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May 15, 2017 117230-0001

Via EAB eFiling System

Ms. Eurika Durr Clerk of the Board U.S. Environmental Protection Agency Environmental Appeals Board 1200 Pennsylvania Avenue, NW Mail Code 1103M Washington, DC 20460

Re: Town of Marion - Wastewater Treatment Plant Petition for Review of NPDES Permit No. MA 0100030

Dear Ms. Durr:

Please find attached for filing the Town of Marion's Petition for Review of NPDES Permit No. MA 0100030.

The Permit was issued to the Marion Wastewater Treatment Plant by EPA Region 1 on April 13, 2017. Marion received the permit via e-mail that same day. Pursuant to 40 C.F.R. § 124.19 and 40 C.F.R. § 124.20, the deadline for filing a petition for review is May 15, 2017.

The petition has been prepared in compliance with the formatting and length requirements contained in the Environmental Appeals Board's Practice Manual. Because the attachments to this brief exceed 50 pages, we are also mailing a paper copy of those documents separately.

Thank you for your attention to this matter.

Very truly yours,

Matthew J. Connolly

MJC:skt Attachments

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

In re:

Town of Marion

Permit No. MA0100030

PETITION FOR REVIEW OF TOWN OF MARION WASTEWATER TREATMENT PLANT'S NPDES PERMIT ISSUED BY REGION 1

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May 15, 2017

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I. INTRODUCTION

The Town of Marion operates a small wastewater treatment facility that handles wastewater from about 1,650 homes. For over 40 years, the facility has discharged effluent from its wastewater treatment plant into Aucoot Cove, located in Buzzards Bay, pursuant to a National Pollutant Discharge Elimination System ("NPDES") permit. A critical component to this facility involves three unlined lagoons, which the plant uses to equalize wastewater and treat the minimal sludge produced. State environmental regulators approved the lagoons' design and operations. And they and Region 1 (the "Region") have consistently regulated them as treatment sites due to the aerobic and anaerobic processes the lagoons facilitate to digest and treat sludge.

Now the Region—for the first time—seeks to regulate the unlined lagoons as surface disposal sites in the facility's NPDES permit. But the lagoons are treatment facilities not subject to the Environmental Protection Agency's ("EPA") regulations. Further, rather than simply subject the lagoons to the *purportedly* applicable regulations governing surface disposal sites, 40 C.F.R. § 503, the Region declared that the unlined lagoons are *per se* improper operation and maintenance of a facility. This declaration contradicts the plain language of the regulations and the EPA's guidance on surface disposal sites. Closing or lining the lagoons would require Marion to significantly change its internal treatment processes, an expensive demand that would have no discernible impact on water quality.

Marion therefore requests that the Environmental Appeals Board (the "Board") accept its petition for review of the Region's lagoon requirements for at least the following four reasons:

First, the Region erred in relying on a third-party report commissioned by the Buzzards Bay Coalition (the "Coalition Report") that asserts the lagoons contaminate the groundwater with nitrogen and this contamination travels to and significantly impacts Aucoot Cove. The Coalition

Report relies on faulty assumptions and analysis that drastically overstate the impact, if any, caused by the lagoons. Indeed, the groundwater contours provided in the report show that only one lagoon could possibly affect groundwater that might eventually reach the cove. Marion's analysis shows that any nitrogen leached from the lagoons into the groundwater is well within acceptable limits prescribed both by the EPA and the Massachusetts Department of Environmental Protection ("MassDEP").

Second, the lagoons are treatment facilities, not surface disposal sites, and therefore are not subject to the Part 503 regulations. The Region has consistently considered the lagoons treatment facilities since it began issuing permits to the plant, and nothing has changed in the operations to justify altering the prior determinations.

Third, even if the lagoons were disposal sites subject to the Part 503 regulations, the Region erred by summarily concluding that unlined lagoons are *per se* noncompliant. EPA regulations and guidance routinely permit unlined surface disposal sites as long as a groundwater specialist confirms that the sites do not contaminate an aquifer. Total nitrogen¹ is not a groundwater contaminant under Part 503, and the Region made no attempt to even consider the lagoons' effect on any aquifer. Further, the Region acted arbitrarily and capriciously in determining that Marion's 40-year practice, expressly permitted by EPA and MassDEP regulation and prior permits, is *per se* improper operation and maintenance of the facility. Its decision to abandon its prior precedent and rules requires an acknowledgement of and basis for the change and a notice and comment period. Here, the Region did neither.

¹ Total nitrogen refers to the sum of organic and inorganic nitrogen. Inorganic nitrogen can be further broken down into nitrate, nitrite, and ammonia.

Fourth, requiring the lining of these lagoons exceeds the Region's authority under the Clean Water Act, which is limited to regulating point source discharges to surface waters of the United States. These lagoons are not point source discharges to surface waters, nor are they hydrologically connected to any such waters. The lagoons are located 1.5 miles from Aucoot Cove and have no direct connection to any surface water. The Region (ambitiously) estimates that any nitrogen discharge to groundwater would take at least *twenty years* to reach the cove. This is far too long for the lagoons to be deemed connected to the cove under the Clean Water Act. Similarly, the lining requirement impermissibly attempts to regulate the internal workings of a facility, rather than a point source discharge.

II. PERMIT CONDITIONS FOR REVIEW

Pursuant to 40 C.F.R. § 124.19(a), Marion petitions for review of the conditions of Permit No. MA0100030 (the "permit"), which was issued to Marion on April 13, 2017 by Region 1. The permit authorizes Marion to discharge from the Marion Water Pollution Control Facility, located at 50 Benson Brook Road in Marion, MA to an unnamed brook, which flows to Aucoot Cove. (*See* Att. 1, Current Permit.) Marion contends that certain permit conditions are based on clearly erroneous findings of fact and conclusions of law. Specifically, Marion challenges the Region's finding that "placement of sludge in unlined lagoons constitutes sludge disposal and is therefore subject to the requirements of Part 503 for sludge disposal" (*id.* at 11), and that Marion must "cease the placement, storage, and disposal of sludge and other treatment related to solids in unlined lagoons, cease the use of the unlined lagoons for storage of wastewater, and remove sludge solids currently in the lagoons" in accordance with a provided compliance schedule. (*Id.* at 12.)

Any contested permit conditions and any uncontested conditions that are not severable from contested conditions are stayed pending final agency action. 40 C.F.R. §§ 124.16(a)(2)(i), 124.60(b). Although Marion only contests the permit conditions related to the lagoons, these conditions are inseparable from the total phosphorus limit of 200 μ g/L and the requirement that Marion submit an "alternatives analysis/facility plan to EPA for the treatment and/or pollution prevention improvements" required to achieve the phosphorus limit. (*See* Att. 1 at 5, 12.) Consistent with the compliance schedule in the permit, Marion is considering two options to meet the total phosphorus limit:

- 1. Modify the facility to chemically treat wastewater in order to remove phosphorus, which will generate chemical-laden sludge that cannot be treated in the lagoon system. Sludge produced by this treatment operation would need to be processed on-site and hauled off-site for disposal, presenting a significant capital cost to construct sludge processing facilities coupled with a significant ongoing operational cost for sludge hauling.
- 2. Build an outfall extension to the head of the salt marsh. This option is economical if coupled with sludge treatment in the existing facultative lagoon system.

If Marion is not able to continue its current sludge treatment operations in the lagoons, and the town instead builds sludge processing facilities, the costs for sludge processing would likely make the outfall extension option more expensive than chemical phosphorus removal based on current planning-level cost estimates. Since Marion needs to commence design immediately on modifications to address the total phosphorus limit condition in order to meet the 42-month compliance schedule, a stay of the total phosphorus provisions is necessary until the permit's lagoon requirements are resolved. Therefore, both the lagoon and phosphorus conditions are stayed. (*see* Att. 1 at 5, 11-12.)

III. FACTUAL AND STATUTORY BACKGROUND

Marion submits the following relevant factual, statutory, and regulatory background to assist the Board's review:

A. Factual Background

i. *Marion Facility History*

The Town of Marion is located in southeastern Massachusetts and has an estimated population of 4,907 residents. The Marion Water Pollution Control Facility (the "facility" or the "plant"), the subject of the permit, serves 1,646 Marion ratepayers. (*See* Att. 8, Nov. 13, 2015 Comments, Letter from CDM Smith at 2.) The remaining residents use septic systems. The facility, and more specifically its lagoons, are located 1.5 miles from Aucoot Cove. Pursuant to its NPDES permit, Marion's plant discharges wastewater that has been treated in the facility to an unnamed brook, which reaches Aucoot Cove.

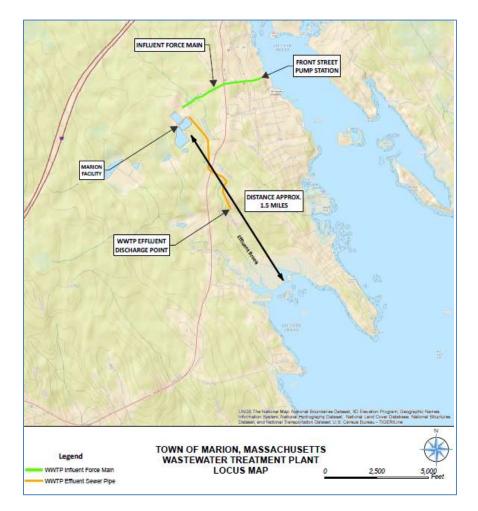


Figure 1 Location of Facility

The facility has three unlined lagoons, shown below, which Marion added in 1969:



Figure 2 Marion's Lagoons

Lagoons 1 and 2 are each five acres. They each have a maximum depth of eight feet, with a total volume of approximately 12 million gallons ("MG"). Lagoon 3 is 10 acres, and it has a maximum depth of eight feet, with a volume of approximately 25 MG. Marion designed the facility in 1969 to treat municipal wastewater (including septage) with an average daily wastewater flow of 0.50 million gallons per day ("mgd"),² a maximum daily wastewater flow of 1.54 mgd,³ and peak hour flow of 2.33 mgd.⁴ When Marion installed the lagoons, they were connected in series to the existing influent pumping station and sand bed filters. In 2002, Marion replaced the sand bed filters with a disk filter facility to achieve more reliable filtration.

² This is the average flow of wastewater over 24 hours in dry weather.

⁵ This is the maximum daily volume of wastewater expected during a continuous 24-hour period, including wet weather inflow and infiltration and dry weather flow.

⁴ This is the maximum wastewater flow that can be accommodated by the facility in a one-hour period, including wet weather inflow and infiltration, and dry weather flow[.]

In 2005, Marion completed a major upgrade at the facility with a new average design flow of 0.588 mgd and a peak day design capacity of 1.18 mgd. The upgrades completed by Marion included: (1) replacing the chlorination facility with an ultraviolet disinfection facility and (2) adding influent screening and significantly improved treatment via sequencing batch reactors ("SBR") with activated sludge.⁵ Marion also incorporated the facultative lagoons to use as influent equalization basins, which minimize the variation in wastewater characteristics in order to provide better conditions for subsequent treatment.

As demonstrated in the below figure, the lagoons are integral to the facility's operation.

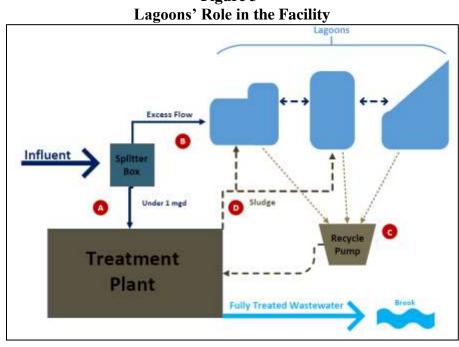


Figure 3⁶ Lagoons' Polo in the Facilit

⁵ An SBR is a variation of the activated sludge process where all of the necessary process steps occur in a timed cycle in one tank. At the beginning of a process cycle, the SBR contains the necessary biological mass of organisms needed for treatment, settled to a low water level in the tank. Raw influent is introduced into the tank, filling the tank and contacting the influent with the biomass. The SBR is alternately aerated to provide oxygen needed for the aerobic treatment part of the cycle, and then mixed without air to provide oxygen-deficient conditions needed to improve process control. The oxygen-deficient conditions also allow for nitrogen removal, though this was not required by the 2006 NPDES Permit. At the end of the treatment cycle, mixing is turned off, and the contents of the SBR tank separate into clean, treated effluent above and settled biomass below. The treated effluent is then decanted from the surface, excess biomass is removed from the tank as waste activated sludge, and the settled biomass is ready for the next treatment batch.

⁶ A more detailed diagram of the facility's process flow management is included as Attachment 16.

As wastewater comes into the facility, it first enters a "splitter box" that usually routes the wastewater directly into the plant (designated as point "A"). When incoming wastewater exceeds 1 mgd, the excess wastewater flow is diverted into the lagoons for storage and treatment ("B"). When capacity is available, that is incoming wastewater flow is below the plant's hydraulic capacity, water from the lagoons is pumped back to the plant for additional treatment ("C"). The lagoons also receive a small amount of sidestream flow (floor drains, disk filter backwash, and untreated wastewater from the plant's facilities), and waste activated sludge from the SBR units ("D").⁷ The facility produces, at most, minimal sludge. (Att. 15, 2006 Permit, Fact Sheet at 10.)

The lagoons are open to the air and are aerated, primarily to help control odor, although the transferred oxygen does reduce biological oxygen demand ("BOD").⁸ The waste activated sludge and scum pumped to the lagoons is largely biodegradable and is aerobically and anaerobically treated in the lagoons. It is not physically possible for flow to be released from the lagoons to any navigable water, whether via pump or gravity. No flow is discharged from the plant to a surface water that has not had full treatment in the SBRs, effluent filters, and ultraviolet disinfection processes.

The lagoons remain essential to the facility's operation, both for influent equalization and the treatment of waste activated sludge from the plant's SBR system. Without the lagoons, the facility would need to make significant and costly updates to its treatment process to reliably

⁷ On rare occasions, treated effluent is pumped to the lagoons to maintain adequate levels in the lagoons for operation of the aeration system or to perform maintenance on plant facilities.

⁸ "BOD" represents the amount of dissolved oxygen used by microogranisms to decompose organic matter.

accommodate flows in excess of the current plant's hydraulic capacity and would need to develop alternative sludge treatment or disposal mechanisms.

ii. Marion Permitting History

Marion has discharged effluent pursuant to an NPDES permit for over 40 years. Prior permits have referenced sludge treatment or disposal. For example, the 1998 permit included a prohibition on the disposal of sludge from the plant without providing 120 days' notice to the EPA. (*See* Att. 14, 1998 Permit, at 6). The 1998 permit makes no reference to the lagoon's treatment of sludge. (*See id.*)

In 2002, the Town completed a Comprehensive Wastewater Management Plan. (*See* Att. 11, Comprehensive Wastewater Management Plan.)⁹ The plan described Marion's plans to construct a wastewater treatment facility with an average daily design flow of 0.588 mgd using the existing lagoons as part of the treatment process. (*See id.* at 3-1.) MassDEP approved the plan on December 2, 2002. (*See* Att. 12, MassDEP Approval Letter, Dec. 2, 2002.)

In 2003, Marion presented plans to MassDEP showing the lagoons' use for wasteactivated sludge management and peak flow equalization. MassDEP approved the plans on April 6, 2003. (*See* Att. 13, MassDEP Approval Letter, Apr. 6, 2003.) MassDEP made no objections to the Town's plans with respect to lagoon operation. (*See id.*) Marion made the upgrades in 2005.

In 2006, the Region issued an NPDES permit to Marion that continued a prohibition on the discharge of sludge, but the EPA did not raise any concern with the lagoons, finding that Marion's lagoons "produce minimal sludge." (*See* Att. 15, 2006 Fact Sheet at 10). The Region

⁹ The Comprehensive Wastewater Management Plan consisted of a draft from May 2001 and a Supplemental Plan from April 2002, totaling over 400 pages. Marion has attached relevant excerpts from the Supplemental Plan and May 2001 draft, which discuss the upgraded systems flow projections, the lagoons' use in the facility and plans for upgrades, as well as a summary of the environmental monitoring completed as part of the planning.

noted that Marion had "not yet removed or disposed of any sludge from its *treatment* process" (i.e., the lagoons) and advised that *if* Marion chose to *dispose* of any sludge, Marion would have to follow federal and state laws and regulations that apply to sewage sludge use and disposal. (*Id.*) (emphasis added).

iii. 2014 Draft Permit

In 2014, in its draft NPDES permit, the Region determined that the placement of sludge in those same lagoons, which are and always have been unlined, now constituted sludge *disposal*, subjecting them to the requirements of 40 C.F.R. § 503. (*See* Att. 3, 2014 Draft Permit, at 11.) The Region also declared that the use of unlined lagoons for flow equalization and sludge disposal is not in compliance with the operation and maintenance requirements of a treatment facility under 40 C.F.R. § 122.41(e). (*See* Att. 3, 2014 Fact Sheet at 19.)

The Region's ostensible reasons for imposing new conditions on the lagoons were that: (1) Marion had deposited sludge in the lagoons for several years without plan for removal or disposal, and under 40 C.F.R. § 503, the EPA considers land that contains sewage sludge for more than two years to be a disposal site; and (2) the Coalition Report estimated that the lagoons were leaching nitrogen into the groundwater, including some that ultimately reaches Aucoot Cove. (Att. 3, 2014 Fact Sheet at 19-23.) The Region stated that the "lag time for groundwater to travel from Aucoot Cove is at least 20 years." (*Id.* at 22.)

iv. Comments Submitted by Marion

In response to the 2014 Draft Permit, Marion submitted comments on February 6, 2015, and supplemental comments in September and November 2015, April 2016, and finally, in November 2016. (*See* Att. 5, Feb. 6, 2015 Comments; Att. 6, Sept. 16, 2015 Comments; Att. 7, Sept. 23, 2015 Comments; Att. 8, Nov. 13, 2015 Comments; Att. 9, Apr.12, 2016 Comments; Att. 10, Nov. 21, 2016 Comments.) These comments raised concerns with the Region's new

treatment of the lagoons as disposal sites, the Region's reliance on the deeply flawed Coalition Report in determining that the lagoons were leaching high amounts of nitrogen that were ultimately reaching Aucoot Cove, and the Region's unauthorized exercise of authority over the lagoons. As an alternative to the lining requirement, Marion proposed a groundwater monitoring program to assess any potential contaminants leached from the lagoons.

As the Region noted, Marion submitted supplemental comments after the ordinary 30-day period (as did the Buzzards Bay Coalition). The Region responded to most of the supplemental comments submitted, stating that they relate "generally to the subject matter of the Town's timely submitted comments." (Att. 2 at 1-2.) But the Region did not respond to the April 12, 2016 Comments. (*See id.*) In fact, the Region did not even acknowledge them. (*See id.*) Importantly, those comments related directly to concerns raised in Marion's timely-submitted comments, and provided further details regarding compliance alternatives to the permit's conditions on the lagoons and the results of Marion's nitrogen loading analysis to compare with the findings of the Coalition Report. Moreover, in September 2015, Marion informed the Region that this analysis was forthcoming, noting further that "[w]e believe it is in the best interest of both the regulatory agencies and the Town's ratepayers that the Town be allowed to complete these studies, and that the result of the studies be taken into account before issuance of a final permit for the treatment facility." (Att. 6, Letter from CDM Smith, at 5).

Marion's supplemental comments were submitted beyond the 30-day period because of the time it took to gather relevant data and conduct the needed analysis. Moreover, the Region and Marion were in constant communication regarding the permit, and had meetings in May, June, and November 2015, and April 2016. (*See* Att. 10 at 1.) Marion continued to provide Region 1 with material relevant to assessing and issuing the permit during this entire period.

The Region's decision to respond to some but not all of the supplemental comments is an arbitrary and capricious exercise of discretion. *See Envtl. Defense Fund v. Blum*, 458 F. Supp. 650, 661 (D.D.C. 1978) (the EPA "may not . . . skew the 'record' for review in its favor by excluding from that 'record' information in its own files which has great pertinence to the proceeding in question"); *see also In re Gov't of the Dist. of Columbia Mun. Separate Storm Sewer Sys.*,10 E.A.D. 323, 326 (EAB 2002) (holding that "the Region cannot rely exclusively on the District's section 401 certification, at least in a circumstance like this one in which there is a body of information drawing the certification into question"); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 420 (1971) (a plenary review of the Secretary of Transportation's decision is to be "based on the full administrative record that was before the Secretary at the time he made his decision").

v. The Current Permit (2017)

On April 13, 2017, the Region issued Marion's NPDES permit, maintaining its position that the placement of sludge in the lagoons constitutes sludge disposal and that the lagoons must be closed or lined. (Att. 1 at 11-12.) In response to Marion's comments and concerns, the Region acknowledged that the Coalition Report likely overestimated the leakage rate from the lagoons, but it continued to rely on the report, reinforcing its stance that nitrogen from the lagoons was reaching the groundwater and traveling to Aucoot Cove, and that it had authority to require Marion to close or line the lagoons. (*See* Att. 2 at 42, 76-82.)

The current permit includes provisions related to the operation of the lagoons that will have a significant impact on the operation of the facility. The permit requires that Marion "cease the placement, storage, and disposal of sludge and other treatment related solids in unlined lagoons, cease the use of the unlined lagoons for storage of wastewater, and remove sludge solids currently in the lagoons." (Att. 1 at 12.) The lagoons are an integral and necessary part of

the facility's process, and the facility "as-is" cannot treat all the influent wastewater nor maintain its current operating efficiency without the lagoons. The lagoons are used to accommodate inflows that exceed the hydraulic capacity of the plant, and receive and treat waste activated sludge from the facility's two SBR tanks (along with other minor side streams).

Marion has identified three options to comply with the lagoon-related provisions of the permit while maintaining the facility's equalization and other operational requirements:

- 1. Line 10 acres of lagoon area to manage peak inflow from the collection system and construct additional facility modifications and updates to improve reliability. The remaining 10 acres of lagoon area would be decommissioned. This would maintain the plant's operation in the same way the facility is currently operated but with a smaller lagoon volume and additional treatment facilities to minimize the need for storage during maintenance activities.
- 2. Line 20 acres of lagoon area to manage peak inflow from the collection system, reconfigure the piping system to distribute flow to and between the lagoons, and modify the lagoon aeration distribution system. This would maintain the plant's operation in the same way that the facility is currently operated.
- 3. Construct equalization basins and sludge handling facilities, and decommission all 20 acres of lagoon area. New equalization basins would likely consist of concrete tanks, while sludge handling facilities would include a gravity thickener and sludge storage and transfer facilities. Marion would need to contract with a sludge hauler to periodically truck sludge from the facility to an off-site disposal facility.

If required to comply with the permit's lagoon requirements, Marion would likely choose the first alternative (though no final decisions have been made). While the costs associated with these options vary, the planning-level estimated <u>capital</u> costs for that alternative (including design, construction, and project contingencies) is between \$8 million and \$9 million (in 2019 dollars). This estimate does not include the significant increase in operation and maintenance costs that would be required.

B. The Clean Water Act and 40 C.F.R. § 503

Congress passed the Clean Water Act ("CWA") in 1972 in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a).

CWA jurisdiction exists over navigable surface waters, meaning "the waters of the United States, including territorial seas." *Id.* at § 1362(7). The NPDES permitting program is authorized under § 1342, and implemented by the regulations at 40 C.F.R. § 122, and it allows the EPA to issue permits for facilities that discharge pollutants from point sources into waters of the United States.

33 U.S.C. § 1345 authorizes the EPA to regulate the use or disposal of sewage sludge when such disposal "would result in any pollutant from such sewage sludge entering the navigable water," and it mandates that the EPA "develop and publish . . . regulations providing guidelines for the disposal of sludge. § 1345(a),(d). Such regulations are contained in 40 C.F.R. § 503. The regulations establish requirements for the use or disposal of sewage sludge in three circumstances: (1) when the sludge is applied to the land for a beneficial purpose, § 503, Subpart B; (2) when the sludge is disposed on land by placing it in a surface disposal site, § 503, Subpart C; and (3) when sewage sludge is incinerated, § 503, Subpart D. Section 1345 and the regulatory requirements of Part 503 do not apply to the *treatment* of sludge. Before the current permit, the Region considered Marion's lagoons as sludge treatment facilities, exempt from the Part 503 regulations. But in the current permit, the Region has now determined that Marion's lagoons are a surface disposal site for sludge. (*See* Att. 1 at 11.)

The regulations applicable to surface disposal sites are set forth in 40 C.F.R. § 503.20. As made clear in Subsection 503.20(a), this subpart applies to the sites, their owners/operators, and those who prepare sewage sludge for placement at such sites. This subsection expressly acknowledges the difference between treatment and disposal, stating that "this subpart *does not* apply to sewage sludge treated on the land or to the land on which sewage sludge is treated." § 503.20(c) (emphasis added). Significantly, when the EPA issued the Part 503 regulations in 1993, it declined to impose a liner mandate on surface disposal sites. *See* Standards for the Use

or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993) ("The Agency disagrees

that liners should be required for all monofills").¹⁰

IV. THRESHOLD PROCEDURAL REQUIREMENTS

Marion satisfies the threshold requirements for filing a petition for review under 40

C.F.R. § 124.19, because:

- 1. Marion has standing to petition for review of the permit decision because it participated in the public comment period on the permit. *See* 40 C.F.R. § 124.19(a)(2); (*see also* Att. 5; Att. 6; Att. 7; Att. 8; Att. 9; Att. 10.)
- The issues raised in this petition were raised during the public comment period or in a timely fashion based on new data or EPA claims made during the issuance process, and therefore were preserved for review. *See* 40 C.F.R. § 124.19(a)(2); (*see also* Att. 5; Att. 6; Att. 7; Att. 8; Att. 9; Att. 10.)
- 3. Marion has filed the petition for review within 30 days after the Regional Administrator served notice of issuance of the final permit decision. *See* 40 C.F.R. § 124.19(a)(3). Marion was served notice of the permit on April 13, 2017, and the deadline for filing the petition for review is May 15, 2017. *See* 40 C.F.R. § 124.20.

V. STANDARD OF REVIEW

The Board may grant review of a permit decision when the petitioner shows that the

decision was based on: "(A) A finding of fact or conclusion of law that is clearly erroneous, or

(B) An exercise of discretion or an important policy consideration that the Environmental

Appeals Board should, in its discretion, review." 40 C.F.R. § 124.19(a)(4)(A),(B); accord In re

Broward County, Florida, 4 E.A.D. 705, 721 (EAB 1993).

In assessing clear error, the Board examines the administrative record that serves "as the

basis for the permit to determine whether the permit issuer exercised his or her 'considered

judgment."" In re: Town of Newmarket, NPDES Appeal No. 12-05, slip op. at 4 (EAB Dec. 2,

¹⁰ Monofills are "sludge-only landfills" and are considered surface disposal sites. Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993).

2013). When the "the administrative record is unclear" as to the factual basis for a determination by the Region in issuing a permit condition, the Board must remand the petition. *In re Broward County, Florida*, 4 E.A.D. at 721.

When an agency exercises discretion, it must "cogently explain why it has exercised its discretion in a given manner." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 48 (1983); *see also Ash Grove Cement Co.*, 7 E.A.D. 387, 397 (EAB 1997) ("acts of discretion must be adequately explained and justified."). An agency action may not be arbitrary and capricious. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43. An action is arbitrary and capricious if:

[T]he agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Id. If such deficiencies are present, "[t]he reviewing court should not attempt itself to make up for such deficiencies; [it] may not supply a reasoned basis for the agency's action that the agency itself has not given." *Id.* (citation omitted).

Finally, an agency must not exceed the authority granted in its authorizing statute.

5 U.S.C. § 706(2)(C); see also Iowa League of Cities v. E.P.A., 711 F.3d 844, 877-78 (8th Cir.

2013); Waterkeeper Alliance, Inc. v. E.P.A., 399 F.3d 486, 504-505 (2d Cir. 2005).

VI. ARGUMENT

A. Region 1 Erred In Concluding That The Lagoons Are Leaching Material Amounts Of Nitrogen Into The Groundwater Or Aucoot Cove

When presented with technical issues on appeal, the Board looks "to determine whether the record demonstrates that the Region duly considered the issues raised in the comments and whether the approach ultimately adopted by the Region is rational in light of all the information in the record." *In re Gov't D.C. Mun. Separate Sewer Sys.*, 10 E.A.D. at 348. "The Region's rationale for its conclusions, however, must be adequately explained and supported in the record." *In re Dominion Energy Brayton Point*, 12 E.A.D. 490 (EAB 2006). The Board "takes a careful look at technical issues and will not hesitate to order a remand when a Region's decision on a technical issue is illogical or inadequately supported by the record." *In re NE Hub Partners*, 7 E.A.D. 561, 568 (EAB 1998); *see also In re Austin Powder Co.*, 6 E.A.D. 713, 719-720 (EAB 1997).

The Region's conclusion that "significant amounts of nitrogen are leaching into groundwater from the lagoons and ultimately entering Aucoot Cove, (*see* Att. 2 at 77), is not adequately explained or supported by the record. The Region reached this conclusion by relying on a deeply flawed study on lagoon leaching issued by the Horsley Witten Group, Inc., which was prepared on behalf of the Buzzards Bay Coalition, a third-party advocacy group. (*See* Att. 4, the Coalition Report.) The Coalition Report is not an EPA report and it did not follow the procedures for an EPA report.

The Coalition Report estimates an implausibly high rate of (1) leaching from the lagoons, and (2) contribution of nitrogen from the lagoons to Aucoot Cove, neither of which are supported by science or logic. The Region directly cites to the Coalition Report as a reason why the "EPA has formulated special conditions relative to operation and maintenance of the lagoon system." (Att. 3, 2014 Fact Sheet at 19-20.) Using this study to justify the unprecedented permit requirement that Marion either close or line its lagoons renders the Region's special conditions for the lagoon operations arbitrary and capricious. Marion critiqued the Coalition Report multiple times during the comment period. (*See* Att. 5 at 2, 32, 35; Att. 8, Letter from CDM Smith at 1-2; Att. 9, Section 1 at 13-14; Att. 2, Comment 22 at 37.) Yet the Region's responses to these concerns fail to meaningfully acknowledge or address the errors identified by Marion. Indeed, the Region did not address Marion's April 2016 Comments (Att. 9) at all.

The Coalition Report's findings are overstated, and the estimates of leaching from the lagoons do not match the operating experience and data at the plant. (*See* Att. 5 at 32-35.) Specifically, Marion's February 6, 2015 Comments stated that the leaching or infiltration rate assumed in the Coalition Report's analysis was impossibly high, as the assumed infiltration rate is higher than the average daily inflow to the plant (and the inflow is only rarely discharged to the lagoons). (*Id.* at 33.) If the rate of leaching, 0.5 mgd, asserted in the Coalition Report were accurate, the lagoons would be dry most of the time (not accounting for precipitation). This is not—and never has been—the case. (*See* Att. 9, Section 1, at 13.) In fact, Marion's analysis showed that the leaching rate is at most 0.05 mgd, *one-tenth* of the Coalition Report's conclusions, and is likely even lower. (*See id.* at 14.)

In response, the Region stated that "there is uncertainty associated with attempts to quantify the volume and nitrogen concentration of sewerage exfiltrating from the unlined lagoons." (Att. 2, Response 22 at 38.) But the Region failed to acknowledge that in light of the Coalition Report's faulty analysis, Marion conducted studies that more precisely quantified the potential nitrogen contributions from the lagoons to Aucoot Cove. Marion presented the results of these studies to the Region in its supplemental comments submitted on September 16, 2015 and April 12, 2016. (*see* Att. 6; Att. 9.) They include a detailed water balance conducted using high-resolution pressure transducers (to measure water level) installed in each of the three

lagoons, coupled with flow data within the facility and water quality samples collected from each lagoon to determine the total nitrogen concentration. While there may still be some uncertainty regarding the precise total nitrogen contribution, Marion's studies show that the lagoon load is not anywhere near the load assumed in the Coalition Report, and is no greater than 0.3 lb/day (i.e., five ounces). While the Region does not have to accept the findings of Marion's studies, its failure to even consider and respond to them, particularly given the vastly different findings, is error. *See In re Gov't D.C. Mun. Separate Sewer Sys.*, 10 E.A.D. at 348 (the record must demonstrate that the "the Region duly considered the issues raised in the comments" and the "approach ultimately adopted by the Region is rational in light of *all* the information in the record") (emphasis added); *see also Mississippi v. E.P.A.*, 744 F.3d 1334, 1357 (D.C. Cir. 2013) ("it is a familiar principle that agencies may not merely recite the terms 'substantial uncertainty' as a justification for their actions instead, they must explain the evidence which is available, and [they] must offer a rational connection between the facts found and the choice made")(internal quotations omitted).

With regard to the nitrogen loading to Aucoot Cove, Marion's April 12, 2016 Comments showed that the potential total nitrogen load to Aucoot Cove is *at most* 0.3 lb/day (*id.* at 15), which is *150 times lower* than the 45.8 lb/day estimate presented in the Fact Sheet in reliance on the Coalition Report. (*See* Att. 3, 2014 Fact Sheet at 21.) Marion's assessment indicates that the lagoons are a *de minimis* source of total nitrogen to Aucoot Cove, even assuming the "worst case" maximum loading contribution from Marion's studies, and that lining the lagoons would have a negligible impact on water quality in Aucoot Cove. While there may still be some uncertainty regarding the precise total nitrogen contribution (*see* Att. 2, Response 22 at 38),

Marion's studies show that the lagoon nitrogen load to Aucoot Cove is not anywhere near the load assumed in the Coalition Report. (*See* Att. 9 at 15.)

To put this into perspective, a total nitrogen load of 0.3 lb/day is quite small when compared with other point and non-point sources to Aucoot Cove. For example, the facility, despite its "exceptional level of treatment" (Att. 2 at 33), contributed an average seasonal total nitrogen load of 13.75 lb/day between 2011 and 2013 from the effluent pipe authorized by the 2006 permit (Att. 3, 2014 Fact Sheet at 21), 45 times larger than the maximum possible nitrogen contribution from the lagoons. As for other non-point sources, Marion calculated a land-use based watershed load (see Att. 9), which shows the attenuated non-point nitrogen load to be 17.3 lb/day, which is nearly 60 times greater than the maximum possible lagoon contribution. As part of the watershed load assessment, Marion used the Massachusetts Estuaries Project water-use based approach to determinate the nitrogen load to Aucoot Cove from septic systems. There are 247 septic systems within the Aucoot Cove watershed in Marion and Mattapoisett, and the estimated septic load to Aucoot Cove is 2,251 lb/year, meaning a single septic system in Aucoot Cove contributes 9.1 lb/year. (Att. 9, Section 1, at 9.) In comparison to the maximum possible nitrogen load from the lagoons (0.3 lb/day, or 110 lb/year), the nitrogen contribution from septic systems into Aucoot Cove is over *twenty times* greater. In fact, the maximum possible nitrogen load from the lagoons is the equivalent load to only 12 septic systems. In other words, even if the lagoons are leaching as much as 0.3 lb/day, the impact to Aucoot Cove of removing only a *fraction* of the septic systems within the town would have a significantly greater impact than lining all 20 acres of lagoons.

The Region concedes that the Coalition Report's leaching rate from the lagoons is probably overstated, asserting that "leakage rate estimate of 1 inch per day [as contained in the

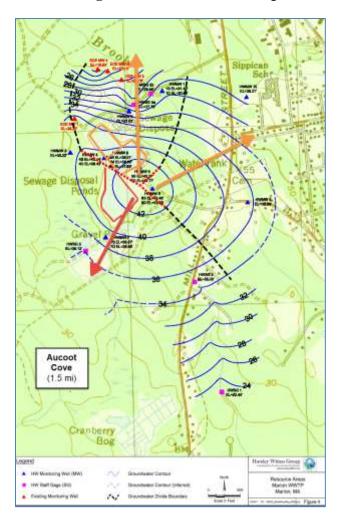
report] is likely higher than actual leakage rates." (*See* Att. 2, Response 22, at 38.) But it still relies on the Coalition Report by stating that "[t]he requirement to line or abandon the lagoons does not turn on a precise quantification of the magnitude of nitrogen loading from the lagoons ... the results of the loading analysis would be similar if the actual lagoon loading were one half of the [Coalition's] estimate." (*Id.*) Importantly, this response ignores Marion's April 12, 2016 Comments, which demonstrated that the actual lagoon leaching rate was less than *one-tenth* of the Coalition Report estimate, and that the loading rate to Aucoot Cove was *one-hundred-fifty* times less than the Coalition Report estimate.¹¹ (*See* Att. 9, Section 1 at 13-14.) Contrary to the Region's assertion, a difference of this magnitude matters a great deal.

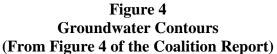
The Region has no logical basis to assert that one half of its loading estimate is somehow sufficiently reliable given the vast differences in the leakage estimates submitted by the Coalition and Marion. *See Settling Devotional Claimants v. Copyright Royalty Bd.*, 797 F.3d 1106, 1109 (D.C. Cir. 2015) ("Congress . . . required that the . . . determinations rest on a focused analysis of the record, not an arbitrary splitting of the baby"). Moreover, the Region's assertion in that regard is no substitute for scientifically reliable data, information, or explanation. *See Brand v. Miller*, 487 F.3d 862, 869 (Fed. Cir. 2007) ("agency expertise cannot substitute for record evidence because '[t]he requirement for administrative decisions based on substantial evidence and reasoned findings-which alone make effective judicial review possible would become lost in

¹¹ Although the Region considered and responded to a number of issues raised in Marion's supplemental comments, the Region did not directly respond to or acknowledge Marion's April 12, 2016 Comments, which has a substantial bearing on the question of whether and at what rate the lagoons might be leaching. Given that the Region has chosen to consider a range of other supplemental comments touching on the same issues, and this supplemental comment was submitted approximately a year before the Final Permit issued, the Region should not be allowed to arbitrarily restrict the administrative record to exclude the April 12, 2016 Comment. *See Envtl. Defense Fund v. Blum*, 458 F. Supp. at 661.

the haze of so-called expertise."") citing *Baltimore & Ohio R.R. Co. v. Aberdeen & Rockfish R.R. Co.*, 393 U.S. 87, 92 (1968).

As a final point, even if the Board were to accept the Region's findings that the lagoons leach nitrogen, the Coalition Report shows that—at most—only Lagoon 3 could have any impact on Aucoot Cove.¹² (*See* Att. at 16.) Take, for example, Figure 4 from the Coalition Report (reproduced below with minor edits):





¹² Marion raised its concerns regarding groundwater flow and counters in its February 6, 2015 Comments. (*See* Att. 5 at 34-35; *see also* Att. 2 at 40-43.)

Figure 4 from the Coalition Report includes the groundwater contours and approximate location of a groundwater divide, which is a high point of land where the water table slopes downward radially. Added to the Coalition Report's figure, and shown above, are red dotted lines indicating the likely approximate location of the groundwater divide near the lagoons, and arrows showing the general groundwater flow path from the groundwater divide located slightly east of the lagoons. Given the Coalition's groundwater contours, the groundwater for Lagoons 1 and 2 travels *away* from Aucoot Cove and, therefore, lining these lagoons would have no impact on the cove.

The Region acknowledged that groundwater flow in this area was not reaching Aucoot Cove, but emphasized that this did not impact the conclusion that nitrogen was leaching into the groundwater from the lagoons. (*See* Att. 2, Response 24 at 40.) Notably, the Region stated that "while there is uncertainty associated with the exact direction of groundwater flow from the entire 20-acre lagoon area, all nitrogen from the lagoons will reach a surface water and have a detrimental effect on that surface water." (*Id.*, Response 26 at 43.) There are several problems with this response. *First*, the EPA does not have authority to regulate groundwater. *See* Section VI.D.i. *Second*, nitrogen is not a groundwater contaminate under the EPA regulations. *See* Section VI.C.i. *Third*, and perhaps most important, the groundwater contours impact the effect of the lagoons on the cove, the water body at issue in the permit. The Region cannot evade its responsibility by summarily asserting—without basis—that the groundwater eventually reaches a surface water and impacts water quality. (*See id.*, Response 26 at 43.) The Region's rationale for its conclusions, particularly on technical matters, must be adequately explained and supported in the record. *See In re NE Hub Partners*, 7 E.A.D. at 568. At a minimum, the Region must

state: (1) which surface waters are impacted, and (2) how a minimal nitrogen contribution would affect them. The Region has not done so.

B. Marion's Lagoons Are Treatment Facilities Not Subject To 40 C.F.R. § 503

The Region wrongly determined that Marion's lagoons are "subject to the requirements of Part 503 for sludge disposal." (*See* Att. 1 at 11.) In stark contrast to the 2006 permit, which regulated the lagoons as providing treatment and noted that they only "produce minimal sludge" (*see* Att. 15, 2006 Fact Sheet at 10), the Region has now declared that "for purposes of this permit, the placement of sludge in unlined lagoons constitutes sludge disposal and is therefore subject to the requirements of Part 503 for sludge disposal." (Att. 1 at 11.) The EPA has not provided sufficient justification for this novel interpretation and committed clear error by determining for the first time that the lagoons are no longer a treatment facility.

As the Region has noted—and the current permit states—40 C.F.R. § 503 regulations "do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g., lagoons or reed beds) . . . " (*See* Att. 1 at 11); *see also* 40 C.F.R. § 503.6(a) ("This part does not establish requirements for processes used to treat domestic sewage or for processes used to treat sewage sludge prior to final use or disposal . . ."); 40 C.F.R. § 503.20(c) ("This subpart does not apply to sewage sludge treated on the land or to the land on which sewage sludge is treated").

Lagoons like those at the Marion plant treat sludge through anaerobic digestion, and as the EPA has explained "[a]naerobic fermentation is the dominant activity in the bottom layer in the lagoon" and "[t]he bottom layer of the lagoon includes sludge deposits and supports anaerobic organisms." Wastewater Technology Fact Sheet – Facultative Lagoons, EPA Document EPA-832-F-02-014 (Sept. 2002)(attached as Att. 18). Marion's lagoons are

"facultative," meaning that aerobic treatment occurs in the upper, oxygen rich layers while anaerobic digestion occurs in the lower, oxygen deprived layers where heavier sludge settles.

The lagoons are integral to the facility's operation and the treatment of waste activated sludge. When waste activated sludge, which is largely composed of biodegradable material, is initially removed from the main biological process, a large percentage (typically more than 75 percent) of the material is volatile, meaning that it is biologically active. When placed into an anaerobic environment, such as exists in the bottom layer of a facultative lagoon, this biologically active material begins to digest; as a result of this anaerobic digestion, the biologically active material in the sludge is consumed and the quantity reduced by 30 to 40 percent with enough detention time, and sometimes even more. Treating sludge in this way significantly reduces the quantity of material, as well as reducing its pathogenic nature. The below diagram summarizes the treatment process in lagoons.

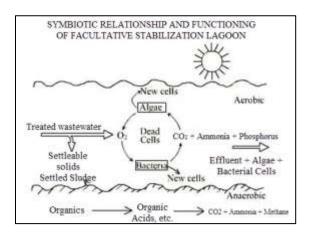


Figure 5 Facultative Lagoon Treatment of Sludge¹³

Lagoons like those at Marion's plant have long been considered sludge treatment

facilities by the EPA, and the Region has consistently treated Marion's lagoons as such in all

¹³ Figure derived from NPTEL, Water & Wastewater Engineering,

http://nptel.ac.in/courses/105104102/Lecture%2040.htm, (last visited May 11, 2017).

prior permits. (*See* Att. 15 at 9; Att. 14 at 19.) The Region's prior practice was consistent with EPA guidance that states that lagoons are sludge treatment facilities not subject to Part 503 regulations. *See* EPA Region VIII, Biosolids Management Handbook, Part 1 C Biosolids Regulations, 1.1-7 ("EPA does not intend to regulate under Part 503 wastewater treatment lagoons in which sewage sludge is being treated") (excerpt attached as Att. 19); Proposed Standards for the Disposal of Sewage Sludge, 54 Fed. Reg. 5746-01 (Proposed Feb. 6, 1989) ("The distinguishing feature [between a surface disposal site and sludge treatment facilities] is that a surface disposal site is the ultimate method of disposal, rather than part of the wastewater or sewage sludge treatment processes"); *see also* NPDES Sewage Sludge Permit Regulations; State Sludge Management Program Requirements, 54 Fed. Reg. 18716-01 (May 2, 1989) ("Part 503 proposes to regulate the ultimate use or disposal of sewage sludge. Therefore, the proposed rule does not cover sludge placed in pits, ponds, *lagoons*, and similar surface impoundments which traditionally have been considered either part of the wastewater treatment train or as temporary storage facilities.") (emphasis added).

Marion's lagoon operations and sludge treatment have not changed, yet for the first time, the Region has now declared them disposal sites by invoking the "two-year storage guideline" to justify imposing Part 503 regulations. (*See* Att. 2 at 80.) The Region explains that "section 503.20(b) provides that sites where sewage sludge remains for longer than two years will generally be considered surface disposal sites, unless the sludge preparer has, among other requirements, explained why the sludge must remain for longer than two years before it can be finally used or disposed and specified the approximate period when the sewage sludge will be used or disposed." (*Id.*) But the two-year storage guideline is inapplicable in this case. In establishing the two-year guideline, EPA explained that "[i]f retained and *not treated* for more

than two years, the sewage sludge is presumed to be disposed." Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993) (emphasis added). Here, the sewage sludge has not been "retained" and "not treated" for more than two years; rather, it continually undergoes treatment, as explained above. *See also* Robert Brobst, *A Plain English Guide to the EPA Part 503 Biosolids Rule*, 59 (EPA Document EPA/832/R-93/003, September 1994) ("The surface disposal provisions of the Part 503 rule do not apply when biosolids are treated on the land, such as in a treatment lagoon or stabilization pond, and treatment could be for an *indefinite period*") (emphasis added) (excerpt attached as Att. 20); *see also* NPDES Sewage Sludge Permit Regulations; State Sludge Management Program Requirements, 54 Fed. Reg. 18716-01 (May 2, 1989).

Remarkably, in response to Marion's comments, the Region dismisses Marion's concerns by stating that "the commenter's suggestion that the lagoons should not be considered disposal sites and are exempt from regulation merely because they may provide some undetermined level of sludge treatment is unpersuasive." (*See* Att. 2, Response 66 at 79.) This response ignores that the EPA itself has long considered such lagoons exempt from EPA regulations because they in fact do treat sludge. Further, there has never been a requirement to quantify or determine the level of treatment that is occurring in order to find the Part 503 regulations inapplicable. The regulations simply define "treatment of sewage sludge" as "the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge." 40 C.F.R. § 503.9(z).

Ultimately, the Region's sudden change in policy and handling of the Marion lagoons is clear error and is arbitrary and capricious. *See Donovan v. Adams Steel Erection, Inc.*, 766 F.2d 804, 810 (3d Cir. 1985) (finding that the OSHA Review Commission acted arbitrarily when

contrary to established precedent related to "steel erection standards" it vacated a citation to a steel erector company).

C. Even If The Lagoons Are A Surface Disposal Site, Region 1 Acted Arbitrarily And Capriciously In Declaring That Unlined Lagoons Are *Per Se* Improper Operation and Maintenance, And In Creating A New Groundwater Discharge Limit Of "0" For Nitrogen.

The Region has determined that the unlined lagoons are *per se* improper operation and maintenance under §§ 503 and 122.41(d)(e), because it believes that the lagoons leach some amount of nitrogen into groundwater, while giving no regard to "the magnitude and travel time of nitrogen leaching from lagoons" to Aucoot Cove. (*See* Att. 2, Response 25 at 42.) Effectively, the Region has established a limit of zero for the discharge of nitrogen from the lagoons. This requirement is entirely new and constitutes a reversal from the EPA's prior application of its regulations and guidance. In addition, such a requirement is beyond the scope of an NPDES permit. Marion raised concerns with the EPA's apparent new liner mandate throughout the comment period (*see, e.g.*, Att. 5 at 31; Att. 2, Comment 66 at 77), but the EPA failed to acknowledge it is imposing such a mandate. Ultimately, the Region's demand to impose a liner mandate in this permit is arbitrary and capricious.

As discussed in Section II.B. above, the Region has considered lagoons as providing treatment since at least 1998. And even if the lagoons were disposal sites, the EPA has never before demanded lining. In fact, just the opposite. The EPA has long acknowledged that sludge disposal sites may be unlined and explicitly declined to impose a liner mandate on monofills when it issued the Part 503 regulations. *See* Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993) ("The Agency disagrees that liners should be required for all monofills"). Indeed, both the surface disposal regulations, 40 C.F.R. § 503, Subpart C, and the Region's sludge compliance guidance expressly contemplate unlined disposal

sites and create special requirements for them. *See, e.g.*, EPA Region 1, NPDES Permit Sludge Compliance Guide, 2.2 (Nov. 4, 1999) ("If the liner does not meet the specified hydraulic conductivity, the sludge disposal unit is regulated as an unlined sewage sludge disposal site.") (excerpt attached as Att. 21). Nowhere do they say that unlined lagoons are *per se* improper.

This declaration that the lagoons must be lined is clear error because it is contrary to the EPA's regulations and guidance, done without providing a legitimate basis for this change, and constitutes an improper rulemaking without notice and comment.

i. The Region failed to consider whether the unlined lagoons could comply with the current groundwater requirements in 40 C.F.R. § 503

Even if the unlined lagoons are a surface disposal site, they likely comply with those provisions of the Part 503 regulations that address groundwater contamination. These regulations list several potential groundwater contaminants. *See* 40 C.F.R. § 503.24(n)(1); 40 C.F.R. § 503.21(c); 40 C.F.R. § 141.62(b). Critically, total nitrogen is not one of them.¹⁴ The only nitrogen-related substance listed as a contaminate is nitrate.¹⁵ 40 C.F.R. § 141.62(b). And the Coalition Report that the Region relies on found only minimal levels of nitrate, well under the prescribed limit.

Section 503.24 lists a series of management practices for sewage disposal units. Subsection (n) addresses groundwater and states that "[s]ewage sludge placed on an active sewage sludge unit shall not contaminate an aquifer." 40 C.F.R. § 503.24(n)(1). Further, a site operator must use "a ground-water monitoring program developed by a qualified ground-water

¹⁴ Nitrogen in groundwater does not cause the same ecological concerns as nitrogen levels in surface water. Total nitrogen becomes a concern in groundwater only when it discharges to surface water, where it could contribute to eutrophication in nitrogen-limited environments.

¹⁵ Nitrates in groundwater are a human health concern at certain levels and are regulated as part of the National Primary Drinking Water Standards.

scientist or a certification by a qualified ground-water scientist" to "demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer." *Id.* at § 503.24(n)(2). An "[a]quifer is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs." *Id.* at § 503.21(b). "Contaminating an aquifer means" introducing a substance that would cause *nitrate* levels in an aquifer's ground water to exceed the maximum contaminant level ("MCL") of 10 mg/L. § 503.21(c); *see also* EPA's Process Design Manual: Surface Disposal of Sewage Sludge and Domestic Septage, 39 (Sept. 1995) (excerpt attached as Att. 22). There is no certification requirement or limit on total nitrogen discharged from a sludge disposal site. *See id.* So while the regulations permit the EPA to consider the effect of pollutants on groundwater, nitrogen is not a groundwater pollutant and its consideration is limited to the effect a disposal site has on aquifers.

The Region erred in at least two respects. *First*, it failed to consider the effect the unlined lagoons would have on an aquifer, the only groundwater-related consideration in the regulations. This omission alone warrants review by the Board. *See In re Broward County, Florida*, 4 E.A.D. at 721 (ordering remand and supplementation of the record to clarify whether the Region made certain factual determinations when establishing permit conditions). The record shows no evidence that the lagoons contaminate an aquifer, either with nitrates or total nitrogen. As shown in Figure 6 below, created by the Massachusetts Office of Geographic Information (with minor edits), the nearest mapped aquifer to the lagoons is over a mile away:

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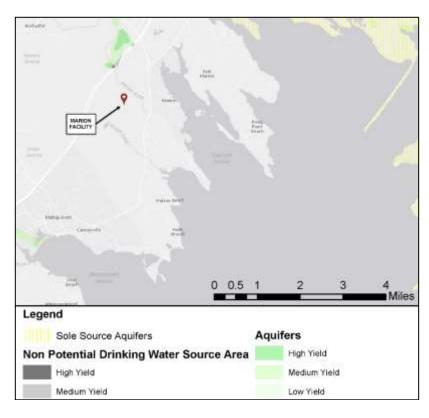


Figure 6¹⁶ **Closest Documented Aquifer to Marion Facility**

Second, the Region committed clear error by defining total nitrogen as a groundwater contaminant, which does not have such status in the Part 503 regulations. Nitrate is the only nitrogen-related groundwater contaminant in Part 503, and the Coalition Report confirms that it is unlikely—at best—that nitrates from the lagoons leaks to the aquifer at contaminable levels. (*See* Att. 4 at Appendix B.) For example, as shown in Figure 7 below, of the 10 wells monitored by the Coalition, none registered nitrate levels above 2.06 mg/L, with most at barely detectable levels.

¹⁶ Complete figure provided as Attachment 17.

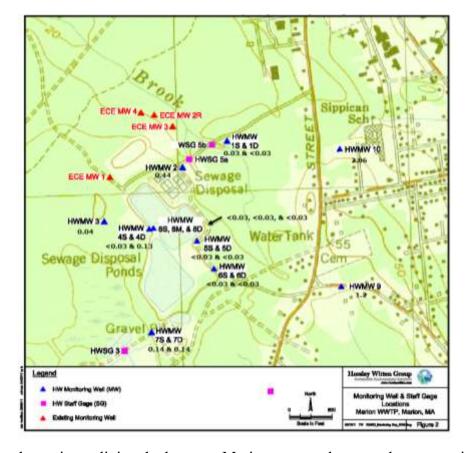


Figure 7 Summary of Nitrate Concentrations (mg/L) Based on Coalition Report (Feb. 2011)

As an alternative to lining the lagoons, Marion proposed a groundwater monitoring program to assess contaminants discharged from the lagoons consistent with § 503.24. *(see* Att. 10 at 2-4.) The Region failed to meaningfully consider this proposal,¹⁷ as well as consider whether Marion could comply with Part 503's requirement that the lagoons not contaminate an aquifer. This failure is clear error. *See In re Broward County, Florida*, 4 E.A.D. at 721.

¹⁷ The Region, in response, simply asserted that the desire for greater scientific certainty cannot preclude the EPA from proceeding with its permit. (*See* Att. 2, Response 71 at 86.) While Marion is mindful that the EPA need not avoid issuing a permit in the face of "unavoidable scientific uncertainty" the imposition of permit conditions that will impose millions of dollars in expenses on this small community must rest on more reliable data than that contained in the Coalition Report.

ii. It is arbitrary and capricious for Region 1 to declare the unlined lagoons improper operation and maintenance when the EPA's regulations, guidance, and prior permits sanction them.

The Region has declared, without citing to precedent or providing sufficient explanation, that the use of unlined lagoons does not comply with the operation and maintenance requirements of a treatment works. (*See* Att. 2, Response 22 at 38.) It does so without any regard for the facility's actual operations, the maintenance performed by Marion, "the amount of nitrogen exfiltrating the unlined lagoons," the amount of solids placed in the lagoons, or the length of time of the placement. (*See id.*) Instead, the Region has declared that unlined lagoons, *per se*, are improper operation and maintenance under 40 C.F.R. § 122.41(d)-(e). (Att. 2 at 38-39.)

This decision is arbitrary and capricious. *First*, § 122.41(e) requires only that the permittee "properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures." This provision does not give the Region authority to dictate the *type* of treatment facility or what equipment a permittee must use. That authority rests exclusively with the state, as discussed below. *See* Section VI.D. Indeed, we are aware of no instance where the EPA used this operation and maintenance section to require the installation of a new treatment system, especially where that system would have no impact on a point-source discharge to a navigable water. *See* Section VI.D, below.

Second, the Region's per se rejection of unlined lagoons is a reversal of the EPA's prior rulemaking and guidance. The Region has recognized that Marion's lagoons provide sludge treatment since at least 1998, and never before has it required—or even recommended—lining. Further, the EPA had long acknowledged that sludge disposal sites may be unlined. In fact, the EPA explicitly declined to impose a liner mandate when it issued the Part 503 regulations. *See* Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993) (explicitly declining to impose a liner mandate on monofills). Further, both the surface disposal regulations, 40 C.F.R. § 503 Subpart C, and the Region's sludge compliance guidance expressly contemplate unlined disposal sites and create special requirements for them. (*See e.g.*, Att. 21) (presenting two scenarios that involve unlined surface disposal sites and conditions that would apply). Nowhere has the Region or EPA held that unlined lagoons are *per se* improper. It is basic common sense that a practice expressly permitted by the agency cannot be deemed improper operation and maintenance.

While an agency is free to change its policies in certain instances, it must identify and articulate a valid reason for doing so. As observed in *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009):

the requirement that an agency provide reasoned explanation for its action would ordinarily demand that it display awareness that it *is* changing its position. An agency may not, for example, depart from a prior policy *sub silentio* or simply disregard rules that are still on the books And of course the agency must show that there are good reasons for the new policy.

See also Mingo Logan Coal Co. v. EPA, 829 F.3d 710, 718 (D.C. Cir. 2016) ("When an agency changes policy . . . it must in some cases 'provide a more detailed justification than what would suffice for a new policy created on a blank slate."") (quoting *FCC v. Fox*, 556 U.S. at 515.). Here, the Region did not do that. It did not acknowledge its change of interpretation of the lagoons' function from treatment to disposal. And more importantly, once it determined that the lagoons serve a disposal function, it provided no explanation why the normal disposal requirements are inapplicable. Such sudden and unexplained change renders the Region's decision arbitrary and capricious. *See, e.g., Motor Vehicle Mfrs. Assn.*, 463 U.S. at 46–57

(finding that National Highway Traffic Safety Administrative failed to provide clear and convincing reasons for its action to abandon the passive restraint system); *see also, e.g., United States v. Pennsylvania Industrial Chemical Corp.*, 411 U.S. 655, 670–675 (1973) (remanding case for court to consider whether there was legitimate reliance on prior agency interpretation); *Smiley v. Citibank (South Dakota), N.A.*, 517 U.S. 735, 742 (1996)("agency interpretations that are of long standing come before us with a certain credential of reasonableness").

iii. *A lagoon lining requirement and setting a nitrogen groundwater limit at* "0" is an improper rulemaking without notice and comment.

Public notice and comment are to be included as part of any regulations promulgated under the CWA. 40 C.F.R. § 25.10(a); *see also Iowa League of Cities*, 711 F.3d at 874. Under the Administrative Procedures Act ("APA"), "rule" means "the whole or a part of an agency *statement* of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency." 5 U.S.C. § 551(4) (emphasis added). For informal rulemaking, agencies must publish "notice of proposed rulemaking" in the Federal Register, "give interested persons an opportunity to participate in the rule making," and provide a "concise general statement of their basis and purpose" in the final rule. 5 U.S.C. §§ 553(b), (c). The APA also requires agencies to give "interested person[s] the right to petition for the issuance, amendment, or repeal of a rule." *Id.*

The Region did none of that here. In effect, the Region has declared that unlined lagoons are improper operation and maintenance under § 122.41, and it adds a new requirement for sludge operations, stating that no disposal site may discharge any amount of nitrogen into the groundwater, regardless of whether or not there is any effect on an aquifer. Such a regulatory change can only be accomplished by notice and comment.

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These failures are significant. From a policy perspective, there are good reasons why a facility may not need lining for a lagoon, including such considerations as cost, the permeability of the soil, the relatively low amount of sludge deposited, and the lack of an aquifer—all considerations that EPA previously acknowledged were significant but now the Region does not. (*See* Att. 22; *see also* Att. 3, 2014 Fact Sheet at 20.) And more significantly, Marion likely can meet the requirements of the current regulations, if given the opportunity to do so. As described above, there is no known aquifer. The soil is substantially non-permeable. And the amount of sludge deposited is minimal. (Att. 15, 2006, Fact Sheet at 10.) The EPA has provided no reason why Marion should not be subject to the above-cited longstanding rules and guidance. Nor could it.

D. The EPA Has Exceeded The Scope Of Its Authority Under The Clean Water Act By Attempting to Regulate Groundwater Discharges and the Internal Workings of a Facility

Under the APA, an agency's rules should be "set aside [when they are] in excess of statutory jurisdiction, authority, . . . or short of statutory right." 5 U.S.C. § 706(2)(C). *Iowa League of Cities.*, 711 F.3d at 876. Here, the EPA seeks to regulate the lagoons under Section 405 of the Clean Water Act, 33 U.S.C. § 1345, and the regulations EPA promulgated pursuant to that section, which are at 40 C.F.R. § 503. In doing so, it has exceeded the scope of its CWA authority by impermissibly regulating sludge that lacks a direct impact on surface waters of the United States, and by dictating the internal workings of a treatment facility. (*See* Att. 5 at 32.)

i. The Clean Water Act does not permit the EPA to regulate groundwater discharges, especially those that lack a direct impact on surface waters of the United States.

It is well settled that EPA's authority under the Clean Water Act is "strictly limited to the discharge of pollutants into navigable waters." *National Pork Producers Council v. E.P.A.*, 635 F.3d 738, 750 (5th Cir. 2011) (the EPA could not require an animal feeding operation that

'purposed' to discharge pollutants, but had not actually discharged any, to apply for an NPDES permit) (listing cases). "[T]here must be an actual discharge into navigable waters to trigger the CWA's requirements and the EPA's authority." *Id.* at 751; *see also Waterkeeper Alliance*, 399 F.3d at 505 ("in the absence of an actual addition of any pollutant to navigable waters from any point, there is no . . . statutory violation"). Congress imposed this limitation to preserve important federalism principles:

It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.

Rapanos v. United States, 547 U.S. 715, 722-23 (2006) (citing 33 U.S.C. § 1251(b)).

This requirement applies equally to EPA's sludge authority. Under § 1345(a), Congress

expressly connected EPA's authority to regulate sludge with the sludge's impact on navigable

waters:

Notwithstanding any other provision of this chapter or of any other law, in any case where the disposal of sewage sludge resulting from the operation of a treatment works as defined in section 1292 of this title (including the removal of in-place sewage sludge from one location and its deposit at another location) would result in any pollutant from such sewage sludge *entering the navigable waters*, such disposal is prohibited except in accordance with a permit issued by the Administrator under section 1342 of this title.

33 U.S.C. § 1345(a) (emphasis added). As if the express language was not clear enough, the

legislative history confirms the limited nature of the NPDES program as applied to sludge. For

example, Senator Boggs, who originally introduced Section 405 of the CWA, stated in

consideration of the conference report:

Under Section 405 . . . disposition of sewage sludge in any manner which might affect the inland or coastal navigable waters would be prohibited (either by dumping sludge on land in such a fashion as

to run off into waters or dumping in the ocean in such a manner as would have it returned into territorial waters).

Pacific Legal Foundation v. Quarles, 440 F. Supp. 316, n. 6 (D.C. Cal. 1977) (citing S. Conf.

Rep. No. 92-1236, in 1 Legislative History of the Water Pollution Control Act Amendments of

1972 (compiled for the Senate Comm. on Public Works by the Library of Congress) at 170-71).

And according to the EPA:

The CWA, as enacted in 1972, addressed sewage sludge use and disposal in only one limited circumstance: when the use or disposal posed a threat to navigable waters. Thus, section 405(a) of the Act prohibited the disposal of sludge if it would result in any pollutant from the sludge entering navigable waters unless in accordance with a permit issued by EPA.

Standards for the Use or Disposal of Sewage Sludge, 58 Fed. Reg. 9248-01 (Feb. 19, 1993).

In 1977, Congress amended § 1345 by adding two subsections. The first, subsection (d),

required the EPA to develop regulations "for the disposal of sludge and the utilization of sludge

for various purposes." The second, subsection (e), states:

The determination of the manner of *disposal or use* of sludge is a local determination except that it shall be unlawful for the owner or operator of any publicly owned treatment works to dispose of sludge from such works for any use for which guidelines have been established pursuant to subsection (d) of this section, except in accordance with such guidelines. (emphasis added).

These changes in 1977 do not suggest that Congress intended to move away from the

requirement that regulating sludge (and issuing permits to regulate sludge) had to be connected

to pollutants into navigable waters. In that regard, Senator Muskie, speaking about the

conference report that produced these changes, stated:

The conference bill, in every possible way, attempts to reinforce the specific statement of the 1972 act with respect to innovation, use of alternatives, and the adoption of policies which would lead to the confined and contained disposal of waste, utilization of the values of waste, *and the elimination of the discharge of pollutants to the Nation's waters*. Cong. Rec. S19636-86 (daily ed. Dec. 15, 1977) (statement of Senator Muskie)(emphasis added).¹⁸

Here, there is no dispute that the lagoons are unconnected to navigable waters of the United States. The three lagoons are located approximately 1.5 miles from the head of the salt marsh in Aucoot Cove. (*See* Att. 3, 2014 Fact Sheet at 22.) There is no direct connection between the lagoons and a surface water, and the lagoons cannot physically discharge to any surface water.

Even if there were leaching from the lagoons to the groundwater, the Region acknowledges that it would take at least 20 years for any pollutant to reach Aucoot Cove via groundwater travel.¹⁹ (See id.) This is especially important given how little nitrogen could possibly be discharged by the lagoons—well less than other point or non-point discharges to the cove. But the key is that the CWA does not govern groundwater, even if it is hydrologically connected to navigable waters.²⁰ See Realty Co. v. Ursinus Coll., No. 11-5885, 2013 WL 6164092, at *8 (E.D. Penn. 2013) (where pollution from underground storage tanks took approximately five to six years to travel from groundwater into navigable surface waters, the court found it to be "nonpoint source pollution outside the purview of the CWA"); see also Patterson Farm, Inc. v. City of Britton, 22 F. Supp. 2d 1085, 1091 (D.S.D. 1998) (the "court lacks subject matter jurisdiction over plaintiff's claim that the poor operation and maintenance of

¹⁸ Congress made other amendments to this section in 1977 and 1987, which do not affect this analysis.

¹⁹ And it could take even longer to reach Sippican Harbor. (*See* Att. 4 at 8-9) (estimating a travel time in the range of 13 to 52 years).

²⁰ Marion raised this concern in its initial February 6, 2015 Comments. (*See* Att. 5 at 32) ("If the lagoons were to be found to be discharging to groundwater, their regulation is not in the province of an EPA-issued NPDES permit.") The Region's response simply asserts that under Part 503 it has authority to regulate the lagoons, but the Region fails to address its authority (or asserted lack thereof) to regulate discharges to groundwater. (*See* Att. 2 at 81-82.)

the industrial lagoons is causing discharges into the groundwater"); *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014) ("Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow "hydrologically connected" to navigable surface waters"); *Kelley ex rel. Mich. v. United States*, 618 F. Supp. 1103, 1107 (W.D. Mich. 1985) ("Congress did not intend the Clean Water Act to extend federal regulatory and enforcement authority over groundwater contamination. Rather, such authority was to be left to the states"); *Umatilla Waterquality Protective Ass 'n v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1318 (D. Or. 1997).

Regulating the sludge in these lagoons when a connection to navigable waters is lacking is beyond the EPA's authority under the CWA.²¹ The lagoons, and any discharges to groundwater, are therefore not a point source pollutant to a navigable water and are not subject to EPA regulation under the CWA.²²

²¹

Although in *United States v. Hagberg*, 207 F.3d 569, 472 (9th Cir. 2000), the Court found that the EPA could enforce the sludge regulations against an operator who pumped sewage from a septic tank and then dumped it along a stretch of road, this case does not state how the operator's actions impacted navigable waters.

²² Moreover, these lagoons have no effect on interstate commerce, the basis for Congress's Clean Water Act authority. The sludge is treated in the lagoons. It does not travel in interstate commerce, nor is it sold. This raises "significant constitutional questions raised by [EPA's] application of their regulations, and yet we find nothing approaching a clear statement from Congress that it intended [the CWA] to reach [treatment lagoons] such as we have here." *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159, 167 (2001) (Section 404(a) did not reach an abandoned sand and gravel pit, which the Army Corps of Engineers said impacted intrastate waters used as habitat by migratory birds); *Rapanos*, 547 U.S. at 738 (plurality) ("we would expect a clearer statement from Congress to authorize an agency theory of jurisdiction that presses the envelope of constitutional validity"). And the EPA should not receive deference when its interpretation invokes the outer limits of Congress' power. *See Miller v. Johnson*, 515 U.S. 900, 923 (1995); *Edward J. DeBartolo Corp. v. Florida Gulf Coast Bldg.*, 485 U.S. 568, 574-75 (1988); *see also Gutierrez-Brizuela v. Lynch*, 834 F.3d 1142, 1158 (10th Cir. 2016) (Gorsuch, J.) (reconsidering *Chevron* deference).

ii. The Administrator may not dictate the internal working of a wastewater facility

The "EPA can properly take only those actions authorized by the CWA—allowing, prohibiting, or conditioning the pollutant discharge." 33 U.S.C. § 1342; *see also Natural Resources Defense Council, Inc. v. EPA*, 822 F.2d 104, 129 (D.C. Cir. 1986) ("EPA's jurisdiction [under the CWA] is limited to regulating the discharge of pollutants. . . ."). The "EPA may not, . . . under the guise of carrying out its responsibilities . . . transmogrify its obligation to regulate discharges into a mandate to regulate the plants or facilities themselves. To do so would unjustifiably expand the agency's authority beyond its proper perimeters." *Natural Resources Defense Council, Inc. v. E.P.A.*, 859 F.2d 156, 170 (D.C. Cir. 1988). "[J]ust as EPA lacks authority to ban construction of new sources pending permit issuance, so the agency is powerless to impose permit conditions unrelated to the discharge itself." *Id.* "The statute is clear: The EPA may regulate the pollutant levels in a waste stream that is discharged directly into the navigable waters of the United States through a "point source"; it is not authorized to regulate the pollutant levels in a facility's internal waste stream." *Am. Iron and Steel Inst. v. E.P.A.*, 115 F.3d 979, 996 (D.C. Cir. 1997).

Three cases are instructive. In *Iowa League of Cities*, the Eighth Circuit correctly determined that EPA cannot place effluent limitations on or regulate the flow of water inside a publicly owned treatment works facility, and can only regulate effluent quality at the final point of discharge:

The EPA is authorized to administer more stringent "water quality related effluent limitations," but the CWA is clear that the object of these limitations is still the "discharges of pollutants from a point source." 33 U.S.C. § 1312(a). In turn, "discharge of pollutant" refers to the "addition of any pollutant to navigable waters." § 1362(11). The EPA would like to apply effluent limitations to the discharge of flows from one internal treatment unit to another. We cannot reasonably conclude that it has the statutory authority to

do so.... Therefore, insofar as the blending rule imposes secondary treatment regulations on flows within facilities, we vacate it as exceeding the EPA's statutory authority.

Iowa League of Cities, 711 F.3d at 877-78.

Similarly, in *Natural Resources Defense Council*, the D.C. Circuit invalidated regulations that imposed non-water quality permit conditions unconnected to surface water discharges. 859 F.2d at 193 (citing 40 C.F.R. §§ 122.29(c)(3), 122.44(d)(9), and 122.49(g)). In doing so, the court found that "the CWA does not empower the agency to regulate point sources themselves; rather, EPA's jurisdiction under the operative statute is limited to regulating the discharge of pollutants." *Natural Resources Defense Council*, 859 F.2d at 194.

Finally, in *Am. Iron and Steel Inst.*, the D.C. Circuit found that the EPA exceeded its CWA authority by requiring a pollutant minimization program that monitored and regulated the discharge of a pollutant from each source within the facility. 115 F.3d at 995. The court distinguished between monitoring and reporting requirements for internal plant sources, which the EPA may require, and placing pollutant limits on "the streams and pools that are inside the facility," which the EPA may not. *Id.* at 995-96. "[T]his sort of meddling inside a facility" would impermissibly "deprive the individual permittee of the ability to choose between a control system that meets the point-source [effluent limits] by means of point source controls and a control system that meets the point source [limits] by means of internal waste stream purification." *Id.* at 996. The court therefore vacated the procedure "insofar as it would impose the point-source [limit] upon a facility's internal waste streams." *Id.*

Like these three cases, the Region's insistence that the lagoons be lined or removed impermissibly regulates the facility itself, rather than its discharge of pollutants.²³ The lagoons are integral to the internal waste stream. *See* Section III.A., above. And they are not an independent point source discharge into a navigable water, even assuming EPA's ambitious 20-year estimate for nitrogen from the lagoons meandering to Aucoot Cove.

This limitation on EPA's authority is significant. "[B]y authorizing the EPA to impose effluent limitations only at the point source, the Congress clearly intended to allow the permittee to choose its own control strategy." *Am. Iron & Steel Inst.*, 115 F.3d at 996. Marion is free to determine how it meets its effluent limitations. To the extent the lagoons have any effect at all, it is Marion's decision whether or not to line the lagoons. In effect, the EPA is dictating treatment design. The CWA does not permit "this sort of meddling inside a facility." *Id.*

VII. CONCLUSION

For these reasons, the Town of Marion respectfully seeks Board review of the terms and conditions of Marion's current NPDES permit regarding its treatment of the facility's lagoons. After such review, Marion requests a remand of the permit to Region 1 with an order to issue an amended NPDES permit that removes the condition that Marion either close or line the lagoons.

²³ Marion raised this concern in its initial February 6, 2015 Comments. (*See* Att. 7 at 32) ("EPA has authority to regulate effluent limits and disposal of biosolids, not the internal working of a wastewater facility"). The Region did not directly address this concern, but rather noted "[t] o the extent the commenter also disputes the need to line or close the lagoons, as well as EPA's authority to require it, we note that the Town has applied for SRF funding for a project that would accomplish "lining/closure" of the lagoon." (Att. 2 at 81, n. 16.) This response does not address the Region's *authority* to mandate the lining but rather deflects the issue.

Respectfully submitted,

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Attorneys for Petitioner

Dated: May 15, 2017

REQUEST FOR ORAL ARGUMENT

Petitioner, Marion, respectfully requests oral argument before the Environmental Appeals Board on its petition for review of NPDES Permit No. MA0100030 because it believes oral argument will be of assistance to the Board.

STATEMENT OF COMPLIANCE WITH THE WORD/PAGE LIMITATION

In accordance with 40 C.F.R. § 124.19(d)(1)(iv) & (d)(3), I hereby certify that this Petition does not exceed 14,000 words. Not including the transmittal letter, caption, table of contents, table of authorities, figures, signature block, table of attachments, statement of compliance with the word limitation, and certification of service, this Petition contains 13,151 words.

Matthew J. Connolly

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TABLE OF ATTACHMENTS

- 1. Current Permit, NPDES No. MA0100030 (Apr. 13, 2017).
- 2. EPA Response to Comments, NPDES No. MA0100030 (Apr. 13, 2017).
- 3. 2014 Draft Permit, NPDES No. MA0100030 (Dec. 2014).
- 4. Buzzards Bay Coalition Report, Environmental Assessment of the Marion Wastewater Treatment Plant Sewage Lagoons Prepared by Horsley Witten Group (Apr. 29, 2011).
- 5. Town of Marion Comments, Feb. 6, 2015.
- 6. Town of Marion Comments, Sept. 16, 2015.
- 7. Town of Marion Comments, Sept. 23, 2015.
- 8. Town of Marion Comments, Nov. 13, 2015.
- 9. Town of Marion Comments, Apr. 12, 2016.
- 10. Town of Marion Comments, Nov. 21, 2016.
- 11. Comprehensive Waste Management Plan (May 2001 and 2002) (excerpts).
- 12. Approval Letter from MassDEP (Dec. 2, 2002).
- 13. Approval Letter from MassDEP (Apr. 6, 2003).
- 14. 1998 Permit, NPDES No. MA0100030 (Sept. 30, 1998).
- 15. 2006 Permit, NPDES No. MA0100030 (Sept. 29, 2006).
- 16. Marion Wastewater Treatment Plant Process Flow Diagram (Apr. 2016).
- 17. Map of Aquifers from Massachusetts Office of Geographic Information
- 18. Wastewater Technology Fact Sheet Facultative Lagoons (EPA Document EPA-832-F-02-014, Sept. 2002).
- 19. EPA Region VIII, Biosolids Management Handbook, Part 1 C Biosolids Regulations (excerpt).
- 20. Robert Brobst, *A Plain English Guide to the EPA Part 503 Biosolids Rule*, 59 (EPA Document EPA-832-R-93-03, September 1994) (excerpt).

21. EPA Region 1, NPDES Permit Sludge Compliance Guide (Nov. 4, 1999) (excerpt).

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22. Process Design Manual Surface Disposal of Sewage Sludge and Domestic Septage (EPA Document EPA-625-R-95-002, Sept. 1995) (excerpt).

CERTIFICATE OF SERVICE

I hereby certify that on May 15, 2017 a copy of the foregoing Petition for Review was served on Respondent identified below by U.S. first-class mail and email:

> Robin L. Johnson EPA New England 5 Post Office Square, Suite 100 Mail Code OEP6-1 Boston, MA 02109

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Matthew J. Connolly

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