



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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July 18, 2024

Benjamin Reynolds
Director of Environmental Affairs
Holtec Decommissioning International, LLC
1 Holtec Boulevard
Camden, NJ 08104

Re: Final Determination to Deny a Modification to the Massachusetts Permit to Discharge Pollutants to Surface Waters for Pilgrim Nuclear Power Station, NPDES MA0003557

Dear Mr. Reynolds:

Enclosed please find a Final Determination to Deny a 2023 request to modify the Massachusetts Permit to Discharge Pollutants to Surface Waters for Pilgrim Nuclear Power Station, issued by the Massachusetts Department of Environmental Protection ("MassDEP") pursuant to the Massachusetts Clean Waters Act, M.G.L. Chap. 21, §§ 26-53, and the implementing regulations at 314 CMR 2.00, 3.00 and 4.00. On January 30, 2020, the United States Environmental Protection Agency ("USEPA") and MassDEP issued a joint NPDES Permit MA0003557 authorizing certain discharges from Pilgrim Nuclear Power Station which ceased power generation on May 31, 2019. MassDEP will issue a Response to Comments at a later date.

Please contact me at (617) 259-0537 or at lealdon.langley@mass.gov if you have any questions.

Very truly yours,

Lealdon Langley, Director
Division of Watershed Management

FINAL DETERMINATION TO DENY APPLICATION TO MODIFY**A****MASSACHUSETTS PERMIT TO DISCHARGE POLLUTANTS TO SURFACE WATERS**

Pursuant to the Massachusetts Clean Waters Act, as amended (M.G.L. c. 21, §§ 26 - 53), and implementing regulations at 314 CMR 2.00, 3.00 and 4.00,

Holtec Decommissioning International, LLC
1 Holtec Boulevard
Camden, NJ 08104
(the "Applicant")

has requested a modification of its authorization to discharge to surface waters pursuant to Permit No. MA0003557 dated January 30, 2020 ("Permit"), from the following facility,

Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360
(the "Facility")

to receiving water named

Cape Cod Bay

Pursuant to 314 CMR 2.08(1), the Massachusetts Department of Environmental Protection ("MassDEP") has determined to deny the Applicant's request for permit modification. The following statement of reasons supports this final determination:

1. Part I.B of the Applicant's Permit, titled UNAUTHORIZED DISCHARGES, states, in pertinent part, "The Permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Parts I.A. through I.C. of this permit." The Permit also prohibits several specific types of discharges:
 - a. Pollutants in spent fuel pool water (including, but not limited to, boron).
 - b. Pollutants in stormwater associated with construction activity, including activities, physical alterations, or additions associated with the dismantlement and demolition of plant systems, structures, and buildings.
 - c. Pollutants associated with contaminated site dewatering, pipeline and tank dewatering, collection structure dewatering, or dredge-related dewatering, and including but not limited to physical alterations or additions resulting in the discharge of pollutants associated with the dismantlement and decontamination of plant systems and structures and/or the demolition of buildings.
2. The Facility permanently stopped generating electricity on May 31, 2019, and decommissioning and demolition is ongoing at the Facility.
3. On April 4, 2023, the Applicant applied to MassDEP for a permit modification to authorize the discharge of 1.1 million gallons of treated wastewater from the spent fuel pool, torus, dryer separator, and reactor cavity. This wastewater stream has been shown to contain pollutants such as suspended solids, oil and grease, copper, zinc, lead, nickel, boron, and phenol.
4. On July 24, 2023, in accordance with 314 CMR 2.04(1), MassDEP issued a tentative determination to deny the application for a permit modification. MassDEP provided public notice of this decision in

accordance with 314 CMR 2.06 and held a public hearing on August 24, 2023. The public comment period closed on August 31, 2023. MassDEP received more than 1,000 comments, including comments from the Applicant.

5. On November 3, 2023, MassDEP offered the Applicant an opportunity to supplement its application by providing to MassDEP any state or federal permits issued for wastewater discharges from the Facility in 1971 or earlier. On November 10, 2023, the Applicant provided an interim permit issued by the Massachusetts Division of Water Pollution Control, dated January 8, 1969 (“Interim Permit”), and three water quality certifications issued by the same office, dated July 31, 1970, April 15, 1971, and April 23, 1971. The Interim Permit is a one-page document that refers to an application dated October 17, 1968, and a report entitled “Pilgrim Station No. 600, Boston Edison Company, Salt Water Use and Waterfront Development for Pilgrim Nuclear Power Station” (“Salt Water Use Report”).
6. On December 8, 2023, MassDEP offered the Applicant a second opportunity to supplement its application by providing to MassDEP materials referenced in the Interim Permit as well as any documents submitted in support of the applications for the Interim Permit and the water quality certifications. On December 19, 2023, the Applicant provided an application for an operating license submitted to the United States Atomic Energy Commission dated August 6, 1971 (“AEC Application”), and an application for a discharge permit submitted to the Department of the Army, Corps of Engineers, dated September 30, 1971 (“Army Corps Application”). The Salt Water Use Report was included in the documents provided by the Applicant on December 19, 2023.
7. The receiving water is within Cape Cod Bay Ocean Sanctuary, as defined in the Ocean Sanctuaries Act (“Act”), M.G.L. c. 132A, §§ 12A – 18.
8. Section 15 of the Act prohibits the “dumping or discharge of commercial, municipal, domestic or industrial wastes” into ocean sanctuaries. M.G.L. c. 132A, § 15(4). According to the application to modify the Permit and the definition of “wastes” at 301 CMR 27.02, the water the Facility proposes to discharge is industrial waste subject to that prohibition. The water is stored in the spent fuel pool, torus, dryer separator pit, and reactor cavity, was utilized in the Facility’s industrial operations and for decommissioning activities, is contaminated, and is now proposed to be discharged into Cape Cod Bay Ocean Sanctuary.
9. Section 16 of the Act identifies certain narrow exemptions to the Act’s prohibition against discharges into ocean sanctuaries.
10. None of the exceptions in Section 16 applies to the proposed discharge.
11. Section 16 of the Act exempts “activities, uses and facilities associated with the generation, transmission, and distribution of electrical power.” M.G.L. c. 132A, § 16. It is undisputed that the Facility has ceased electrical power generation, is no longer transmitting or distributing power, and is in the process of being decommissioned. The waters proposed for discharge have been used for decommissioning processes, including dismantlement of plant systems, and require disposal as part of the decommissioning process. Since the proposed discharge is associated with the decommissioning of the Facility, not the generation, transmission, or distribution of electric power, this exception does not apply.
12. Section 16 of the Act also exempts “the operation and maintenance of existing municipal, commercial or industrial facilities and discharges.” Section 12B defines an “existing discharge,” with respect to Cape Cod Bay Ocean Sanctuary, as a discharge “at the volume and locations authorized by the appropriate federal and state agencies . . . on December [8, 1971].” M.G.L. c. 132A, §§ 12B, 16. There is currently no discharge from the spent fuel pool, torus, reactor cavity, and dryer separator pit, and such discharges are explicitly prohibited by Part I.B of the Applicant’s Permit. Since the proposed discharge is not the continuation of an existing discharge, this exception does not apply.

13. Even if MassDEP were to disregard the fact that the proposed discharge is not the continuation of an existing discharge and assume that the Interim Permit authorized a discharge at the same volume and location as the proposed discharge, the materials provided by the Applicant do not clearly demonstrate that, as of December 8, 1971, the radwaste discharge described in the Salt Water Use Report and the Army Corps Application was federally authorized on or before December 8, 1971, or had even begun on or before that date.
14. The documents provided by the Applicant indicate that Boston Edison Company (then owner of the Facility) applied to the Army Corps for a discharge permit on or about September 30, 1971. Army Corps Application, p. 55. According to Army Corps final regulations promulgated on April 7, 1971, facilities wishing to discharge (or already discharging) pollutants into navigable waters were required to apply for a permit before July 1, 1971, or no less than 120 days in advance of the date on which they proposed to begin discharging. 36 Fed. Reg. 6564, 6565 (April 7, 1971). The regulations further provided that “[a]ll discharges or deposits to which the Refuse Act is applicable ... are unlawful unless authorized by an appropriate permit issued under the authority of the Secretary of the Army. The fact that official objection may not have been raised with respect to past or continuing discharges or deposits does not constitute authority to discharge or deposit or to continue to discharge or deposit in the absence of an appropriate permit.” *Id.* Pursuant to these regulations, Boston Edison Company could seek to discharge not less than 120 days after September 30, 1971 (the date on which the Army Corps Application was submitted), or on or after January 28, 1972, and any discharge prior to the issuance of the Army Corps permit would be unlawful unless permitted. The Applicant did not provide an Army Corps permit issued prior to December 8, 1971, and in fact, responded that it was not able to identify any federal permits issued 1971 or earlier. As a result, any discharge as of that date could not have been authorized and therefore could not have been an existing discharge.
15. The three water quality certifications do not demonstrate an authorization for an existing discharge under the Act. A water quality certification issued pursuant to Section 21(b)(1) of the Water Quality Improvement Act of 1970 (the precursor to Section 401 of the federal Clean Water Act) is a prerequisite to federal authorization but in and of itself does not authorize a discharge. *See* Pub. L. No. 91-224, § 102, 84 Stat. 108 (1970). A water quality certification indicates that the state issuing the certification has determined that a discharge that a federal agency is proposing to authorize will comply with the state’s water quality standards. *See id.* The Applicant did not provide the federal permit certified by the water quality certifications, nor do the certifications indicate what proposed federal permit they are certifying.
16. Furthermore, the Army Corps Application contains ambiguous information about whether the radwaste discharge began prior to December 8, 1971. The Army Corps Application described the radwaste discharge as one that “will begin about July, 1971.” *Id.* at 61, 73. In addition, in part 1 of Section II of the Army Corps application, the discharge is described as “present” and not as “proposed new or changed.” *Id.* However, part 19 of Section II says “see Attachment 2” as the answer to the “date discharge began,” and part 20 says “see Attachment 2” as the answer to the “date discharge will begin.” *Id.* Attachment 2 says that the radwaste system effluents “discharge ... will begin about July, 1971,” even though the date of the Army Corps Application was September 30, 1971. *Id.* at 73. The attachment further indicates that when the discharge begins, it will contain “no added radioactivity. Radioactivity in this discharge will increase about December, 1971 when reactor operation is initiated.” *Id.* The radwaste discharge is the only discharge in Attachment 2 that is noted to be prospective (it describes two other discharges and the date they began). *Id.* The Applicant has not provided any documents that clearly identify when the radwaste discharge began. As a result, it has not demonstrated that the radwaste discharge had begun prior to December 8, 1971.

17. Therefore, even if MassDEP were to disregard the fact that the proposed discharge is not the continuation of an existing discharge, *see supra* ¶ 12, and assume, again, that the Interim Permit authorized a discharge at the same volume and location as the proposed discharge, the Applicant has not demonstrated that there was a discharge “authorized by the appropriate federal and state agencies ... on December [8, 1971],” as required by the definition of “existing discharge.” M.G.L. c. 132A, § 12B. In particular, the Applicant has not provided evidence of authorization by the appropriate federal agency, or that the proposed radwaste discharge had in fact begun as of December 8, 1971.
18. Even if the radwaste discharge had been properly authorized by both state *and* federal permitting agencies and had begun prior to December 8, 1971, the Applicant would need to demonstrate that the type of discharge for which it now seeks authorization falls within the types of discharges that would have been authorized by those permits.
19. The Applicant is presently seeking authorization of a discharge that would empty all the wastewater held in the spent fuel pool, torus, reactor cavity, and dryer separator pit. The proposed discharge contains pollutants resulting from decommissioning, which per se could not have been “existing” prior to December 8, 1971, a full year before the Facility began commercial operations.
20. Therefore, even if MassDEP were to assume that the discharge described in the Salt Water Use Report and the Army Corps Application was authorized and in existence as of December 8, 1971, the materials provided by the Applicant do not clearly demonstrate that the Interim Permit or the Army Corps permit, had it been issued, would have authorized the type of discharge for which Holtec now seeks authorization.
21. Section 16 of the Act identifies certain other exceptions, each of which is inapplicable on its face. These include exceptions for “the laying of cables ... ; channel and shore protection projects, navigation aids, projects authorized under chapter ninety-one ... ; other improvements not specifically prohibited by said sections 12B to 16K, inclusive and section 18 ... ; the harvesting and propagation of fish and shellfish ... ; temporary educational and scientific activities ... ; and the extraction of sand and gravel ...” and certain discharges from “municipal wastewater treatment facilities.” M.G.L. c. 132A, § 16.
22. For the foregoing reasons, the proposed discharge is prohibited by Section 15 of the Act and does not qualify for any exception to the Act under Section 16.
23. The Act prohibits state agencies from permitting activities contrary to the provisions of the Act. M.G.L. c. 132A, § 18.
24. Since the proposed discharge is prohibited by the Act, MassDEP must deny the requested Surface Water Discharge permit modification in accordance with Section 18 of the Act.
25. CZM is vested with the “care, oversight and control” of ocean sanctuaries, M.G.L. c. 132A, § 14. The Act directs state agencies to “confer and consult with [CZM] to ensure compliance with the Act.” M.G.L. c. 132A, § 18. Before issuing the tentative determination to deny the application, MassDEP conferred with CZM, including by letter, regarding application of the Act to the Applicant’s proposed discharge. CZM advised MassDEP on this matter, including by letter. Those letters are attached to the final determination and incorporated herein by reference. MassDEP conferred further with CZM before finalizing this determination.

Signed this 18th day of July, 2024

A handwritten signature in black ink, appearing to read "Lealdon Langley". The signature is fluid and cursive, with a large initial "L" and a long, sweeping underline.

Lealdon Langley, Director
Division of Watershed Management
Department of Environmental Protection

APPEALS

Any person aggrieved by this decision may request an adjudicatory hearing on the Determination to Deny by timely filing a Notice of Claim for an Adjudicatory Appeal ("Notice of Claim") in accordance with 314 CMR 2.08(2) and 310 CMR 1.01 within 30 days of its issuance. The Notice of Claim shall state specifically, clearly and concisely the facts that are grounds for the appeal, the relief sought, and any additional information required by applicable law or regulation. A copy of this decision shall be included with the Notice of Claim. In accordance with 314 CMR 2.08(5), any person who is not the permit applicant who files a Notice of Claim shall simultaneously send a copy of the Notice of Claim by certified mail, return receipt requested, to the permit applicant.

The Notice of Claim and supporting documentation, and a copy of the check and transmittal form described below, must be sent by certified mail, hand delivery or email to:

Case Administrator
Office of Appeals and Dispute Resolution
Department of Environmental Protection
100 Cambridge Street, Suite 900
Boston, MA 02114
Caseadmin.OADR@state.ma.us

In addition, the Department's fee transmittal form, together with a valid check made payable to the Commonwealth of Massachusetts in the amount of \$100 for the appeal filing fee, if required, must be mailed to:

Commonwealth of Massachusetts Lock Box
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The Notice of Claim may be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city, town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, along with the hearing request, an affidavit setting forth the facts believed to support the claim of undue financial hardship.



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July 21, 2023

Lisa Berry Engler, Director
Office of Coastal Zone Management
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Ms. Engler:

On April 4, 2023, Holtec Decommissioning International, LLC (“Holtec”), filed an application with the Department of Environmental Protection (“MassDEP” or “Department”) to modify Holtec’s Surface Water Discharge (“SWD”) Permit, issued pursuant to the state Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the Department’s regulations at 314 CMR 3.00, for the former Pilgrim Nuclear Power Station (“PNPS”), located in Plymouth, Massachusetts. Holtec’s application requests the authorization of a new discharge of wastewater that is prohibited under the existing permit.

Holtec is proposing to discharge that wastewater, via its permitted discharge canal, into Cape Cod Bay. The receiving waters for the proposed discharge are within Cape Cod Bay Ocean Sanctuary, which is protected under the Ocean Sanctuaries Act (“Act”), M.G.L. c. 132A, §§ 12A-18. The Act grants “care, oversight and control” of the ocean sanctuaries to the Office of Coastal Zone Management (“CZM”) and prohibits state agencies from permitting activities contrary to provisions of the Act. *Id.* at §§ 14, 18. After carefully reviewing the provisions of the Act and Holtec’s application for modification of its existing permit, MassDEP concludes that the proposed discharge is subject to and prohibited by the Act. By this letter, MassDEP seeks to confer and consult with CZM as required by the Act, M.G.L. c. 132A, § 18, to determine whether CZM agrees with MassDEP’s interpretation of the Act and its application to Holtec’s proposed discharge.

Background

Holtec states that PNPS began commercial operations in December 1972. PNPS was constructed and operated by Boston Edison Company, sold to Entergy Corporation in 1999, and then sold to Holtec in 2019. On May 31, 2019, PNPS permanently stopped generating electricity and is now undergoing decommissioning.

As described in the permit modification application, current wastewater discharges from the plant are authorized by a National Pollutant Discharge Elimination System (“NPDES”) Permit

(No. MA0003557) and Surface Water Discharge Permit of January 2020 (“2020 Permits”) issued jointly by the Department and the U.S. Environmental Protection Agency (“EPA”).

The 2020 Permits authorize discharges of circulating water, non-thermal backwash water, non-contact cooling water from the salt service water system, intake screenwash water, stormwater, station heating system water, cooling water from certain heat exchangers, drainage from boiler room floor drains, salt service water system chlorinated salt water from various sumps, and reject water from the demineralizer system and the emergency standby liquid control system. Holtec’s March 31, 2023, Application to EPA (“2023 Application”) at 3-22.¹ The 2020 Permits expressly prohibit certain discharges, including discharges of pollutants from the spent fuel pool, discharges of pollutants in stormwater associated with construction activity, and discharges of pollutants associated with the dismantlement, demolition or decontamination of plant systems and structures or otherwise not authorized by the 2020 Permits. *Id.* at 27.

Holtec’s applications to EPA and MassDEP to modify the 2020 Permits request authorization to discharge “a new source of industrial wastewater” from the spent fuel pool, torus, reactor cavity, and dryer separator pit, via an outfall numbered #015, into the existing, permitted discharge canal which discharges into Cape Cod Bay. 2023 Application at 3-4. According to Holtec, this wastewater stream, which it proposes to treat prior to discharge, would potentially contain pollutants such as suspended solids, oil and grease, copper, zinc, lead, nickel, boron, and phenol. *Id.* at 3-6.

Holtec’s proposed discharge is explicitly prohibited by the 2020 Permits because the wastewaters originate, in part, in the spent fuel pool and because it proposes to discharge pollutants associated with dewatering, dismantlement, demolition or other decommissioning of plant components. Since the plant ceased commercial operation, the waters of the spent fuel pool, reactor cavity, dryer separator pit, and torus have been used for decommissioning purposes unrelated to generation of electricity, as explained on page 4 of the 2023 Application:

Following the permanent shutdown of Pilgrim in 2019, spent fuel assemblies stored in the pool were transferred to dry cask storage in a stand-alone Independent Spent Fuel Storage Installation (“ISFSI”). The racks that stored the fuel have been removed and disposed of and the pool is currently being used to package radiological materials such as the reactor vessel internal components for ultimate disposal. Following the completion of the packaging campaign the [spent fuel pool] water will be drained to the Torus for final disposition.

In addition, “[d]uring decommissioning, water in the Reactor Cavity / Dryer Separator Pit provides for radiological shielding of irradiated component removal including underwater waste generation,

¹ Holtec’s submission to MassDEP consisted of the appropriate MassDEP application form plus a copy of its application to EPA.

consolidation, and packaging activities.” *Id.* at 62-63.² The waste generation, consolidation, packaging, and other decommissioning activities, such as dismantlement of the reactor vessel, are distinct from prior use of the waters and have introduced new pollutants or increased pollutant concentrations in these waters. Thus, the proposed discharges are distinct from historical discharges from these water volumes.

The Department encloses Holtec’s 2023 Application for your consideration.

MassDEP’s Jurisdiction

MassDEP has jurisdiction over Holtec’s proposed discharge of pollutants. Pursuant to the state Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the Department’s regulations at 314 CMR 3.00, Holtec must obtain a surface water discharge permit from MassDEP for wastewater discharges into Cape Cod Bay.

Ocean Sanctuaries Act

The Ocean Sanctuaries Act, M.G.L. c. 132A, §§ 12A-18, protects five named ocean sanctuaries, including the Cape Cod Bay Ocean Sanctuary. *Id.* at § 13(b). The Act provides CZM with oversight responsibility for the ocean sanctuaries. *See id.* at §§ 12C, 14, and 18. Section 14 provides that “[a]ll ocean sanctuaries . . . shall be under the care, oversight and control of” CZM. Section 12C directs CZM to “promulgate such regulations as it deems necessary for the implementation, administration and enforcement of the act.” CZM has issued these regulations. *See* 301 CMR 27.00.

The Act prohibits “[a]ll departments, divisions, commissions, or units of the executive office of energy and environmental affairs and other affected agencies or departments of the commonwealth” from permitting or conducting activities “which [are] contrary to the provisions of the Act.” *Id.* at § 18. Therefore, if Holtec’s proposed discharge is contrary to the provisions of the Act, MassDEP, a department of the Executive Office of Energy and Environmental Affairs, cannot issue the requested permit modification. The Act requires departments to “confer and consult with [CZM] to ensure compliance with the Act.” *Id.* at § 18. MassDEP therefore seeks to confer and consult with CZM regarding whether Holtec’s proposed discharge is contrary to the provisions of the Act.

Broadly speaking, section 15 of the Act prohibits various activities, unless they are permitted by section 16. Section 15 states, in relevant part:

Except as otherwise provided in this section, the following activities
shall be prohibited in an ocean sanctuary:

² Holtec’s 2023 Application notes that there were historic discharges of waters from the spent fuel pool, torus, reactor cavity, and dryer separator pit, from which it now proposes to discharge. It states that waters of the spent fuel pool were combined with waters of the reactor cavity/dryer separator pit during biennial refueling and that a portion of those combined waters were later discharged. 2023 Application at 3-4. Holtec states that the last discharge of waters from these locations occurred in 2015. *Id.* at 4. Since then, these waters have been used for decommissioning purposes and the proposed discharge would be associated with dismantlement and dewatering of the plant in any event.

...

- (4) the dumping or discharge of commercial, domestic or industrial wastes

Id. (emphasis added).

Section 16 authorizes certain activities that would otherwise be prohibited by Section 15. It states that “[n]othing in this act is intended to prohibit the following activities, uses or facilities,” indicating that the activities, uses or facilities described in section 16 are permitted notwithstanding the prohibitions in section 15. *Id.* Section 16 contains nine unnumbered categories of permitted activities, of which two appear to merit review and are extracted below in separate lines for ease of reading:

In all ocean sanctuaries except the Cape Cod Ocean Sanctuary the planning, construction, reconstruction, operation and maintenance of industrial liquid coolant discharge and intake systems and all other activities, uses and facilities associated with the generation, transmission, and distribution of electrical power, provided that all certificates, licenses, permits and approvals required by law are obtained therefor, and provided, further, that such activities, uses and facilities shall not be undertaken or located except in compliance with any applicable general or special statutes, rules, regulations or orders lawfully promulgated;

the operation and maintenance of existing municipal, commercial or industrial facilities and discharges where such discharges or facilities have been approved and licensed by appropriate federal and state agencies;

Analysis

Based on our analysis, the Department concludes that: (1) Holtec’s proposed discharge of wastewater from the spent fuel pool, torus, reactor cavity, and dryer separator pit is prohibited by section 15 because it is a discharge of industrial wastewater into an ocean sanctuary; and (2) none of the exceptions in section 16 apply.

Section 15: Prohibited Activities in Ocean Sanctuaries

Section 15 of the Act prohibits Holtec’s proposed discharge. Section 15 of the Act contains a broad prohibition on discharges of wastes to ocean sanctuaries: “Except as otherwise provided in this section, the following activities shall be prohibited in an ocean sanctuary: . . . (4) the dumping or discharge of commercial, municipal, domestic or industrial wastes” The Regulations define “wastes” as:

any unwanted, discarded, or environmentally harmful solid, liquid, or gaseous materials resulting from commercial, municipal,

domestic, or industrial Activities, including, but not limited to garbage, snow, thermal discharges, saline discharges, and sewage. Waste does not include approved and licensed dredge spoils, approved and licensed stormwater discharges, or snow disposal consistent with Department guidance.

301 CMR 27.02.

Holtec's 2023 Application itself characterizes the proposed discharges as "industrial wastewater." 2023 Application at 4. Likewise, the proposed discharge qualifies as "waste" resulting from an "industrial Activit[y]" under the definition in CZM's Regulations, as the discarded water is unwanted, intended to be discarded, and may contain "environmentally harmful" pollutants resulting from PNPS's decommissioning activities, even after treatment. We therefore conclude that the proposed discharges would be a discharge of industrial wastewater and, consequently, that section 15 prohibits the discharge of water from the spent fuel pool, torus, reactor cavity, and dryer separator pit.

Section 16: Permitted Activities in Ocean Sanctuaries

As explained above, section 15 of the Act prohibits activities in the named ocean sanctuaries unless they are permitted by section 16. It is MassDEP's opinion that none of the section 16 exceptions to the section 15 prohibition on industrial wastewater discharges apply to Holtec's proposed discharge. Although section 16 contains nine exceptions, we only discuss the first two in detail because the remaining seven exceptions are inapplicable on their face.

1. Generation, transmission, and distribution of electrical power

Holtec's proposed discharge of wastewater from the spent fuel pool, torus, reactor cavity, and dryer separator pit is not authorized by the first exception in section 16 of the Act because it is a "new discharge" of wastewater for the purpose of decommissioning. It is the Department's opinion, based on the plain language of the statute, that the first exception in section 16 does not apply to the dismantling or decommissioning of a former power station. It is undisputed that PNPS has ceased power generation and is in the process of decommissioning.

Section 16 permits "the *planning, construction, reconstruction, operation and maintenance* of industrial liquid coolant discharge and intake systems and all other activities, uses and facilities *associated with the generation, transmission, and distribution of electrical power*" provided such activities, uses and facilities are otherwise properly authorized and conducted in accordance with applicable law. *Id.* (emphasis added). By its plain terms, this permitted activity does not apply to discharges associated with decommissioning. *See id.* The text limits permitted discharges to the pre-operating and operating phases of the life-cycle of a power plant—"planning, construction, reconstruction, operation and maintenance"—and does not mention post-operating phases such as dismantling or decommissioning. *See id.* This omission indicates that the legislature did not intend to include discharges associated with decommissioning in this exception. *See Metro. Prop. & Casualty Ins. v. Emerson Hosp.*, 99 Mass. App. Ct. 513, 522 (2021) ("It is a 'maxim of statutory

construction . . . that a statutory expression of one thing is an implied exclusion of other things omitted from the statute.” (citation omitted).

Nor would applying the maxim frustrate the Act. *Id.* (citation omitted). Indeed, the legislature’s omission of post-operation activities is consistent with and supports the legislative intent of the Act, which is to prohibit any discharges other than those within specific categories of activities of particular policy importance. In this instance, this omission indicates that the legislature made a reasonable policy determination that the economic and social benefits associated with constructing, operating, and maintaining facilities for electric power generation—not least, ensuring the availability and reliability of sufficient electrical power to meet the needs of the Commonwealth and its citizens—are absent once such facilities have been taken out of service and are being dismantled, when protection of the ocean sanctuary may be elevated as a policy priority.

Holtec’s proposed discharge also cannot be said to be “associated with” generation of electricity. While Holtec states that plant operators discharged a minimum volume of water from the spent fuel pool, reactor cavity, and dryer separator pit during episodic refueling outages, as described above, the proposed discharge differs and is related to decommissioning. It is not a function of refueling, which was a necessity for continued plant operation; the waters are currently being used for decommissioning purposes rather than electricity generation (underwater waste generation, consolidation, and packaging of materials such as the reactor vessel internal components); and the waters contain pollutants produced as a function of decommissioning activities. Further, setting aside the use of the water to facilitate decommissioning tasks, Holtec also acknowledges that disposing of this stored wastewater is itself a decommissioning task and would not occur but for decommissioning: “Following the completion of the packaging campaign the [spent fuel pool] water will be drained to the Torus for final disposition.” 2023 Application at 4.

The 2020 Permits expressly distinguish and prohibit discharges associated with decommissioning, including discharges from the spent fuel pool, as well as any other stormwater or dewatering associated with dismantlement, demolition or decontamination of plant systems and structures or any other discharge from a point source not authorized by the 2020 Permits. 2020 Permits at 27. Holtec’s 2023 Application was submitted precisely because the proposed discharge is a “new discharge” associated with decommissioning and prohibited by the 2020 Permits. Therefore, it is the Department’s opinion that Holtec’s proposed discharge of wastewater from the spent fuel pool, torus, reactor cavity, and dryer separator pit is outside the first category of activities that can be permitted pursuant to section 16.

2. Existing discharge

Holtec’s proposed discharge of wastewater from the spent fuel pool, torus, reactor cavity, and dryer separator pit is not authorized by the second exception in section 16 because it is not an existing discharge.

Section 16 permits “the operation and maintenance of existing municipal, commercial or industrial facilities and discharges where such discharges or facilities have been approved and

licensed by appropriate federal and state agencies” Section 12B, meanwhile, defines an “existing discharge,” in relevant part, as an “industrial discharge at the volume and locations authorized by the appropriate federal and state agencies on . . . December eighth, nineteen hundred and seventy-one, in the case of the Cape Cod Bay . . . Ocean Sanctuary”

The proposed discharge meets neither the plain language of section 16 nor the statutory definition of “existing discharge” in section 12B. First, PNPS is not currently discharging wastewater from the spent fuel pool, torus, reactor cavity, or dryer separator pit. The 2020 Permits, currently in force, explicitly prohibit such discharges, and they cannot occur without a permit modification. It is on that basis that the 2023 Application seeks authorization for the proposed discharge as a “new discharge.” 2023 Application at 9. The proposed discharge therefore cannot be an “existing . . . discharge[]” to which this category of permitted activities could apply.

Even if the proposed discharge was not ineligible as a result of being currently prohibited, no PNPS discharges appear to meet the requirements of the definition of “existing discharge” under the Act. Holtec did not provide any authorization for any discharge of pollutants related to plant operations prior to 1975—well after the December 8, 1971 cutoff for such discharges into Cape Cod Bay Ocean Sanctuary. Even if there were authorized discharges of pollutants occurring prior to the cutoff, those discharges would not be the same as those proposed: the proposed discharges contain pollutants resulting from decommissioning, which *per se* could not have been “existing” prior to December 8, 1971, while the plant was still operational.

Where the proposed discharge does not currently exist and was not existing as of December 8, 1971, the proposed discharge is not allowed under section 16.

Conclusion

For the reasons above, the Department concludes that the discharge proposed in Holtec’s 2023 Application is prohibited by section 15 of the Ocean Sanctuaries Act and does not qualify for any of the exceptions to that prohibition described in section 16 of the Act. Under section 18 of the Act, therefore, the Department concludes that it must deny the 2023 Application.

As noted at the outset, MassDEP seeks to confer and consult with CZM as the Act requires, to ensure that MassDEP’s interpretation of the Act, and any consequent decision regarding the department’s ability to permit the discharge, is in compliance with the Act. We look forward to your views on this matter.

Sincerely,



Lealdon Langley
Director
Division of Watershed Management



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
100 Cambridge Street, Suite 900, Boston, MA 02114 • (617) 626-1200

July 24, 2023

Lealdon Langley
Director
Division of Watershed Management
Department of Environmental Protection
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Mr. Langley,

In your letter of July 21, 2023 (“Letter”), you memorialized the results of the consultation between the Office of Coastal Zone Management (“CZM”) and the Department of Environmental Protection (“MassDEP”) with regard to the application of Holtec Decommissioning International, LLC (“Holtec”), to modify its Surface Water Discharge Permit, issued pursuant to the Massachusetts Clean Waters Act, G.L. c. 21, §§ 26-53, and MassDEP’s regulations at 314 C.M.R. 3.00 *et seq.*, for discharges into Cape Cod Bay from the former Pilgrim Nuclear Power Station (“PNPS”) in Plymouth, Massachusetts (“Application”). The Application seeks to authorize “discharge of a new source of industrial wastewater” that is prohibited under the existing permit. Your Letter presents MassDEP’s conclusion that approval of the Application would be inconsistent with the Ocean Sanctuaries Act, G.L. c. 132A, §§ 12A-18 (“Act”). CZM agrees with MassDEP’s interpretation of the Act and its application to the facts of Holtec’s proposed discharge, as described in the Letter.

I. BACKGROUND

The structure of the Act is straightforward:

- Section 13 of the Act names and geographically defines five ocean sanctuaries, including the Cape Cod Bay Ocean Sanctuary, at G.L. c. 132A, § 13(b);
- Section 14 of the Act provides that “[a]ll ocean sanctuaries as described in section thirteen . . . shall be protected from any exploitation, development, or activity that would significantly alter or otherwise endanger the ecology or the appearance of the ocean, the seabed, or subsoil thereof”;
- Section 15 identifies five categories of activities that, “[e]xcept as otherwise provided in this section, . . . shall be *prohibited* in an ocean sanctuary,” including “the dumping or discharge of commercial, municipal, domestic or industrial wastes,” *id.* § 15(4) (emphasis added);
- Section 16 lists activities that are *permitted* in ocean sanctuaries notwithstanding the prohibitions in Section 15, including:
 - “In all ocean sanctuaries except the Cape Cod Ocean Sanctuary the planning, construction, reconstruction, operation and maintenance of industrial liquid coolant discharge and intake systems and all other activities, uses and facilities associated



with the generation, transmission, and distribution of electrical power, provided that all certificates, licenses, permits and approvals required by law are obtained therefor, and provided, further, that such activities, uses and facilities shall not be undertaken or located except in compliance with any applicable general or special statutes, rules, regulations or orders lawfully promulgated”; and

- “the operation and maintenance of *existing* facilities and *discharges* where such discharges or facilities have been approved and licensed by appropriate federal and state agencies” (emphasis added).
- Section 12B defines “existing discharge” in relevant part as “a municipal, commercial or industrial discharge at the volume and locations authorized by the appropriate federal and state agencies . . . on December eighth, nineteen hundred and seventy-one, in the case of the Cape Cod Bay . . . Ocean Sanctuary”

As noted in the Letter, the Act places primary responsibility with CZM, but also requires all other agencies—including MassDEP—to fulfill their permitting responsibilities in accordance with the Act:

- Section 12C states that CZM “shall promulgate such regulations as it deems necessary for the implementation, administration and enforcement of the [A]ct” and “shall integrate its implementation, administration and enforcement of the [A]ct with other programs and agencies responsible for the protection of the public health, safety, welfare and the environment.” CZM has promulgated those regulations at 301 C.M.R. 27.00 (“Regulations”).
- Likewise, Section 14 states that “All ocean sanctuaries as described in section thirteen shall be under the care, oversight and control of” CZM.
- Finally, Section 18 states that “[a]ll departments, divisions, commissions, or units of the executive office of energy and environmental affairs”—including MassDEP—“and other affected agencies or departments of the commonwealth shall issue permits or licenses for activities or conduct their activities consistently with the act, and shall not permit or conduct any activity which is contrary to the provisions of the Act” and, as MassDEP has done via the Letter, “departments, divisions, commissions, units, or other agencies shall confer and consult with the office to ensure compliance with the Act.”

II. ANALYSIS

As the Letter concludes, granting of Holtec’s Application to modify its discharge permit to authorize “discharge of a new source of industrial wastewater” the PNPS into Cape Cod Bay would be contrary to the Act.

A. SECTION 15

The proposed discharge is prohibited by Section 15 of the Act. As noted above, Section 15 of the Act “prohibit[s] . . . the dumping or discharge of commercial, municipal, domestic or industrial wastes” into ocean sanctuaries, including Cape Cod Bay Ocean Sanctuary. *Id.* § 15(4). The Regulations in turn define “waste” as “any unwanted, discarded, or environmentally harmful solid, liquid, or gaseous materials resulting from commercial, municipal, domestic, or industrial Activities.” 301 C.M.R. 27.02.

Based on the description in the Letter, it appears to be undisputed that the receiving water for the proposed discharge is within the Cape Cod Bay Ocean Sanctuary, and that the proposed discharge is “waste” from an industrial activity. As the Letter notes, according to Holtec’s own application to EPA, the discharged water, though treated, will potentially contain suspended solids, oil and grease, copper, zinc, lead, nickel, boron, and phenol. Based on that description, the proposed discharge is plainly unwanted, discarded, and potentially environmentally harmful. Further, Holtec refers to the proposed discharge in the Application as a “new source of industrial wastewater.” Application at 4. The proposed discharge therefore is prohibited by Section 15.

B. SECTION 16

The proposed discharge does not qualify as one of the permitted activities under Section 16 of the Act, listed above.

First, the proposed discharge is unrelated to the “planning, construction, reconstruction, operation and maintenance of industrial liquid coolant discharge and intake systems and all other activities, uses and facilities associated with the *generation, transmission, and distribution of electrical power.*” *Id.* § 16. As described in the Application and your Letter, PNPS ceased commercial operation of electrical generation in 2019 and the water proposed for discharge has since then been used for the purposes of decommissioning. Where the proposed discharge is made in furtherance of the decommissioning of PNPS, it is, by the plain terms of the statute, not “associated with the generation, transmission, and distribution of electrical power.” As the Letter notes, the legislature could have included “decommissioning” as a permitted activity, but it did not. We interpret this to be an intentional decision to exclude only those listed aspects of electrical power generation, in accordance with canons of statutory interpretation, which instruct that explicit inclusion of a list of items is an implicit exclusion of terms not in the list.¹ Likewise, general terms in a list must be read to be limited by specific terms in the same list.² Similarly, “an exception from the coverage of a statute is ordinarily to be construed narrowly so as to prevent the purposes of the statute from being rendered ineffective.” *Singer Friedlander Corp. v. State Lottery Comm’n*, 423 Mass. 562, 565 (1996) (quoting *Martin v. Rent Control Bd. of Cambridge*, 19 Mass. App. Ct. 745, 747 (1985)). These canons apply to this proposed activity: the specific activities listed in Section 16 are limited to those relating to the building and operation of a power plant; the more general term “all other activities,” therefore, should be read within those limitations, i.e., to exclude the decommissioning of the plant. This interpretation accords with the legislative intent of the Ocean Sanctuaries Act as a whole, which is intended to prohibit discharges into Ocean Sanctuaries except in specifically limited circumstances supported by an overriding public policy priority.

Second, the proposed discharge was not an “existing discharge” on “December eighth, nineteen hundred and seventy-one, in the case of the Cape Cod Bay . . . Ocean Sanctuary” *id.* § 12B, that can be permitted under Section 16. Holtec’s application indicates that the proposed discharge is explicitly prohibited under the terms of Holtec’s existing permit and represents a new discharge associated with decommissioning (i.e., waters used in the packaging of reactor components for disposal and other decommissioning activities, and which require final disposition as part of the overall decommissioning process). A new discharge that is currently prohibited cannot reasonably be interpreted to be an “existing discharge” on its face. Further, as the Department notes, Holtec has not presented evidence of authorization for discharge of pollutants prior to 1975, which means

¹ *Expressio unius est exclusio alterius.*

² *Ejusdem generis.*

that any discharge would necessarily be outside the definition of "existing discharge" as articulated in the Act.

C. SECTION 18

Because no exception applies under Section 16, the proposed discharge is barred by the prohibition in Section 15. Section 18 of the Act, therefore, requires MassDEP to deny Holtec's application.

III. CONCLUSION

As noted at the outset, CZM's analysis, pursuant to its interpretation of the Act and based on the information provided by Holtec, reaches the same conclusion as MassDEP's interpretation and application of the Act in this matter. Please contact me if you have any questions or concerns.

Sincerely,



Lisa Berry Engler
Director