No. 85-0489, as amended by *Second Stipulation*.

MassDEP extended the water quality standards variance for CSO discharges to Alewife Brook on August 30, 2007, making it effective through September 1, 2010. *See Fact Sheet* at 10; *Permit* at Attachment D. EPA approved this variance extension. *See Fact Sheet* at 9-10; *Permit* at Attachment D. The Region anticipates that MassDEP will extend the variance again in 2010. *See Fact Sheet* at 10; *U.S. v. MDC*, No. 85-0489, as amended by *Second Stipulation*, at 1. If MassDEP modifies the variance during the

permit term, EPA would consider this new information pursuant to 40 C.F.R. § 122.62(a)(2), making it cause for permit modification. *See Fact Sheet* at 10.

4. Procedural History

In Massachusetts, the Region administers the NPDES permitting program, as the Commonwealth has not obtained authorization to administer the program. The Region issued a draft NPDES permit to the City on July 24, 2009. *See Draft Permit* (Ex. 4; AR 6). From July 24, 2009 through August 22, 2009, the Region solicited public comments on the draft permit. *See Response to Comments (“RTC”)* (Ex. 2, AR 13) at 1. The Region received five sets of written comments, including comments from the petitioner. *See RTC*.

In his comments on the draft permit, the petitioner focused primarily on concerns about alleged flooding increases in the Alewife Brook watershed associated with a drainage relief project planned by the City. *See Stephen Kaiser Comments on Draft Permit* (Ex. 5, AR 28) at 1-4 (August 22, 2009); *RTC* at 8-15. The City plans to perform the drainage project to reduce the frequency and volume of CSO discharges in the Alewife Brook watershed, in accordance with the MWRA Final CSO Facilities Plan. *See NPC* at Chapter 8. This plan contains the recommended level of CSO control in the Alewife Brook watershed to comply with state water quality standards, consistent with the variances issued by MassDEP for CSO discharges to Alewife Brook, and the order issued pursuant to an enforcement action by the United States against MWRA. *See NPC* at Chapters 1-4, 8; *Fact Sheet* at 9-11; *U.S. v. MDC*, No. 85-0489, as amended by *Second Stipulation*, at 1. Prior to the Region’s issuance of the draft permit, the City submitted information to EPA regarding the drainage project and its impacts on the Alewife Brook

watershed. *See NPC* at Chapter 8. The City asserted in its materials that the project would not exacerbate flood conditions in the watershed. *See NPC* at Chapter 8, 8-7 to 8-11, 8-17 to 8-25, and Appendix E, E-3, E-9.

In contrast, the petitioner alleged in his comments that the City's drainage project would cause flooding increases in the Alewife Brook watershed and would result in increased inflow to the City's combined sewer system, which could lead to additional CSO and sanitary sewer overflow ("SSO") discharges, without the implementation of mitigation measures. *See Stephen Kaiser Comments* at 2-4; *RTC* at 8-11. Accordingly, the petitioner commented that the City needed to install flap gates on its CSO outfalls to prevent inflow. *See Stephen Kaiser Comments* at 4-5; *RTC* at 10-11. The petitioner further contended that the permit must require the City to monitor and report data on flooding and rainfall, as well as CSO activity, from its stream gauges in Alewife Brook to effectively characterize the efficacy of CSO controls. *See Stephen Kaiser Comments* at 4-5; *RTC* at 11-12.

After evaluating the petitioner's comments to the extent they mentioned a relationship between flooding issues in the Alewife Brook watershed and potential inflow problems, in conjunction with information provided by the City about the drainage project, the Region added a provision to the permit requiring the City to conduct an inflow assessment in the Alewife Brook watershed. *See Permit* at 6; *RTC* at 10-11. Specifically, the permit requires the City's second annual nine minimum control report, due to EPA on April 30, 2011, to include (1) an assessment of the potential for inflow from Alewife Brook to enter the combined sewer system through the existing regulator structures over a range of flood conditions and corresponding brook levels, and (2) an

assessment of the cost, feasibility, and effectiveness of installing inflow controls on the remaining CSO outfalls if flow enters the combined sewer system more frequently than a 100 year storm event. *See Permit* at 6. The inflow study results will provide the Region with information about the need for and feasibility of installing inflow controls on the City's CSO outfalls. *See RTC* at 11. As discussed in more detail below, the Region also included limits on CSO and SSO discharges, as well as monitoring requirements, in the permit. The scope of the permit's inflow-related conditions, however, is at the heart of this permit appeal.

After preparing its response to comments and obtaining certification from Massachusetts pursuant to Section 401 of the CWA, the Region issued a final permit to the City authorizing discharges of sanitary wastewater and stormwater from twelve CSO outfalls to Alewife Brook and the Charles River in Cambridge, Massachusetts, on September 30, 2009. *See MassDEP Water Quality Certification* (Ex. 8, AR 11) (September 30, 2009); *Permit* at 1. On November 3, 2009, Stephen Kaiser filed a petition for review of the permit.

In his petition, the petitioner argued that the permit must contain a prohibition on the construction of the City's drainage relief project until, at a minimum, the City completes the inflow assessment and implements mitigation requirements for the alleged flooding consequences associated with the project. *See Stephen Kaiser Petition for Review* ("Pet.") at 2-3 (November 3, 2009). The petitioner further asserted in his petition that the inflow study in the permit must contain (1) an "inflow problem statement," as well as (2) a schedule for the installation of flap gates or similar flow restrictions on the City's CSO outfalls. *See Id.* Additionally, the petitioner argued that the permit must

require the City to submit wet weather data from its monitoring gauges in Alewife Brook. *See Id.* at 3.

On December 4, 2009, the City moved to intervene in this NPDES permit appeal as a party respondent. The Board granted the City's motion in an order dated December 9, 2009. The Region filed a motion for a 60-day stay of the proceedings in this matter on December 16, 2009, which the Board granted on December 17, 2009. On December 28, 2009, the Region issued a notice of contested and uncontested conditions to the City. Given that the petitioner challenged only the Region's decision not to include certain conditions in the permit, the Region determined that none of the conditions in the permit were contested, making all of the permit conditions uncontested and severable from the issues raised in the petition for review. Accordingly, the permit became fully effective on February 1, 2010, pursuant to 40 C.F.R. § 124.16(a)(2)(i). Following the stay of proceedings, the Board directed the Region and the City to file their responses to the petition by April 5, 2010.

5. Permit Requirements

The permit authorizes the permittee to discharge combined stormwater and sanitary wastewater from particular combined sewer outfalls during wet weather, provided that the City implements the requisite nine minimum controls detailed in the permit and complies with state water quality standards, consistent with the variances issued by MassDEP and approved by EPA. *See Permit* at 2-3; *Fact Sheet* at 5. The permit establishes minimum implementation levels for the City's nine minimum control program, which the City must update no later than April 30, 2010. *See Permit* at 2-6. The permit also limits the activation frequencies and discharge volumes for CSO

discharges from the City's combined sewer system, as well as prohibits CSO discharges during dry weather and any SSO discharges. *See Id.* at 2-7, Attachment B.

The City must submit annual reports to EPA regarding its nine minimum control program. *See Id.* at 6-8. In the City's annual reports, it must quantify and report, in accordance with a monitoring plan, the activation frequencies and discharge volumes for the CSOs listed in the permit, as well as daily precipitation data. *See Id.* at 3-6, Attachments A and B. The annual reports must also contain status updates on the permittee's CSO abatement work conducted pursuant to the MWRA Final CSO Facilities Plan and the abovementioned federal court order. *See Id.* at 6; *U.S. v. M.D.C.*, No. 85-0489, as amended by *Second Stipulation*, at 1.

The permit further requires the City's second annual nine minimum control report, due to EPA on April 30, 2011, to include an assessment of the potential for inflow from Alewife Brook to enter the City's combined sewer system through the existing regulator structures over a range of flood conditions and corresponding brook levels, as well as an assessment of the cost, feasibility, and effectiveness of installing inflow controls on the City's CSO outfalls if flow enters the combined sewer system more frequently than a 100 year storm event. *See Permit* at 6.

C. Standard of Review

A party seeking review of an NPDES permit carries the burden of demonstrating that a permit condition (or the absence of a permit condition) is based on a clearly erroneous finding of fact or conclusion of law, or involves an exercise of discretion or an important policy consideration warranting review by the Board. *See* 40 C.F.R.

§ 124.19(a)(1)-(2); *In re Carlota Copper Co.*, 11 E.A.D. 692, 708 (EAB 2004); *Rohm & Haas*, 9 E.A.D. 499, 504 (EAB 2000).

In an NPDES permit appeal, simple repetition of objections made during the comment period or the “mere allegation of error” without specific supporting information are insufficient to warrant Board review. *In re Phelps Dodge Corp.*, 10 E.A.D. 460, 496, 520 (EAB 2002); *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000).

Additionally, parties seeking review of an NPDES permit cannot raise new arguments that were not raised in comments on the draft permit. *See* 40 C.F.R. § 124.19(a).

Arguments must be made with specificity below in order to be preserved for the Board’s review. *See In re Maui Elec. Co.*, 8 E.A.D. 1, 9 (EAB 1998); *In Re Puerto Rico Electric Power Authority*, 6 E.A.D. 253, 255 (EAB 1995).

Where petitioners offer opposing technical interpretations and conclusions to the Region’s determinations on the sufficiency of NPDES permit terms, they must demonstrate why the Region’s technical judgment and explanations warrant review by this Board. *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). As is discussed more fully below, the petitioner has not carried his burden and, therefore, the Board should deny review.

II. ARGUMENT

A. The Permit Appropriately Requires an Inflow Study Without Prohibiting or Mandating Limitations and Mitigation for the Permittee’s Drainage Relief Project

The petitioner argues that the Region should have included, in the permit’s requirement for an inflow assessment, a prohibition on the construction of the drainage relief project that the City plans to conduct pursuant to the Final CSO Facilities Plan

until, at a minimum, the City completes the inflow study and implements mitigation measures for alleged flooding increases in the Alewife Brook watershed. *See Pet.* at 2-3. This specific argument did not appear in the comments on the draft permit. *See RTC.* While the petitioner discussed the City's drainage relief project and alleged flooding consequences associated with such project in his comments, neither he nor any commenter requested that the permit prohibit construction of the project until the City conducted an inflow study and implemented mitigation measures. *See Stephen Kaiser Comments* at 2-5; *RTC.* Accordingly, the petitioner's claim was not preserved for Board review. *See Maui Elec. Co.*, 8 E.A.D. at 9.

Even if the Board reaches this argument, it should deny review because the petitioner has failed to show clear error in the Region's decision not to include the requested conditions in the permit. The petitioner is understandably concerned about CSOs and SSOs that have occurred in the Alewife Brook watershed, which raise health and safety, as well as environmental, concerns. *See Pet.* at Ex. 1-3. Nevertheless, the petitioner has failed to meet his burden of demonstrating that additional permit conditions are warranted.

The petitioner commented on the draft permit that the City's drainage relief project would increase flooding in the Alewife Brook watershed and asserted that the City had not adopted any mitigation plans. *See Stephen Kaiser Comments* at 2-4. The petitioner further indicated that the alleged flooding increases would result in additional inflow to the City's combined sewer system, which could increase CSO and SSO discharges. *See Id.* As a result, the petitioner argued that the City must install flap gates on its CSO outfalls. *See Id.* at 4-5. In his petition, the petitioner expands his request for

relief by claiming that, in addition to the installation of flap gates or similar flow restrictions, the permit must prohibit construction of the City's drainage relief project until the City at least conducts the inflow assessment required by the permit and implements mitigation measures for the alleged flooding increases in the Alewife Brook watershed. *See Pet.* at 2-3.

In the Region's responses to the petitioner's comments that alleged flooding increases in the Alewife Brook watershed could result in increased inflow to the City's combined sewer system, leading to additional CSO or SSO discharges, the Region noted that the permit limits and establishes conditions for allowable CSO discharges and prohibits any SSO discharges. *See RTC* at 10; *Permit* at 2-7, Attachment B. The permit specifically mandates limits for the activation frequencies and discharge volumes from the City's CSOs into Alewife Brook, as well as prohibits CSO discharges during dry weather. *See Permit* at 2-7, Attachment B. The Region set these limitations consistent with the Final CSO Facilities Plan and the water quality standards variance issued by MassDEP for CSO discharges to Alewife Brook. *See Id.*, *Fact Sheet* at Attachment D.

Additionally, in response to the petitioner's comments that the permit must contain inflow controls on the City's CSO outfalls, the Region added a provision to the permit requiring the City to conduct an inflow assessment for its combined sewer system, as described in more detail below. *See Stephen Kaiser Comments* at 4-5; *RTC* at 10-11; *Permit* at 6. In developing this permit requirement, the Region evaluated information provided by the petitioner, as well as by the City, regarding the drainage relief project and its anticipated impacts on the Alewife Brook watershed. In contrast to the petitioner's assertions described above, the City's materials indicate that the drainage

relief project will not exacerbate flooding conditions in the Alewife Brook watershed. *See NPC* at Chapter 8, 8-7 to 8-11, 8-17 to 8-25, and Appendix E, E-3, E-9. The City also informed the Region that it received all the necessary state permits to proceed with construction of the drainage relief project. *See RTC* at 10. Given the conflicting information presented to the Region by the petitioner and the City regarding the alleged flooding consequences from the City's drainage relief project and any potential corresponding inflow into the City's combined sewer system, the Region acted reasonably in requiring an inflow assessment in the permit, rather than prohibiting construction of the project or mandating a schedule for specific inflow controls or mitigation measures at this time.

The inflow study contained in the permit specifically requires the City to assess the potential for inflow from Alewife Brook to enter the combined sewer system over a range of flood conditions and corresponding river levels, as well as to assess the cost, feasibility, and effectiveness of installing inflow controls on the City's CSO outfalls if flow enters the sewer system more frequently than a 100 year storm event. *See Permit* at 6; *RTC* at 10-11; *Pet.* at 2-3, Ex. 1. If the results of these assessments, which the City must submit to EPA in its second annual nine minimum control report no later than April 30, 2011, demonstrate the need for and feasibility of inflow controls on the City's CSO outfalls, the Region could modify the permit at that time to incorporate such inflow control requirements. *See Permit* at 6.

The Region established the permit requirements, including the limits and conditions on the City's CSO and SSO discharges, as well as the inflow assessment, to ensure compliance with the CSO Policy and the Massachusetts water quality standards,

and, accordingly, the CWA. The Region used its best professional judgment and technical expertise to determine that the inflow study in the permit was sufficient to evaluate any inflow problem in the Alewife Brook watershed that could lead to unauthorized CSO and SSO discharges by the City, without prohibiting the construction of the City's drainage relief project or incorporating additional mitigation measures for the drainage project in the permit prior to analyzing the results from the study. Accordingly, deference should be afforded to the Region. *In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 567-568 (EAB 1998); *see also In re Envotech, L.P.*, 6 E.A.D. 260, 284 (EAB 1996) ("absent compelling circumstances, the Board will defer to a Region's determination of issues that depend heavily upon the Region's technical expertise and experience").

The petitioner failed to show clear error in the Region's analysis or substantiate his assertion that the Region must prohibit construction of the City's duly permitted drainage relief project, or require specific mitigation measures for the project, prior to any analysis of whether inflow even enters the City's combined sewer system as a result of such project. The petitioner has not demonstrated how the combination of the permit requirements that limit and establish conditions for CSO discharges, prohibit SSO discharges, and mandate an inflow assessment for the City's CSO outfalls are insufficient to address his concerns regarding unauthorized CSO and SSO discharges resulting from potential inflow into the City's combined sewer system. The petitioner's strategy would prescribe an arbitrary solution before the identification of any inflow problem or the assessment of appropriate inflow controls. When a petitioner challenges the Region's technical judgment, "petitioners must provide compelling arguments as to

why the Region's technical judgments or its previous explanations of those judgments are clearly erroneous or worthy of discretionary review." *Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. at 668 (citing *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 404 (EAB 1997)). The petitioner failed to do so in this case and, therefore, review should be denied.

B. The Permit Requirement for the Inflow Study Contains Sufficient Parameters to Promote the Development of Useful and Accurate Information about Stream Inflow from Alewife Brook

The petitioner argues that the Region should have required the permittee to include an "inflow problem statement" in its first annual nine minimum control report, which the permittee must submit in accordance with the permit. *See Pet.* at 3. The petitioner claims that this statement would provide a foundation for the permittee's mandated second annual report, in which it must detail results from its inflow study in the Alewife Brook watershed. *See Pet.* at 3; *Final Permit* at 6. The Board should deny review of this issue because the petitioner has failed to demonstrate why the absence of such a provision in the permit constitutes clear error by the Region.

The permit requires the permittee to submit, in its first annual report, an updated nine minimum control plan that reviews the current controls and updates them to enhance their effectiveness. *See Permit* at 6. Thereafter, the permit requires the permittee to submit a second annual report containing an assessment of the potential for inflow from Alewife Brook to enter the City's combined sewer system over a range of flood conditions, as well as an assessment of the cost, feasibility, and effectiveness of installing inflow controls on the City's CSO outfalls if flow enters the combined sewer system more frequently than a 100 year event. *See Id.*

The petitioner merely asserts that the Region should have included the requirement for an “inflow problem statement” in the permit, without any discussion of what the statement would contain or why such statement would improve the usefulness or accuracy of the inflow study that the permit requires the permittee to conduct. *See Pet.* at 3. Presuming the petitioner envisioned that the statement would describe problems associated with inflow from Alewife Brook, his analysis is misguided in that the permittee cannot make a statement about the parameters of an inflow problem prior to analyzing whether such problem even exists.

The permittee must first determine whether a problem exists with inflow into its combined sewer system from floodwaters in the Alewife Brook watershed. *See Permit* at 6. Thus, the inflow study required in the permit mandates an initial assessment of whether the City experiences an inflow problem in its combined sewer system. *See Id.* If the study reveals an inflow problem, the permittee must then assess the installation of inflow controls to address such problem. *See Id.* In its second annual report required by the permit, the permittee must document and transmit to the Region the results from these assessments, which would likely contain information resembling an inflow problem statement, if applicable, in addition to any necessary proposed solutions. *See Id.* The assessment of inflow could lead to permit requirements for the installation of controls on the City’s CSO outfalls if necessary and feasible to ensure compliance with the CWA.

The petitioner failed to demonstrate why an inflow problem statement would be necessary to facilitate an effective inflow study in a permit that already requires a full evaluation of any inflow problem, as well as potential solutions to any such problem. *See Pet.* at 3. Accordingly, the petitioner did not show clear error by the Region in its

decision not to require development of such a statement. The Board should, therefore, deny review of this issue.

C. The Permit Appropriately Requires an Inflow Study Without Mandating a Schedule for Inflow Controls Prior to Review of the Study Results

The petitioner contends that the Region should have included a schedule for flap gates or similar flow restrictions to prevent inflow from Alewife Brook floodwaters from entering the City's combined sewer system. *See Pet.* at 3. Because the petitioner failed to demonstrate clear error with the Region's decision not to impose a schedule for the installation of flow restrictions on the City's CSO outfalls potentially affected by Alewife Brook floodwaters, the Board should deny review of this issue.

The petitioner claims that the Region should require a schedule for a particular solution (i.e., flap gates) to an inflow problem from Alewife Brook floodwaters prior to the permittee's investigation of whether inflow enters the City's combined sewer system and generates the potential to cause unauthorized CSOs or SSOs, and, if it does, its assessment of installing controls to limit such inflow. *See Pet.* at 3. Even the petitioner acknowledges that the requirements for installing flow restrictions on the CSO outfalls "would be conditional upon the results of the inflow study" contained in the permit. *See Id.; Permit* at 6. If the inflow study reveals the need for and feasibility of installing inflow controls on the City's CSO outfalls, the Region could modify the permit to include these requirements. *See Permit* at 6; *RTC* at 11. The petitioner has not carried his burden to show that the Region's judgment in this regard constitutes clear error or raises an important policy issue.

The Region employed its best professional judgment and technical expertise in mandating sufficient permit requirements for the inflow assessment to determine

whether an inflow problem exists and how to control it in a feasible and cost effective manner if necessary. *See Permit* at 2-6. The petitioner failed to demonstrate that the Region's phased approach to addressing any inflow problem at the City's CSO outfalls, rather than mandating a particular solution and schedule for the alleged problem prior to the City's inflow assessment, was unreasonable. The petitioner even recognizes that setting a schedule for flow restrictions on the City's CSO outfalls depends upon the results of the inflow assessment as detailed in the permit. *See Pet.* at 3; *Permit* at 6. Accordingly, the Board should afford the Region deference and deny review of this issue. *See NE Hub*, 7 E.A.D. at 567-68; *Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. at 668 (citing *In re Ash Grove Cement Co.*, 7 E.A.D. at 404).

D. The Permit Contains Sufficient Monitoring Requirements to Assess Wet Weather Conditions for Alewife Brook

The petitioner contends that the Region should have required the permittee to include data from the Cambridge monitoring gauges in Alewife Brook in its annual reports to reflect wet weather conditions and major floods. *See Pet.* at 3. The petitioner asserts that these data are necessary for evaluating inflow into the City's combined sewer system. *See Id.* In this claim, the petitioner merely repeats his comments on the draft permit without demonstrating any error in the Region's explanation of its technical approach. *See Stephen Kaiser Comments* at 4-5 (commenting that the City must monitor and regularly report flooding and rainfall, as well as CSO discharge and inflow, data from its two stream monitors in Alewife Brook); *RTC* at 11-12 (responding that the monitoring and reporting requirements in the permit, combined with publicly available data from the United States Geological Survey ("USGS") stream gauge in Alewife Brook, will provide sufficient information for assessing permit compliance and the implementation of

controls on the City's CSO outfalls). Accordingly, the Board should deny review of this issue. *See Phelps Dodge*, 10 E.A.D. at 507-09, 518-19; *Knauf Fiber Glass*, 9 E.A.D. at 5.

Even if the Board reaches the merits of this claim, it should uphold the Region's decision not to require the City to include additional stream data in its annual reports. The permit requires the City to develop a CSO monitoring plan that describes the methods it will use to quantify CSO activation frequencies and discharge volumes. *See Permit* at 5, Attachment B. The permit then mandates that the permittee annually report the activation frequencies and discharge volumes for the CSOs listed in the permit that occur during the calendar year, as well as the precipitation for each day throughout the year, including total rainfall, peak intensity, and average intensity. *See Id.* at 5-6. Moreover, the permit mandates that the City report comparisons and evaluations of actual and average modeled precipitation in the Alewife Brook watershed, along with the corresponding CSO activation frequencies and discharge volumes under the various conditions. *See Id.* at 6. The USGS operates and maintains a stream gauge in Alewife Brook that continuously records river data, across varying wet weather and flood conditions, which are publicly available in real time online. *See RTC* at 11-12. Accordingly, the monitoring and reporting requirements contained in the permit, complimented by the readily available USGS data, provide sufficient information to the Region for its evaluation of weather conditions and corresponding CSO events in the Alewife Brook watershed.

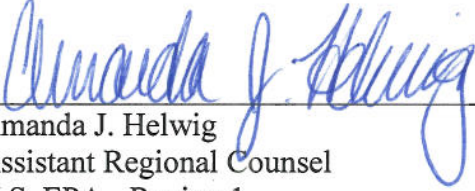
The petitioner asserts that data from the Cambridge monitoring gauges are essential to understanding and rendering preliminary calculations of alleged inflow from Alewife Brook floodwaters to the City's combined sewer system. *See Pet.* at 3; *Permit*

at 6. The petitioner, however, fails to explain what additional information the Cambridge monitoring data could provide or why they are necessary for the inflow evaluation and analysis. *See Pet.* at 3. The inflow study contained in the permit requires sufficient assessment of any inflow problems and necessary controls for the City's CSO outfalls in the Alewife Brook watershed. *See Permit* at 6. The petitioner has not demonstrated clear error with the Region's mandated inflow study in regard to attaining the requisite information for understanding and calculating any inflow into the City's combined sewer system. *See Pet.* at 3. The Region developed the monitoring requirements in the permit using its best professional judgment and explained its reasonable basis for not including additional monitoring. Because the petitioner failed to show clear error or abuse of discretion in the Region's analysis, the Board should deny review of this issue.

III. CONCLUSION

For the foregoing reasons, the Board should deny the Petition for Review.

Respectfully submitted,


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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Memorandum in Opposition of Petition for Review, in connection with NPDES Appeal No. 09-17, was sent to the following persons in the manner indicated:

By Electronic Submission:

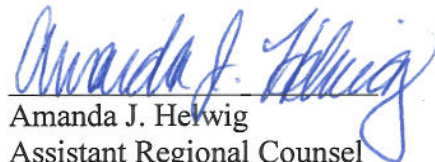
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