



January 28, 2014

Gina McCarthy  
Administrator  
U. S. Environmental Protection Agency  
Mail Code 1101A  
Washington, D.C. 20460

**Re: Pilgrim Nuclear Power Station, Plymouth, Massachusetts: Expired Clean Water Act NPDES Permit No. MA0003557**

Dear Administrator McCarthy,

For the last 18 years, the Pilgrim Nuclear Power Station (Pilgrim) in Plymouth, Massachusetts has been withdrawing cooling water from and discharging polluted and heated water to Cape Cod Bay under an expired U.S. EPA-issued Clean Water Act permit. The destructive “once through” cooling water intake structure (CWIS) technology Pilgrim employs for its water withdrawals was not appropriate when it was first installed at the facility more than 40 years ago, and the environmental damage it has caused since then is incalculable. It is well established that “[t]he environmental impact of these systems is staggering, . . . destabilizing wildlife populations in the surrounding ecosystem. In areas with a designated use as aquatic habitat (such as Cape Cod Bay where Pilgrim’s CWIS operates), therefore, CWIS hinder the attainment of water quality standards.” *Entergy v. Massachusetts Department of Environmental Protection*, 459 Mass. 319, 332 (2011) (quoting *Riverkeeper, Inc. v. United States Env’tl. Protection Agency*, 358 F.3d 174, 181 (2d Cir. 2004)). Accordingly, Cape Cod Bay Watch is writing to request that EPA immediately take steps to terminate Pilgrim’s expired Clean Water Act permit (National Pollution Elimination Discharge System (NPDES) permit No. MA0003557).

Pilgrim is owned and operated by Entergy Nuclear Generation Co. (Entergy). The facility’s NPDES permit expired in 1996. EPA has administratively extended the expired permit for almost 18 years, allowing Entergy to avoid substantive review of the permit terms and conditions. Since 1972, Pilgrim has been using the same outdated and environmentally harmful “once-through” cooling water system. Once-through cooling was outdated and inappropriate when it was first installed at Pilgrim in the 1970s. At that time, Massachusetts ordered Pilgrim to use “closed cycle cooling,” a much less destructive cooling method that uses far less water. The then-owner of Pilgrim, Boston Edison, appealed the state ruling, largely due to the higher cost of a closed cycle system, and Pilgrim was allowed to install the cheaper but more environmentally damaging CWIS.

EPA incorporated Pilgrim’s “once-through system” into Pilgrim’s first federal CWA permit, issued by EPA in 1983, and there has been no meaningful review of that technology since that time. Pilgrim, according to Entergy’s own data, has used and dumped back into the Cape Cod Bay a volume of water equivalent to the entire volume of the Bay. In so doing, Pilgrim has killed and harmed billions of marine organisms (primarily through impingement and entrainment) and has done unquantifiable damage to Cape Cod Bay’s ecosystem. Such endangerment to the environment is grounds for EPA to terminate Pilgrim’s permit. *See* 40 C.F.R. 122.64(a)(3).

For almost 18 years, EPA has failed to properly enforce the Clean Water Act by allowing Entergy to operate with an expired permit that sanctions the use of outdated technology. In late 2012, EPA Region 1 staff promised citizen groups that a draft, updated permit would be issued for public comment by December 2013. That promise has been broken, and a new date of September 2014 was recently put forth. Given the 18 years of delay and broken promises, Cape Cod Bay Watch has no faith that EPA will meet the new September 2014 deadline.

Cape Cod Bay Watch's mission is to protect and restore Cape Cod Bay and all of its resources. The Bay has been irretrievably harmed by Pilgrim's operations over the last 40 years, and those harms continue every day the plant uses its obsolete "once-through" CWIS under its expired permit. Given the unacceptable environmental impacts of Entergy's continued use of Cape Cod Bay as a source of cooling water for Pilgrim and as a dumping ground for its polluted and heated effluent, and EPA's protracted and inexcusable failures to perform its statutory duties of conducting a timely permit review, EPA should terminate Pilgrim's permit.

### **Background**

On October 5, 2012, in the face of EPA's failure to perform its statutory duty and in an effort to address the "staggering" environmental impacts of Pilgrim's outdated CWIS and the facility's use of Cape Cod Bay as a dumping ground for its industrial waste, the public interest group EcoLaw issued a Notice of Intent to commence an Clean Water Act citizen suit on behalf of three Massachusetts citizens (the "NOI").<sup>1</sup> Entergy's persistent non-compliance with its expired permit, as outlined in the NOI, provides a separate and independent basis for permit termination. See 40 C.F.R. 122.64(a)(1). The citizen's NOI followed the U.S. Nuclear Regulatory Commission's ("NRC") 2012 extension of Pilgrim's operating license to 2032; twenty years past Pilgrim's design life, *with the expired NPDES permit in place.*<sup>2</sup>

In response to the citizens' Notice Letter, EPA Region 1 staff and MassDEP Commissioner Kenneth Kimmel committed to the citizens' attorneys that a revised, draft NPDES permit would be issued for public comment by December 2013, which did not happen. Instead, EPA has told attorneys for the citizens that the draft permit will likely be issued in September 2014. Even if a draft permit that required Pilgrim to switch to close cycle cooling were issued in September 2014, it will likely be at least an additional five years before a final permit is implemented at Pilgrim. This means Entergy's revised NPDES permit likely would not take effect until at least 2019,

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<sup>1</sup> A copy of the NOI is attached hereto as Exhibit A.

<sup>2</sup> The NRC rejected a challenge by local residences to Pilgrim's license extension with the expired NPDES permit in place. See *In re: Entergy Nuclear Generation Company et al.* (Pilgrim Nuclear Power Station, U.S. NRC, Atomic Safety and Licensing Board, Docket No. 50-293-LR, ASLBP No. 12-291-08-LR-BD01, July 20, 2012, Memorandum and Order (Denying Petition for Intervention and Request to Reopen Proceeding and Admit New Contention), at 19 ("Whether non-NRC permits are required is the responsibility of bodies that issue such permits. If for example, Petitioners are correct that Entergy's CWIS or discharges violate Massachusetts regulations, or that the CZM certification issued by Massachusetts is flawed, their remedy lies with the Commonwealth, not NRC. Likewise such issues relating to the status of the Pilgrim NPDES permit appear to lie with the EPA, with input from the Commonwealth.") (citations omitted).

more than 36 years since EPA issued the first NPDES permit for Pilgrim, which is essentially unchanged to this day. The year 2019 will be 47 years since Pilgrim started using its destructive CWIS in Cape Cod Bay.

### **The expired permit undermines the goals of the federal Clean Water Act.**

The Clean Water Act's National Pollutant Discharge Elimination System is not intended to be used as a tool for EPA to grant Entergy, a private user, what is in essence a permanent right to pollute by using Cape Cod Bay as a dumping ground for industrial waste as long as the company sees fit. In fact, the Clean Water Act's opening provisions declared that such NPDES permits to pollute waterways *were not to be issued after 1985*. As the Senate Report accompanying the legislation explained, "[T]his legislation would clearly establish that *no one has the right to pollute*-that pollution continues because of technological limits, not because of any inherent rights to use the nation's waterways for the purpose of disposing of wastes."<sup>3</sup> (emphasis supplied). In refusing to address Pilgrim's expired permit and outdated technology, EPA continues to ignore Congress' express "no-pollution" goal.

EPA should have renewed Entergy's NPDES permit on the five year schedule mandated by the Clean Water Act, with the required technology improvements and reductions in pollution along the way. Instead, EPA has done essentially nothing, giving Entergy a right to pollute. However, Entergy's NPDES permit by its terms "[d]oes not convey any property rights of any sort, or any exclusive privilege." Pilgrim NPDES permit, Part II, page 3, ¶ 6. Yet, by allowing Pilgrim to take the water and wildlife of Cape Cod Bay and use the Bay as a dump, the power station has, for 40 years, appropriated public trust resources. And EPA, by failing for the last 18 years to renew Pilgrim's discharge permit and require the facility to employ the best available technology, is complicit in Entergy's appropriation of the public resources of Cape Cod Bay.

EPA has told us that the reason it could not meet the December 2013 permit deadline is that the part-time EPA employee working on the permit left the agency in the summer of 2013 and was not replaced. Thus, EPA has been unable or unwilling for more than six months to find the resources to complete Pilgrim's draft NPDES permit. EPA's refusal to devote the resources for a *part-time* permit writer to complete a draft of a permit that is already almost 18 years overdue is shameful and inexcusable. It is also, as described below, inconsistent with representations EPA made to the First Circuit Court of Appeals.

### **EPA's failure to act on Pilgrim's expired permit contradicts sworn testimony provided to the United States Court of Appeals.**

The egregiousness of EPA's failure to address Pilgrim's expired permit is amplified by EPA's public position, as stated in federal court, that the Pilgrim is one of *three* high priority Clean Water Act permits for EPA Region I. In 2012, EPA staff submitted a sworn declaration to the First Circuit Court of Appeals in support of EPA's argument that the Court should not order the agency to work on expired Clean Water Act NPDES permits for two coal-fired power plants because to do so would delay work on NPDES permits for Pilgrim and two other major polluters.

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<sup>3</sup> Sen. Rpt. No. 92-414, 92 Cong. 1<sup>st</sup> Sess. 41 (1971), reprinted in 2 Env'tl. Policy Div., Cong. Ref. Serv., A Legislative History of the Water Pollution Control Act Amendments at 1972, at 1460 (Sen. Pub. Works Comm. Print 1973); 1972 U.S. C.C.A.N. 3668, 3709.

EPA took this public position in response to a Petition for Mandamus by the Sierra Club seeking to require EPA to address expired Clean Water Act permits for two New England coal-fired power plants that also have been delayed for years. EPA's declaration to the Court stated that accelerating action on the coal-fired power plant permits "will delay completion of new NPDES permits for Merrimack Station, GE-Aviation, and *Pilgrim Nuclear Power Station*, and based on EPA's current information, will threaten greater environmental harm." EPA's Response to Petition for Mandamus, at 23 (attached hereto as Exhibit B). EPA, in essence, argued that the Court should not require the agency to work on the overdue coal-fired power plant permits because that would take resources away from working on Pilgrim's permit and the two other polluters *that EPA determined were more of a risk to the environment*.

The First Circuit took EPA at its word. In denying the Sierra Club's Petition for Mandamus, the Court stated: "The EPA states that it is working on the permits, but the process is complex and it must balance competing priorities with its limited resources, explaining that it has a significant backlog of expired permits in this region, and that it has prioritized permits that have greater environmental impact." Judgment in *In re Sierra Club, Inc. et al.*, at 2 (May 8, 2013) (attached hereto as Exhibit C). EPA's failure to make progress on Pilgrim clearly jeopardizes the agency's credibility with the First Circuit Court of Appeals. Chief Judge Lynch, Judge Torruella and Judge Thompson might certainly question EPA's justification for why the Court should have refrained from issuing a Mandamus on the power plant permits if they were aware today that one of EPA's so-called "priority" permits continued to languish while the agency failed for six months to find enough resources to replace the one part-time permit writer working on the permit.

EPA is an enormous federal agency with substantial resources, and budget in the range of \$8 billion. It has told the First Circuit Court of Appeals that renewal of the Pilgrim CWA permit is a priority for EPA Region 1 *because of the potential environmental threat*. That threat, and indeed actual environmental harm, has been occurring for more than 18 years. If EPA Region 1 did not have the resources to replace a part-time permit writer (which would be an astonishing admission and blatantly inconsistent with its representations to the Court of Appeals), EPA Headquarters should have provided those resources. We believe the agency should be able to prioritize funding to finalize a "priority" permit that is already more than 17 years overdue, both to meet its commitment to the general public, and to act consistently with its testimony to the United States First Circuit Court of Appeals.

**EPA's 18-year delay in acting on Pilgrim's Clean Water Act permit is a violation of the Public Trust.**

Cape Cod Bay is a public resource of global significance. EPA's failure to eliminate Entergy's pollution of Cape Cod Bay and attendant harm to the Bay's ecosystem and wildlife amounts to a *de facto* privatization of this public resource at a great cost to the public's natural resources. The scale of the damage to public trust resources for which Entergy and EPA are responsible is demonstrated in part by a report prepared for EPA Region I and The New England Interstate Water Pollution Control Commission in 2002. (available at [www.capecodbaywatch.org/Stratus](http://www.capecodbaywatch.org/Stratus) Report) This report, by Stratus Consulting, is entitled "*Habitat-Based Replacement Costs: An Ecological Valuation of the Benefits of Minimizing Impingement and Entrainment at the Cooling Water Intake Structure of the Pilgrim Nuclear Power Generating Station in Plymouth, Massachusetts.*" (Stratus Report). The method used in the report "values natural resource losses based on the costs of ecological habitat-based restoration activities which are scaled to increase

natural production as an offset to the I&E [impingement and entrainment by CWIS] losses.” Report 3-3. In other words, it describes the cost to replace the public trust resources that Entergy destroys with its outdated CWIS.

Although the Stratus Report assessed only a portion of the habitat replacement costs, and therefore likely underestimated the cost of fully off-setting I&E losses, it is instructive and revealing as to the scale of the marine life destroyed by Entergy’s CWIS. For example, the report states that the total cost of restoring Atlantic Cod destroyed by Pilgrim is \$35 million and the cost of restoring Winter Flounder is \$46 million.<sup>4</sup> These are only two of many species Entergy’s CWIS is destroying and has destroyed over the past 40 years. Other habitat replacement costs could not be assessed by the report due to data gaps, time constraints and funding. These include annual losses of 160 billion blue mussels and 460,000 fish comprising 13 species. P. 4-85. Instead of acting swiftly in response to information such as this that shows the large scale of the destruction of marine species, EPA has allowed Entergy to continue to operate under its expired permit for almost 18 years.

### **Conclusion**

In sum, EPA has the authority to terminate Pilgrim’s expired Clean Water Act permit. Nearly two decades of delay is long enough. EPA’s duty to protect public trust resources like Cape Cod Bay from overexploitation by private industries such as Entergy mandates that the Pilgrim permit be promptly terminated. Given the history of delay, broken promises, and failure of EPA to translate its words into action, it is simply not realistic to believe that EPA will do its job to renew and implement a permit with appropriate environmental safeguards in any timeframe that is meaningful to the marine environment and species that the Clean Water Act is designed to protect.

Please provide us with a written response to this letter explaining whether or not EPA will terminate Pilgrim’s Clean Water Act permit, and if not, the grounds for continuing to allow Entergy to exploit the natural resources of Cape Cod Bay with impunity.

Please direct your response to me as a representative of Cape Cod Bay Watch. I can be reached at tel. 508-259-9154, via email at meg@ecolaw.biz, or by mail at 58C Main Street, Plymouth MA 02360.

Thank you for your consideration.

Very truly yours,



Margaret E. Sheehan, Esq.

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<sup>4</sup> These are 2001 dollars, and do not account for inflation to the present date.

Encl.

cc:

Senator Edward Markey  
Janet McCabe, Esq., U.S. EPA, Office of Air and Radiation, Acting Administrator  
Cynthia Giles, U.S. EPA, Office of Enforcement and Compliance Assurance  
Senator Elizabeth Warren  
Representative Keating  
Representative Katherine Clark  
Dr. Allison M. Macfarlane, Chair, U.S. Nuclear Regulatory Commission  
Curt Spaulding, U.S. EPA, Regional Administrator, Region I  
David Webster, U.S. EPA, Industrial Permits Chief, Region I  
Massachusetts Governor Duval Patrick  
Richard Sullivan, Secretary, Massachusetts Office of Energy and Environmental Affairs  
Kenneth Kimmel, Mass DEP, Commissioner  
David Cash, Commissioner, Massachusetts Department of Public Utilities  
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Town of Plymouth