

Information Sheet For Pilgrim Station Stakeholders



Dear Stakeholders,

Here are some supporting facts and recent questions we have been asked regarding water disposition.

Q: What has Holtec Pilgrim committed to?

A: We have committed to an open and transparent decommissioning. We committed to a comprehensive agreement with the Commonwealth on the clean-up of Pilgrim Station above and beyond the NRC requirements. This was agreed to by the Commonwealth of Massachusetts and the cleanup limits established are all based on public concern and input.

According to the [Environmental Protection Agency](#) the average American receives 620 millirem of radiation annually from both natural (radon, natural minerals, cosmic, terrestrial) and man-made (x-rays, CT scans, nuclear medicine) sources. (See Exhibit A&B below)

The safe limits that the NRC sets regarding dose to a member of the public from a nuclear power plant is 100 millirem, while the EPA standard is 25 millirem. These safe limits are based on science and were set using a public comment period.

Releases from nuclear power plants typically do not total more than 1 millirem annually.

Q: What is the water in question?

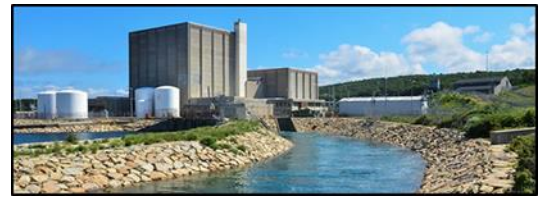
A: The remaining water is the volume of water leftover from plant operations.

During operations and decommissioning, nuclear power plants periodically release treated water. These releases are regulated by U.S. Nuclear Regulatory Commission (NRC) and U.S. Environmental Protection Agency (EPA) and are typically indistinguishable from the natural radioactivity present in the environment. We also comply with EPA/Massachusetts State issued National Pollutant Discharge Elimination System (NPDES) permit requirements for constituents that may be released.

These release levels referenced above have been established via scientific means and are considered safe and protective of the environment and people.

*For perspective, [Pilgrim's historical releases](#) both via liquid and gaseous sources in the last 15 years have averaged a total of **0.12 millirem** annually, or **833 times lower** than the NRC limit and **208 times lower** than the EPA limit., or **33 times lower** than the dose you personally would receive if you were to take a plane from New York to Los Angeles in the summer, which is 4 millirem.*

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Q: In recent times, what are the largest releases in a calendar year?

A: In the last 15 years the two largest liquid releases have been 2011 with 29 releases totaling approximately 325,000 gallons, and 2013 with 21 releases totaling approximately 310,000 gallons. Each of the releases were safely batched in smaller volumes over the year (not a single continuous discharge). (See Pilgrim Environmental Data Charts Below)

*The total dose released for both the liquid release above, as well as the gaseous (evaporative) release, was **0.08 millirem** in 2011, **1,250 times lower** than the NRC limit, and 2013 was **0.03 millirem**, **3,333 times lower** than the NRC limit.*

Q: Who regulates the process?

A: All nuclear power plants are required to have NRC-approved procedures that require treatment, such as filtration of the water to reduce the radioactivity to levels as low as reasonably achievable. The water can then be released through radiation monitors in batches that are sampled prior to release to ensure the water released is well below regulatory requirements. The facility routinely calibrates and maintains the equipment associated with the processing system and radiation monitors to ensure that they are operating properly.

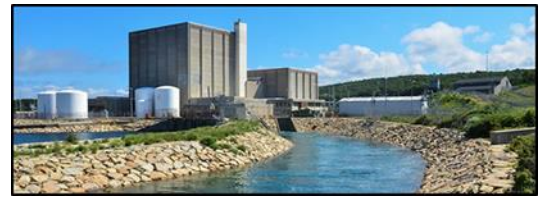
The NRC routinely inspects the work performed by the facility to ensure that it is performed properly and meets regulatory standards. The NRC last inspected the systems at Pilgrim in 2021 and found them to be compliant with regulatory requirements. The NRC will continue to inspect Pilgrim until the plant is completely decommissioned and ensure all activities are conducted in a manner protective of public health and safety.

As part of the Holtec and Commonwealth of Massachusetts agreement, Holtec is required to submit the Annual Radioactive Effluent Release Report to the State at the same time as the NRC and comply with the National Pollutant Discharge Elimination System permit issued by the State Dept. of Environmental Protection and Federal Environmental Protection Agency.

Q: Are there other options for disposal?

A: There are three options for disposal, evaporation of the water, treating and discharging under an approved permit, or transporting the water to be evaporated or treated and released in a similar processing method to how the site treats water.

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Q: Is Pilgrim looking at those options?

A: Yes, we have committed to evaluating all options, and a combination of options, for disposition. As previously stated, Pilgrim has evaporated over 680,000 gallons of water over the past two years using the residual heat to aid the evaporation process. This gaseous release through the building air handling system is filtered and monitored.

With residual heat not available, evaporation would require an alternate heat source, and the use of carbon creating fossil fuels, like oil or natural gas, to evaporate that large a quantity of water.

Transporting to a facility that would process and release the water in the same manners and under a similar type of permit would require hundreds of truck trips, which creates the potential for accidents and still requires a release to the environment after a similar process to how Pilgrim treats water on site.

In all likelihood, discharge, evaporation, and some limited transportation will be a part of the final disposition of liquid once we complete our evaluation of the risks and benefits associated with all the options.

Q: How will you communicate your decision under the allowable permitted options?

A: As we have done since its inception, we will continue to communicate via the legislatively created Nuclear Decommissioning Citizens Advisory Panel (NDCAP), continued outreach to local media, briefing of federal, state, and local elected officials, and our social media.

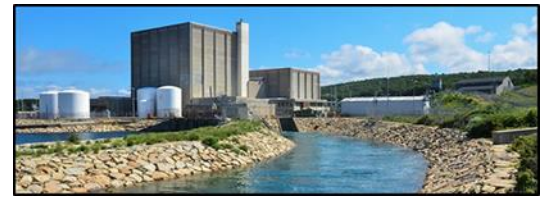
Q: Is the State involved in the process?

A: Holtec and the Commonwealth negotiated a good faith comprehensive agreement in June 2020. This agreement set forth a stricter clean-up standard than is allowed by the NRC and showed our commitment to a safe, efficient decommissioning of the land to allow for future reuse. This commitment bound Holtec to follow the stricter allowable standard agreed to with the Commonwealth.

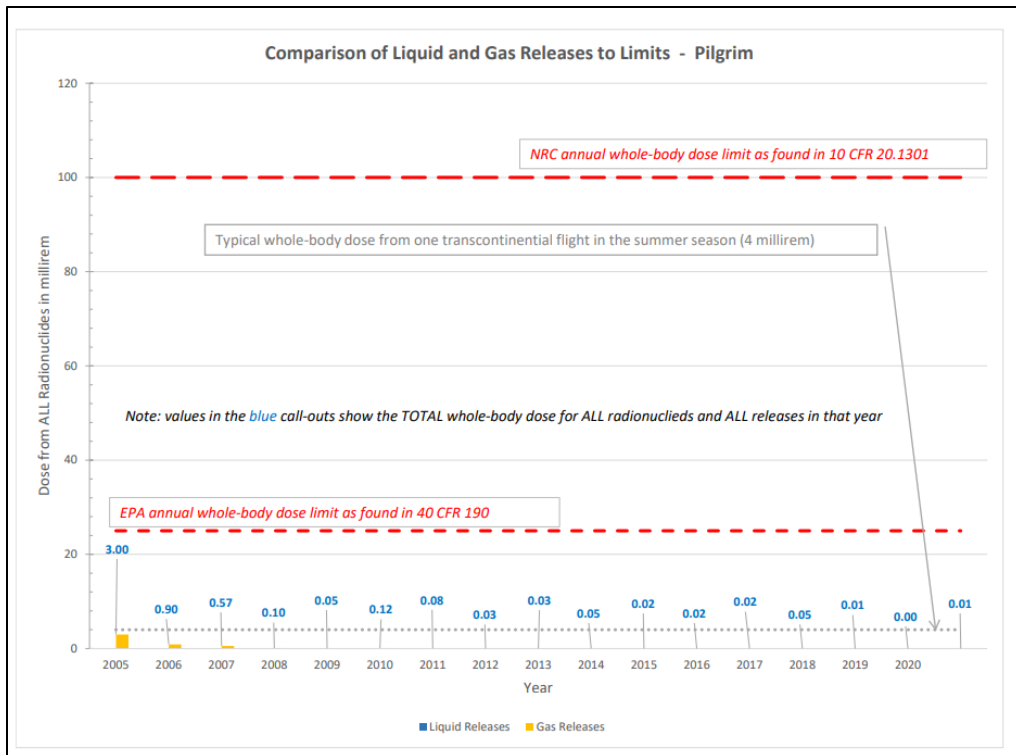
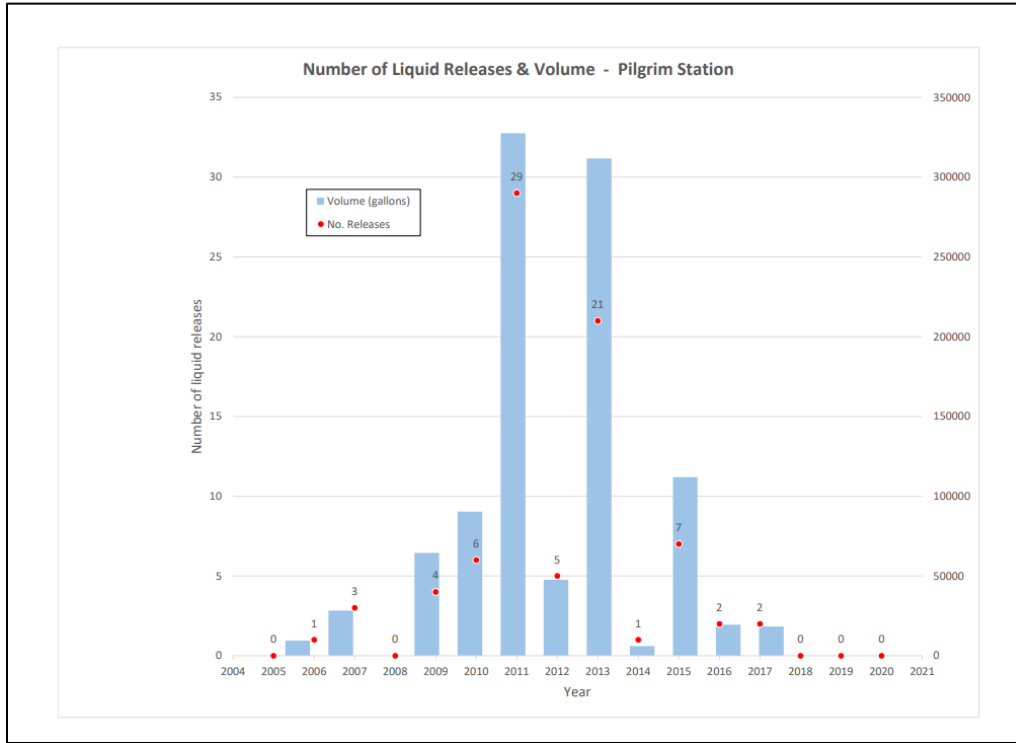
State agencies are involved in all aspect of the process and regularly provide oversight and information via the public NDCAP meetings.

We work hard to be a good corporate neighbor to Plymouth and the surrounding communities. Our team is made up of residents, your friends, and neighbors, who take all aspects of safety: Industrial, Radiological, Nuclear, and Environmental, as our primary goal.

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Pilgrim's Historical Environmental Data

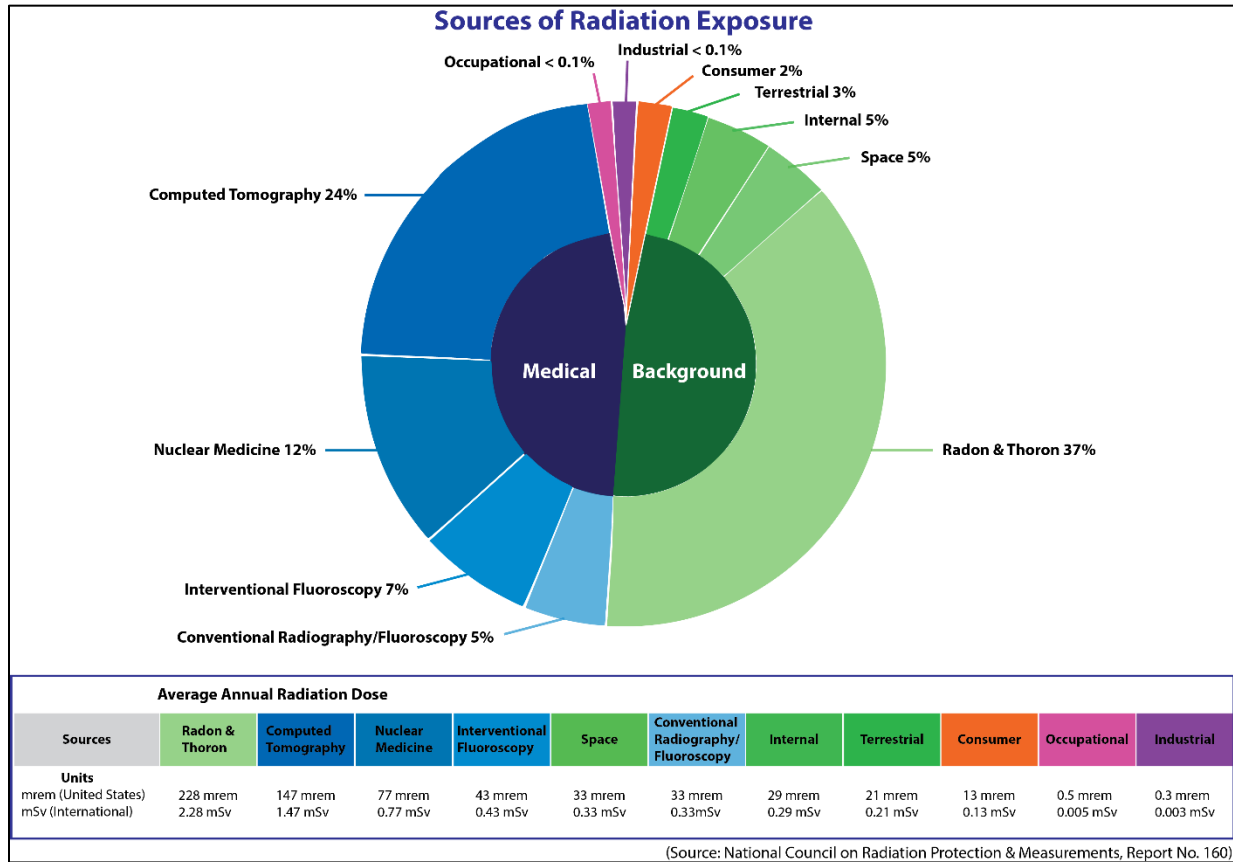


Information Sheet For Pilgrim Station Stakeholders



For reference

Exhibit A



Information Sheet For Pilgrim Station Stakeholders

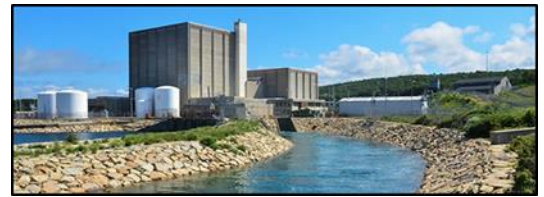


Exhibit B

