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

In re: City of Lowell, Massachusetts **NPDES Permit No. MA0100633**	)	**NPDES Appeal No. 19-03**

REPLY OF PETITIONER

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INTRODUCTION

Pursuant to 40 C.F.R. §124.19(c)(2) Petitioner City of Lowell, Massachusetts ("City" or "Lowell") submits in this matter its Reply to the Environmental Protection Agency's Response of December 10, 2019. The Petition addresses and challenges issues from EPA's September 25 reissuance of the subject NPDES permit.

THRESHOLD AND PROCEDURAL ISSUES

Modern wastewater treatment is a serious business, requiring municipalities that treat millions of gallons a day of sewage and industrial wastewaters to apply complex technologies in a manner that works correctly essentially all of the time. These tasks are complicated further in cases such as this where the permittee operates a Combined Sewer System and must meet technology-based requirements and requirements designed to protect water quality standards, and simultaneously protect public health by maintaining at least partial treatment of the maximum possible wet weather flows.

For wastewater treatment plants to be successful in protecting the environment and public health, they have to be permitted appropriately. The City of Lowell has had to, regretfully, challenge its permit because the permit imposes inconsistent and unnecessary requirements that undermine the City's ability to minimize pollutants discharged.

For example, on one hand, EPA orders the City to maximize flows through the treatment plant – which makes perfect sense because each gallon we treat during wet weather is another gallon that is not discharged untreated from our CSO system. However, on the other hand, EPA continues to impose an annual average flow limit which restricts the amount of flow the City can take through the plant. EPA further won't authorize the City's use of its biological diversion line (despite such diversions being authorized in numerous other CSO permits nationwide). That

makes no sense. Other states and EPA Regions don't impose such inherently conflicting requirements on their CSO communities.

EPA acknowledged this inconsistency and error as to the flow limit in a 2010 administrative order to the City (Admin. Order Docket 010-026; 9/30/2010). AR H.22. That order (1) acknowledged that the flow limit was exceeded because the City did the right thing by maximizing flows through the plant and (2) relieved the City of having to comply with the flow limit by imposing a monitor only requirement for flow until the permit was reissued. Well, the permit was reissued without addressing the inconsistency between these two regulatory requirements. That is not right and certainly not fair. The City should not have had to appeal its permit to get EPA to remove the flow limit or to adjust it so that it would not interfere with the maximization of wet weather flows (for example, by excluding wet weather days from the annual average flow calculation).

Rather than addressing the inconsistencies, unnecessary requirements, and oversights in the permit, the Region attacks the City and seeks to evade review of these issues. That is neither appropriate nor equitable – especially given that the Region flatly rejected several requests by the City to meet and discuss issues such as this before the permit was issued.

The Region Incorrectly Alleges a City Failure to Confront EPA Technical and Legal Responses

The Region's effort to shield its permit decisions from review here are based in part on a suggested procedural threshold barring permittee challenges that repeat pre-issuance comments without further confronting the agency's technical and legal support. Although the City does not agree on any level with the narrow scope of review proposed by the Region, any suggestion that Lowell has not presented substantive factual and/or legal challenges, properly supported and cited, on each and every issue is incorrect.

The Region's support for application of its procedural threshold to this case is unavailing. In *City of Pittsfield* the EAB and the Court of Appeals both found that the petitioner had not even identified the NPDES permit provisions or issues that it wished to challenge, relying instead on mere references to the pre-issuance record. *City of Pittsfield v. EPA*, 614 F.3d 7, 11-13 (1st Cir. 2010). *Pittsfield* bears no relevance to this case.

The City here has identified internal inconsistencies in the permit along with material differences from how other CSO permits have been written by both EPA and the states nationally. The City has also identified aspects of the permit which are inconsistent with EPA's own permitting regulations and applicable laws.

"Differences of Opinion" or "Preference"

A primary theme running through the Region's permit proceedings and its Response, Response at 23-24, is that it can impose any requirement it wishes notwithstanding that its own regulations provide a different standard for the requirement at issue. This is not a difference of opinion or a case in which Lowell would like to take a different approach. Instead the matters that the Region wishes to shield from review involve substantive standards that an agency may not disregard without a lawful reason.

The Region appears to focus here on four appeal issues, *id*. at 24, first noting E. coli bacterial limitations where the City has challenged the limitation expressed as a daily maximum. The City does not simply prefer a weekly average. Rather, EPA's regulations call for limits expressed as monthly and weekly averages unless they are impracticable. *Infra* Argument section 3. The Region has made no suggestion, much less a showing, that weekly limits are impracticable. The regulation must mean something, it means what it says; and where it requires impracticability for a deviation from its strictures, there must be some showing of

impracticability. This is not a difference in opinion or preference.

Second the Region notes testing requirements for Whole Effluent Toxicity ("WET") and metals. Relying on general guidance authorizing monitoring, the Region ignores specific regulations providing for standard monitoring for pollutant parameters that are not specifically subject to permit limitations. *Infra* Argument section 4. This is only a difference of opinion or a preference if it is acceptable for the Region to impose any monitoring requirement it wishes no matter how excessive in place of the standard set by its own regulations.

The Region attributes its hunger for truly massive data sets for WET and metals to concerns about having enough data to do proper "Reasonable Potential" ("RP") for water quality standards exceedance determinations at the next reissuance, the necessary predicate for permit limits. But the Region fails to inform the EAB, that its regulations prescribe a statistical procedure whereby RP determinations are informed by both the data themselves, and also by the number of effluent data points. If there are fewer data points, a multiplier procedure is used that scales up the predicted effluent concentration. AR K.1 at Tables 3-1 & 3-2[1] (section 3.3.2 "Addressing Uncertainty in Effluent Characterization by Generating Effluent Monitoring Data") (EPA's Technical Support Document). This is not a difference of opinion or a preference. EPA also ignores the difficulty in taking clean metals sampling during the winter months when City personnel cannot wade into the stream to collect a clean sample. The City operational team is adamant that winter sampling is a real impracticability (especially to collecting clean metals data) rather than a preference against winter sampling.

For similar reasons, the total phosphorus limits and flow limits issues, Response at 24, do not depend on a mere difference of opinion or a preference.

[1] "Reasonable Potential Multiplying Factors" between 1.1 and 368.

The case law the Region uses does not support its characterization of the City's positions as opinion or preference. In *Upper Blackstone* the difference of opinion to which the EAB and the Court of Appeals referred involved petitioner challenges to total nitrogen permit restrictions wherein the Board and the Court found that Blackstone presented no substantive evidence or legal argument to contradict the EPA decisions. *In re: Upper Blackstone Water Pollution Abatement District*, 14 E.A.D. 577, 598-99 (2010), *affirmed* 690 F.3d 9 (1st Cir. 2012). As to all of its appeal issues Lowell has presented substantial factual and legal arguments. The Region's reliance on *Town of Ashland* presents a similar contrast. The Town had presented to the EAB (1) as to WET limits unsubstantiated objections to EPA's 7Q10 critical receiving waters low flow statistic; and (2) as to an effluent color monitoring requirement an unsupported legal position that EPA could not require monitoring for a pollutant without permit limits, and despite its own record acknowledgement of an instream color issue. *In re: Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661 (2001). That case provides no support for the Region's position here.

Reliance on Generic Monitoring Authority

The Region claims that generic Clean Water Act ("CWA") and NPDES program regulation authority for imposing monitoring requirements fully support any monitoring requirement irrespective of reasonableness, and apparently that a petitioner may not challenge a monitoring requirement unless there is "no basis in fact for the agency to require information in the first place," Response at 2. The EAB should not be open to this broad assertion of unreviewable authority. Among other challenges, the City questions the reasonableness of the requirement for it to amass over the next five years effluent WET testing data involving quarterly analyses of two test species – a total of 40 additional test results. *Infra* at Argument section 4.

Although the Board will evaluate this issue on the Region's full Response and the City's full Reply herein, the standard of review the Region suggests would allow weekly WET testing (160 test results), or daily WET testing (1825). 40 additional WET tests on top of the 40 performed over the past five years, which also triggers commensurate metals sampling - is legally unsupported. There is no reasonable potential for the City to exceed any toxicity limit based upon an extensive record of successful WET test results.

The Clean Water Act directs that monitoring requirements satisfy a reasonableness standard. Section 308(a), which the Region cites, authorizes the agency to "reasonably require monitoring." 33 U.S.C. § 1318(a) (emphasis added). The Region's reliance on *Town of Concord* is equally misplaced. The "no basis in fact" reference that the Region would ask the Board to apply to an analysis of monitoring frequency was in fact a standard the Board applied to the question of whether monitoring could be required at all, and not to the amount or frequency of such monitoring. *In re: Town of Concord Department of Public Works*, 16 E.A.D. 514, 542 (2014).

The Region's blanket reliance on generic monitoring authority should be considered only as background to the specific legal and factual arguments concerning permit monitoring requirements that Lowell presents.

ARGUMENT

1. Total Phosphorus Monthly Average Limit (Summer). In its Response the Region simply continues to support its total phosphorus ("TP") permit limit with its 1984 guidance number of 0.1 milligrams per liter ("mg/l"). It fails to acknowledge that its own regulations provide a road map for instream water quality targets when there is no applicable water quality standard, see Petition at 8. The regulation allows three approaches, and the permit agency must

use one of those. 40 C.F.R. § 122.44(d)(1)(vi). Here the Region purports to take the approach of using a Clean Water Act section 304(a) criterion, referring to the 1984 Gold Book number. Response at 4, 28.

The Region chooses to not address or even acknowledge the point that the Gold Book number is not a section 304(a) criterion at all. In trumpeting "protective target values from peer-review literature," Response at 29, it fails to address the City's observation that the Gold Book itself makes it clear that there is no such peer-review literature for the 0.1 mg/l guidance. Rather than attempt to address the legal or factual underpinnings of its target value, the Region merely relies on its monotonous references to a "precautionary approach," *see* Response at 9, 30, 31, *passim*, and references to use of "site-specific information" or approaches, *see id*. at 27, 28, *passim*, none of which appear on the record.

Finally, the Region claims that Lowell did not demonstrate that the Region's use of a simplistic dilution model was in error; or that the Region's use of the 7Q10 critical low flow was in error. Response at 29-31. This was a classic case where a TMDL was needed, and EPA should have produced one in the 14 years since the issuance of the prior permit to the City. In contrast to the simplified equation at the top of the Region's Fact Sheet page 25, AR A.15, from which the Region derived the TP limit, a TMDL would have considered upstream dischargers of TP including those currently in the process of reducing TP discharges, and a proper hydrologic model of the river rather than the simple use of the 7Q10. The latter point, for which the Region sees no support, is conclusively addressed by EPA's own Technical Support Document, AR K.1 at section 4.6.2, recommending average or long-term river flow statistics for analyses of cultural eutrophication and other long term effects.

Reliance on unpromulgated agency guidance,[2] "protective approaches," and illusory site-specific analyses cannot shield the Region from its legal obligation to properly address water quality conditions.

2. Effluent Flow Limit. Tellingly, EPA's Response entirely ignores *Virginia Department of Transportation et al. v. EPA*, cited by the City, in which the federal court held that EPA unambiguously does not have the legal authority to regulate non-pollutants such as flow. 2013 U.S. Dist. LEXIS 981 (granting Rule 12(c) Motion for Judgment on the Pleadings); *See* Petition at 17.

But impliedly acknowledging its legal problem the Region argues that its authority is not limited to just pollutants. But none of its citations support this idea. It cherry picks for example CWA section 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C). Although the subsection does not use the word "pollutant," the entire context of the sections 301 (a) and (b) is on pollutants. The Region's other citation to CWA section 502(6) (definitions, 33 U.S.C. § 1362) is similarly unavailing, the Region noting the definition inclusion of "sewage" and "municipal . . . waste." *See* Response to Comments ("RTC") at 18, AR B.1.

EPA's defense of the flow limit is further predicated in part on its argument that the analysis of Reasonable Potential (for the instream exceedance of water quality standards) for pollutant parameters is based on a "worst-case" assumption for effluent flow and a resulting decreased instream dilution. Response at 14, 35. But this analysis has a fatal flaw. The circumstances in which effluent flow would exceed the 32 mgd design are solely related to wet weather events, and in any such events the receiving waters flow would also be at increased

[2] Of course, use of such unpromulgated guidance to impose a permit limit violates Executive Order 13891, 84 FR 55235 (2019).

levels, maintaining or increasing dilution, and by definition decreasing concentrations of the pollutant parameters about which the Region expresses concern. The Region's facially erroneous evaluation should be given no weight.

Significantly, the relevant pollutant-specific limits of the permit are in any event expressed in terms of both concentration and mass, and the mass limitations entirely fix the issue that appears to bother the Region. For example, the permit allows a monthly average CBOD discharge of 25 milligrams per liter and 6672 pounds per day. However, if the monthly effluent flow volume should be twice the 32 mgd design flow, the CBOD mass would still be limited to 6672 pounds. That means the City would have to meet an implicit concentration limit of 12.5 mg/l. There is simply no scenario where a flow limit is necessary to protect water quality standards. That is why so many permits throughout the country do not have flow limits, including EPA's permit for the DC Water's Blue Plains Treatment Plant.[3]

Note that the 2010 Administrative Order issued to the City by the Region, AR H.22, recognized the error in permit flow limits for a CSO system, effectively setting them aside in favor of a High Flow Management Plan. The unstated understanding was that a reissued permit would (1) not include such flow limits, (2) in favor of permit provisions coordinated with the City's Long Term Control Plan and other CSO program elements. This has not occurred. Instead, the interim, monitor only effluent limits in the Administrative Order have terminated with the reissuance of the City's NPDES permit. (Order at page 6, paragraph 5, "From the effective date of this Order until the issuance of a new Permit or this order is modified or superceded, the limitation for Annual Average Flow through the WWTF shall be Monitor

[3] *See* DC Water Blue Plains Treatment Plant NPDES Permit No. DC0021199 (July 26, 2018), *available at*: https://www.epa.gov/sites/production/files/2018-10/documents/blueplains_2018_final_permit.pdf.

Only"). Thus, the City now faces liability again should it maximize flows through the plant in excess of the arbitrary flow limit.

Next the Region relies on the fact that other NPDES permits include flow limits. But this is of no legal importance in the absence of judicial decisions supporting such limits after an adverse litigation process. The Region cites no such judicial holdings. The Region also fails to note the flip side of its argument – that a majority of municipal permits – especially those for CSO communities – are written without flow limits, like EPA's permit for the District of Columbia.

Finally the Region continues to press its illusory antidegradation argument, wherein it argues that it cannot remove the existing flow limit (even if illegal) because that would allow an increased discharge of pollutants. EPA misses the forest through the trees. Treating more flow at the plant reduces untreated sewer overflows (some treatment is always better than no treatment). Moreover, the concentration and mass limits in the permit prevent any increase in the discharge of pollutants. We note that EPA has allowed the removal of flow limits on a statewide basis in South Carolina and West Virginia, among others, Petition at 15, without any assertion of antibacksliding obstacles. The fact of the matter (as recognized by EPA's order to the City giving it relief from the flow limit) is that more pollution will enter the environment if the City abided by the flow limit. The flow limit prevents the City from minimizing pollutants such that its removal will ensure the minimum amount of pollution is discharged.

There is no instance where the flow limit is necessary to protect water quality standards. Conversely, violation of the flow limit alone has no environmental significance. That is exactly what has happened to the City where the flow limit was exceeded but no water quality standards were exceeded.

Further contrary to the Region's legal argument, the antidegradation review provisions to which the argument refers are only applicable to defined "High Quality Waters." 314 CMR 4.04(5). Although the receiving waters are supportive of many designated uses, they do not currently fall within the definition. *See* AR A.15 (the Region's Fact Sheet at 14 identifying Merrimack River water quality impairments). Noting that with any increase of pollutants discharged from the facility there would be a corresponding decrease from CSO outfalls, Response at 34, the Region implicitly acknowledges the form-over-substance character of its antidegradation argument, even if the concept applied, which it does not.

The Region's antidegradation argument continues its irrational permitting of the City. Again, the overriding goal is to maximize flow through the plant to minimize untreated CSO discharges. Arguing against an increase in flow through the plant on antidegradation grounds is inconsistent and irrational.

3. Escherichia Coli Daily Maximum Limit.

Although not disputing the City's point that the geometric mean and single sample ("STV") E. coli measures are based on the same statistical distribution of illness data, and therefore that protection of one is protection of both, EPA claims to have concluded that the monthly average and daily maximum limits address "distinct, important aspects of protection," Response at 15. But their juggling of numbers concedes that neither measure results in perfect protection, nor is it intended to do so.

But all of this misses the City's principal legal point that limits for POTWs are required to be established as monthly average and weekly average "unless impracticable." 40 C.F.R. § 122.45(d); Petition at 20. The Region has made no attempt either in its Response to Comments ("RTC") or now to say why weekly limits (rather than daily) would be impracticable. Of course,

it cannot make such a demonstration given the numerous states which use monthly/weekly limits (such as North Carolina, Kentucky, Mississippi, Arkansas, Missouri, Kansas, to name a few). The Region may not hide behind its "protective approach," mantra. *See* Response at 35-36; RTC at 22, AR B.1. Its failure to follow its own regulation without an impracticability showing is clear error of law.

The Region now claims that its most important support for daily limits was the Massachusetts water quality standard itself, which it characterizes as requiring daily limits. Response at 35-36. Although the standard states that no single sample shall exceed the STV number, it does not require daily limits. The Massachusetts standard also states that the geometric mean over the most recent six months shall not exceed the 126 colonies number, 314 CMR 4.05(3)(b)(4)(b), but the Region does not apply the 126 number as a six-month limit – it applies it as a monthly average. EPA has a principal guidance document dealing with permit requirements for human health and other purposes, AR K.1 (the Technical Support Document), largely dedicated to describing how permit limits are to be set. Similar to most limits for toxics which are expressed as four-day chronic criteria and one hour acute criteria, *see* TSD at section 2.2.1 ("Magnitude, Duration and Frequency"), it defines how POTW average monthly and average weekly limits are established in compliance with 40 CFR section 122.45(d).

In an effort to avoid having to challenge the daily maximum limit, the City suggested several regulatory alternatives. Although the Region mounts a purely regulatory argument as to why it did not consider options such as allowing some mixing and/or a higher daily maximum number, nowhere does it address the City's request for an exception provision, see Petition at 20-21, allowing a very small percentage of daily maximum exceedances (consistent with the applicable standard) or a higher limit when effluent flow is greater than the 32 mgd design

capacity. EPA is fully aware that such an allowable exception approach to the daily maximum limit is used in all NPDES permits in states like West Virginia, Petition at 20, and South Carolina, for example.

4. Whole Effluent Toxicity Testing Frequency. Totally ignoring the City's reference to quarterly WET testing it has been doing for the past 14 years with no test showing any indication of relevant toxicity, Petition at 22, EPA first mischaracterizes the City's position by saying that it rests "primarily" on the flawed idea that "WET testing and sampling are not authorized unless EPA makes a finding that there is Reasonable Potential for WET [toxicity] in the Lowell effluent.'" Response at 38. The City made no such claim. The phrase quoted from the Petition was clearly a reference to the positive results of the 56 (and continuing) consecutive quarters of excellent WET data and the assertion that the effluent has been more than well characterized. Petition at 22-23 ("beyond well-characterized as being non-toxic").

EPA's claim that "additional WET testing will aid in the Agency's understanding for Reasonable Potential analyses in future permit cycles," Response at 38, is irrational – certainly at a monitoring frequency of quarterly. Such a basis for legal requirements, if allowed to stand, would justify any permit requirement no matter how excessive, wasteful and unnecessary. It ignores the City's reference to EPA's own regulatory standard for WET testing by POTWs of four WET tests over the permit term. Petition at 22 (citing 40 C.F.R. § 122.21(j)(5)). The testing specified by the regulation is for permit reissuance purposes, which do not differ at all from EPA's RP point. Although the City does not dispute EPA's authority to require testing, there is no rationality to a requirement that multiplies for no reason the regulatory standard testing by a factor of five (20 quarterly cycles compared to four cycles). This particularly after

years and years of such accelerated testing frequency. EPA may not hide behind its assertion of a "protective approach" here.

Finally EPA's continued reliance of one purported downstream test result for lead at a concentration that did not exceed the Massachusetts water quality standard for lead merely serves to illustrate the weakness of any justification for this excessive, arbitrary and capricious WET testing. *See* Response at 38-39. If there is a concern about lead, test for lead but do not try to bootstrap a concern about lead into quarterly WET testing. Of course, there is no concern for lead as evidenced by the fact that there is no RP for lead and, accordingly, no limit for lead.

5. Metals Testing Frequency.

For the reasons noted in section 4 immediately above the Region's Reasonable Potential-based argument is wrong. The City did not argue that RP is required as a predicate for testing.

Second, the Region attempts to dismiss the regulatory point concerning the required three pollutant scans each permit term by claiming that the supporting regulation was not raised in permit comments. But the Region quotes the City's comment about those monitoring requirements. Although the regulation was not cited at that point, section 122.21(j)(4) cited in the Petition is in fact the regulatory cite for the three scan requirement. The comment properly preserved the legal point, and the Region should be charged with knowledge of such an obvious point in its own regulation. And then finally the Region tries to distinguish the 122.21(j)(4) reapplication data standard from the Region's "monitoring or sampling requirements included in a NPDES permit itself." They are one and the same, all focusing on facility performance and later RP determinations.

Although the City does not dispute EPA's general authority for monitoring, all of this continues to illustrate the Region's inappropriate approach to the issue. No purpose is served by

this unwarranted monitoring. Moreover, the Region ignores the City's practical difficulty in performing clean sampling (having to enter the river during high flows and cold water temperature) during the winter months.

6. Failure to Address the Long Term Control Plan.

Section IV.B.2.b of the CSO Policy requires that NPDES permits include "Narrative requirements which ensure that the selected CSO controls are implemented, operated and maintained as described in the long-term CSO control plan." The permit fails to do this.

By failing to incorporate CSO requirements beyond the Nine Minimum Controls into the permit, EPA deprives the public of a right to comment on the CSO long-term control plan requirements. While CSO long-term control plan requirements can be addressed in enforcement orders, the City believes the CSO Policy provision above requires that the LTCP still be addressed in the City's NPDES permit.

Moreover, the City believes that an enforcement order is not appropriate for its CSO program because the City is not in non-compliance. The CSO Policy requires the development of a long-term control plan and compliance with State water quality standards - in accordance with the State's compliance schedule provisions, here 314 CMR 311(10).

It makes no sense for EPA to take the position that the City's CSO discharges are required to comply with water quality standards now rather than at the end of the LTCP implementation period. The City should have a compliance schedule – which mirrors the LTCP implementation period - to achieve water quality standards. After all the Policy calls on EPA to coordinate the CSO level of control with applicable water quality standards. It is clear that the compliance point has not yet arrived for the City. Accordingly, EPA's use of an administrative order – rather than the NPDES permit – is legally incorrect and unfair to the City. It also avoids

the public notice and opportunity for comment that using the NPDES permit will provide. Moreover, EPA fails to offer any explanation as to why an order – which deprives the public of its right to comment on CSO treatment in the NPDES permit – was selected and how that precludes including CSO LTCP language in the permit.

The Board is familiar with this issue from its 2008 decision for the District of Columbia's Blue Plains facility (requiring a CSO LTCP compliance schedule in the Blue Plains NPDES permit despite there being a federal consent decree overseeing the LTCP implementation). See EAB, NPDES Appeal Nos. 05-02, 07-10, 07-11, and 07-12 (March 19, 2008), *available at:* https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/NPDES%20Permit%20Appeals%20(CWA)/54BBDD75E876EDE8852577450059FB0F/$File/DC%20Water%20-%20PUBLISHED.pdf

7. CSO Secondary Bypass Prohibition.

The outright prohibition of secondary treatment bypasses of significant peak wet weather flows is directly inconsistent with the City's LTCP and flow maximization efforts. The Region is well aware of this and the adverse environmental impacts that will result if the City must cease to treat these peak excess flows. All the Region had to do to correct this point was to incorporate by reference in the permit the existing High Flow Management Plan ("HFMP"), and this is all that the City asked for. AR C.12 (City permit comments). We note that the HFMP was submitted in 2011 pursuant to the 2010 EPA Administrative Order. Since that time, the City has been implementing the HFMP.

The Region's single stated reason for not fixing this problem is the absence of a formal feasible alternatives analysis as to options, if there are any, to secondary treatment bypass procedures. *See* RTC at 28; Response at 45-46. The Region is well aware of the current HFMP bypass procedures; the City's routine reporting documents this, *see* AR H.1 to H4 (2015 – 2018

CSO Annual Reports); both the 2010 and 2017 Administrative Orders effectively require maximizing treatment volumes through the treatment facility; and the Region knows there are no current feasible alternatives to bypassing. Given this, it was arbitrary and capricious for the Region to reissue the permit with the challenged footnote.

Significantly, the Region could also have included a compliance schedule requiring the City to submit the foregone conclusion of a no feasible alternatives analysis if it believed it necessary to do so. Despite the Region's long delay in reissuing the permit, it never informed the City of the Region's desire for an alternative analysis. The Region denied several requests by the City to meet during which it could have alerted the City to the Region's interest in such a showing (which, again, is a foregone conclusion).

The prohibition against a secondary bypass puts the City in an irreconcilable regulatory position. On one hand it is required to maximize flow through the treatment plant under the nine minimum controls. Most CSO plants do this by using in-plant diversions, especially where they have greater primary capacity than secondary (typically due to EPA's funding decisions). On the other hand, the standard NPDES permit bypass provision prohibits a bypass for other than emergency maintenance reasons. EPA cannot expect the City to intentionally disobey one or the other of the conflicting commands. The permit must be revised to specify either a maximization of flow (even if on an interim basis) or a throttling of the plant so that in-plant diversions do not occur.

While it means the City will have to continue to work harder, we hope the permit will authorize – even if on an interim basis – in plant diversions that provide some treatment to peak wet weather flows that will otherwise be discharged untreated. EPA has done this for dozens of other CSO communities nationwide.

We are not aware of a single instance where the concept of some treatment has not prevailed over no treatment, and we urge the Board to rule in favor of common sense here as well.

8. General Water Quality Standards Compliance Language.

The Region makes five points in support of its permit condition. First, the Region offered *Northwest Envtl. Advocates* as supporting its position. However, *Northwest* did not consider the legality of permittee Portland's permit condition that apparently purported to prohibit in the abstract the exceedance of water quality standards. Rather, at issue was the ability of plaintiff citizens group to address such an alleged exceedance under Clean Water Act citizens suit provisions, 33 U.S.C. § 1365. The court held that the group did have that ability, but the Region erroneously attributed to the decision the idea that the court upheld the permit provision itself. There was no challenge to the provision, and therefore no such holding. *Northwest Envtl. Advocates v. City of Portland*, 56 F.3d 979, 990 (9th Cir. 1995).

The Region's second point addresses more directly the City's argument, which advances the CWA permit shield of section 402(k). The Region presses once again its unsupported argument that compliance with permit conditions acts as a shield against relevant allegations only if all of the conditions of a permit are complied with. Although we would not object to this interpretation in situations in which it made sense, the Region may not eviscerate the statutory shield, 33 U.S.C. § 1342(k), with the provision in question. A condition that generically allows a claim that a standard is being violated, despite the numeric limitations of a permit and the extensive RP process that the issuing agency went through precisely for the purpose of identifying those pollutant limitations necessary to protect water quality leaves section 402(k) meaningless. The statutory provision must mean something, and the Region's application of it is

impermissible to the extent that it leaves the permittee with no protections at all as to allegations of standards violations.

As to the third of the Region's issues, the City's due process point, the City has consistently objected to the permit general water quality standards compliance language, and the fair notice and due process points are clear and compelling. The condition at issue simply does not give fair notice of the activity that is made illegal. Beyond the lack of fair notice and due process (right to have EPA identify a pollutant, calculate a limit, provide an opportunity for public comment and right of appeal) safeguards, EPA's approach also deprives the City of its right to a compliance schedule under Massachusetts regulation by finding it retroactively unknowingly in violation.

EPA's fourth point is unclear, but it appears to suggest that the general water quality standards compliance language was the State's idea, and refers to DEP's CWA section 401 certification of the permit. But the certification required no such thing. AR at D.1 (Mass. DEQ letter Sept. 24, 2019). Then, apparently in response to the City's point that no court has upheld a provision such as this, EPA cites to *PUD No. 1 of Jefferson City*. The case did not address general compliance language, rather it upheld a state certification dealing with minimum instream flows. *PUD No. 1 of Jefferson City v. Washington Dept of Ecology*, 511 U.S. 700 (1994).

For its fifth point the Region simply claims that its permit provision is necessary and not duplicative. Response at 49-50. It would not be necessary if the Region had some confidence in its implementation of the provisions of its own regulations providing for RP determinations, *see* 40 C.F.R. § 122.44(d). As Region 3 has stated, Petition fn. 8:

> While permits shall contain conditions that are designed to meet all applicable . . . water quality standards . . . water quality standards themselves shall not be incorporated wholesale either expressly or by reference . . . in a permit . . . ."

9. General Water Quality Standards Compliance Language for CSOs.

The Region's Response on the CSO general water quality standards issue entirely fails to address the arguments presented by the City. *See* Response at 50. This completely misunderstands CSO regulation and the Policy, and is another example of the Region's failure to coordinate the permit with the CSO program. The City is legally entitled to a compliance schedule consistent with a final yet-to-be EPA-approved Long Term Control Plan . The LTCP implementation schedule is the CSO compliance schedule. Significantly, the CSO Policy requires compliance with applicable water quality standards at the end of the implementation of the LTCP with verification thereof through post-construction monitoring. It makes no sense to assert that an untreated CSO discharge is on one hand authorized by the permit but, at the same time not to exceed water quality standards, including – as the Region incorrectly asserts here – a daily maximum bacteria limit. This fatal internal regulatory inconsistency is erroneous – an error not made by other EPA regions and delegated NPDES state agencies.

10. Requirements to Sample on Specified Days and Times. The City objected to the footnote requiring that it sample on the same days of the month at the same times, and argued that this unnecessarily micromanages the operation of the Plant and the permittee's compliance program. On similar bases the City objected to the footnote requiring that WET testing be done during the same week in the months of January, April, July, and October.

The Parties agree that the overarching requirement for all sampling is representativeness, that the sampling must be representative of the conditions monitored. *See* 40 C.F.R. § 122.48(b). It has been and is the City's position that the specification of samplings times and days

systematically excludes all other times and days and thereby detracts from representativeness. EPA first refers to some flexibility built into the requirement, which is beside the point.

EPA responds that the requirement ensures its ability to (1) track long term trends, and (2) to eliminate bias. As to tracking trends, EPA claims that the requirement "is informed by its extensive technical experience," Response at 43, citing only to its similar conclusory and unsupported claim in its RTC document. In light of the facially apparent benefits of periodic variations in days and times, this should be given no weight in support of the "tracking trends" point.

As to bias, EPA's plan suggests mistrust of the permittee and, perversely, creates as much potential for bias as it avoids. Although we acknowledge that a set schedule may avoid sampling "at times that may not accurately represent the characteristics of the discharge," Response at 43, that is true only if the sampling design does not intentionally avoid the high flow periods or industrial user discharges about which EPA expresses a concern. A more random design would by definition over time capture all of these contingencies, with both negative and positive implications for effluent quality. We note that the City has sampled during each peak flow diversion event for many years. The plant's performance is well-characterized in both dry and wet weather.

With either approach to a sampling design representativeness comes down to an honest design informed by any known or identifiable variations in effluent quality, and EPA presents no reason to conclude that its idea for a set schedule is the better approach. In the absence for a basis for such conclusion as to this permittee – and we strongly argue there is none - the permit requirement is without basis and arbitrary and capricious.

EPA concludes with continued reliance on other permits which it claims to have consistent sampling provisions. Consistency without a basis should be given little weight. Its reliance on the *Concord* case as to the value of consistency is misplaced. The EAB did not address at all the specification of days and times; instead the reference in the case to "uniform collection system requirements" was part of an objection by Concord, the permittee, and the point was not specifically addressed by the EAB's "broad authority" based response. *In re Town of Concord*, 16 E.A.D. 514, 541-42 (EAB 2014).

Accordingly, as the City argued initially, this requirement has no rational or useful basis and is, thereby, arbitrary and capricious. It is also inconsistent with the overarching legal requirement for representativeness of data and otherwise not in accordance with law.

CONCLUSION

Consistent with the above, Lowell asks that the Environmental Appeals Board grant the relief requested in the Petition for Review.

Respectfully submitted,

/s/ F. Paul Calamita
F. Paul Calamita
Richard H. Sedgley
AquaLaw PLC
6 South 5th Street
Richmond, Virginia 23219
804/716-9021
(fax) 804/716-9022
paul@Aqualaw.com

Rachel M. Brown
First Assistant City Solicitor
BBO # 667369
John R. Hucksam, Jr.
Assistant City Solicitor
BBO # 546519
375 Merrimack Street, 3rd Floor

Lowell, MA 01852-5909
978/674-4050
978/453-1510
Rbrown@lowellma.gov

Attorneys for Petitioner

Date: December 23, 2019

STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I hereby certify that this Petition for Review, including all relevant portions, contains fewer than 7,000 words, pursuant to 40 C.F.R. §124.19(d).

/s/ F. Paul Calamita
F. Paul Calamita
Richard H. Sedgley
AquaLaw PLC
6 South 5th Street
Richmond, Virginia 23219
804/716-9021
(fax) 804/716-9022
paul@Aqualaw.com

Rachel M. Brown
First Assistant City Solicitor
BBO # 667369
John R. Hucksam, Jr.
Assistant City Solicitor
BBO # 546519
375 Merrimack Street, 3rd Floor
Lowell, MA 01852-5909
978/674-4050
978/453-1510
Rbrown@lowellma.gov

Attorneys for Petitioner

CERTIFICATE OF SERVICE

I certify that on this 23rd day of December 2019, a true and correct copy of the foregoing Notice Regarding Oral Argument was sent to the following persons, in the manner specified:

By EAB eFiling System to:

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
1201 Constitution Avenue, NW
WJC East Building, Room 3334
Washington, D.C. 20004

By Electronic Mail to:

Michael Knapp
U.S. Environmental Protection Agency
Region 1
Knapp.michael@epa.gov

Cayleigh Eckhardt
U.S. Environmental Protection Agency
Region 1
Eckhardt.cayleigh@epa.gov

By U.S. Mail to:

Town of Chelmsford
Department of Public Works
Sewer Division
9 Alpha Road
Chelmsford, MA 01824

Town of Dracut
Sewer Department
62 Arlington Road
Dracut, MA 01826

Town of Tewksbury
Department of Public Works
Water and Sewer Division
1009 Main Street
Tewksbury, MA 01876

Town of Tyngsborough
Town Hall
25 Bryants Lane
Tyngsborough, MA 01879

Respectfully submitted,

/s/ F. Paul Calamita

F. Paul Calamita
Richard H. Sedgley
AquaLaw PLC
6 South 5th Street
Richmond, Virginia 23219
804/716-9021
(fax) 804/716-9022
paul@Aqualaw.com

Rachel M. Brown
First Assistant City Solicitor
BBO # 667369
John R. Hucksam, Jr.
Assistant City Solicitor
BBO # 546519
375 Merrimack Street, 3rd Floor
Lowell, MA 01852-5909
978/674-4050
978/453-1510
Rbrown@lowellma.gov

Attorneys for Petitioner