

NUCLEAR DECOMMISSIONING CITIZENS ADVISORY PANEL

NOTICE OF PUBLIC MEETING

The Nuclear Decommissioning Citizens Advisory Panel (“NDCAP”) established pursuant to Chapter 188 of the Acts of 2016 § 14 will hold a public meeting on Monday, July 22, 2024 starting at 6:30 pm. This meeting notice is published pursuant to Massachusetts General Laws, Chapter 30A.

Pursuant to Chapter 2 of the Acts of 2023, this meeting will be conducted in person at Plymouth Town Hall, Great Room, and, as a courtesy, virtually in accordance with applicable law. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public and panel members, the meeting will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless required by law. This hybrid in-person/virtual meeting structure will be used as long as the state permits.

Local Scene (pactv.org) will record the meeting and host the virtual meeting.

The link for members of the public to attend and participate in the meeting is: https://pactv.zoom.us/webinar/register/WN_vnUUzMrFQoymLBkh8atPwA.

To call in, Dial: 1 929-205-6099
Webinar ID: 848 5787 6163
Passcode: 112233

The link for NDCAP members to join the meeting will be sent in a separate email to the members of the panel.

The listing below is of topics that the chair reasonably anticipates may be discussed at the meeting. The topics may not be discussed in the order listed and may be discussed at various times during the meeting. Not all topics listed may be discussed. Topics not listed may be discussed to the extent permitted by law. The Panel also may discuss any general business of the NDCAP.

Please note that for how long a topic may be discussed (“Duration”) and when discussion of a topic may begin (“Start Time”) are estimates.

	Topic	Presenter(s)	Estimated Duration	Estimated Start Time
1	Call to Order Roll Call of Members	Chair/Panel	5 minutes	6:30 pm
2	Previous Meeting Minutes	Chair/Panel	5 minutes	6:35 pm
3	Holtec Decommissioning Activities, Status, and Plans (Panel Discussions and Questions)	Holtec/Panel	20 minutes	6:40 pm

4	IWG Report; Panel Discussion and Questions	IWG/Panel	20 minutes	7:00 pm
5	ESA Work Plans, Settlement Agreement Site Restoration and Environmental Requirements See Attachment - Potential Subjects for Discussion - Settlement Agreement and ESA Work Plans	Panel/AGO, Holtec and ERM Representatives	30 minutes	7:20 pm
6	Possible Contents of Meeting Minutes	Panel	Not known	7:50 pm
7	Status of decision on Holtec request for amended permit, Final Determination (if issued)	Chair/Panel	Not Known	Not Known
8	Public Comments and Questions	Public/Chair/Panel	30 minutes	Not Known
9	Adjourn	Chair		

The next NDCAP meeting is planned to be In-Person with Hybrid option via Zoom on September 23,2024 at 6:30pm.

Attachment to July 22, 2024 NDCAP Agenda

A. In General

1. The 2022 Revised Work Plan said that “where requested information had been previously provided it has been incorporated into this revised ESA Work Plan to facilitate review.”

Were any other materials sent to or considered by the Commonwealth in connection with reviewing the 2022 Work Plan?

2. The Settlement Agreement says that that “Pilgrim” means all “land and associated facilities (including the ISFSI) and equipment transferred to Holtec on the closing date,” and that “Site” or “Pilgrim Site” includes “any place or area where radiological or non-radiological oil or hazardous material (as defined by the Massachusetts Contingency Plan) has been deposited, stored, disposed of or placed, or otherwise come to be located.

Has Holtec sampled/tested all areas and places on the Site where radiological or non-radiological oil or hazardous material (as defined by the Massachusetts Contingency Plan) and including the so-called doughnut hole) may have been deposited, stored, disposed of or placed, or otherwise come to be located.

3. The Plymouth-Carver aquifer is located below the Site, the Site slopes towards the Bay, and underground water flows in that direction also.

In preparing and reviewing the ESA Work Plans what consideration was given to the potential flow of contaminated water into the bay or aquifer? What in the ESA Work Plans is intended to prevent radioactivity from making its way into Cape Cod Bay or the Plymouth-Carver Aquifer?

4. Paragraph 10(e) of the Settlement Agreement says “Holtec shall comply with Chapter 21E and the MCP as applicable.”

What sections/paragraphs of Chapter 21E and the MCP are potentially applicable?

What portions of the 2022 and 2024 Revised Work Plans are directed to compliance with Chapter 21E or the MCP?

5. Page 7 of the 2024 Revised ESA says, “Table 1 includes two sets of calculated DCGL values, one for “building surfaces based on the building occupancy exposure scenario” and another “for soil based on the resident farmer scenario.”

On what actual data and measurements are the “Calculated DGGL values for Building Surfaces and Soil” at page 8 of the 2024 Revised ESA based?

There are no values based on the basement inventory scenario. Why were they not included? Will all three DCGL’s be used in determining compliance with the Massachusetts Standard?

6. Paragraph 11(e) of the Settlement Agreement says that the ESA should “include a proposed list of potential radiological and non-radiological contaminants for which sampling and testing will be conducted at the Site.”

Where in either the 2022 or the 2024 Revised ESA is a “list” of all radiological and non-radiological contaminants that ERM or Holtec will sample and test?

B. The Massachusetts Standard

7. Section 10(d) of the Settlement Agreement says, “Holtec shall comply with the following requirements for addressing radiological contamination at the Site.” Section 10(d)(1) requires Holtec to “demonstrate compliance, or progress toward compliance, with 105 C.M.R. § 120.245.”

Does Holtec expect to demonstrate compliance with the Massachusetts radiological standard at the time of Partial Site release?

8. 105 CMR 120.245 says when “A site will be considered acceptable for unrestricted use.”

What is the “site” referred to in this sentence of the CMR? Is it only the relatively small parcel on the water side of Rocky Hill Road, or does it also include the much larger parcel on the other side? To which do the “requirements for addressing radiological contamination at the Site” apply?

9. In Vermont, perhaps following the NRC’s resident farmer scenario, dose is not averaged but rather is measured and/or calculated survey sector by survey sector, and no sector is allowed to exceed the limit.

How will compliance with the Massachusetts standard be determined if, for example, the average residual radioactivity above background for the overall Site meets the Massachusetts standard but the residual activity in some other portion or portions of the Site is higher and does not?

10. 105 C.M.R. § 120.245 says, “A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that shall not exceed 0.10 mSv (10 mrem) per year, including that from groundwater sources of drinking water and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA).” 120 CMR 120.005 says that Critical Group “means the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances.”

Does Total Effective Dose Equivalent (TEDE) include not only the dose from residual radioactivity activity relative to site soils but also any dose from radioactivity that remains in any below-grade structure or building materials, and from any residual reactivity on indoor building surfaces?

Is TEDE the sum of the effective dose equivalent (for external exposures) and the effective dose equivalent (for internal exposures)?

C. Modeling Dose

11. Section 10(d)(5) of the Settlement Agreement says, “To demonstrate compliance with Paragraph 10(d), Holtec shall use ... the ‘resident farmer scenario’ and ‘basement inventory model’ to model the potential exposure to residual radioactivity in all pathways, provided, however, that the Parties may mutually agree to an alternative standard for modeling if an approved future reuse supports the use of such an alternative standard.”

The AGO’s letter of January 19, 2024 raised “several issues pertaining to the models Holtec will use for dose assessment of radionuclides of concern.” The AGO said that “Holtec has introduced a ‘Building Occupancy Scenario,’ and that “This model is not addressed in the Settlement Agreement and may not be as conservative as the two models specified in the Settlement Agreement....”

Why may the Building Occupancy Scenario “not be as conservative as the two models specified in the Settlement Agreement?”

Why did the January 19, 2024 letter suggest that Holtec might “add[] the Basement Inventory to the list of models that Holtec will use.” What would be gained by adding a third scenario that the AGO says “may not be as conservative?”

12. RCP Comment 3 in the AGO letter says, “Holtec cannot demonstrate compliance with paragraph 10(d) unless it uses both the Resident Farmer Scenario and the basement inventory model,” and that “Holtec must revise” the February 2022 Revised ESA Work Plan to read that the basement inventory model “will be used to model residual radioactivity for compliance with the state radiological standard.”

How might or will these models be used to determine (i) whether Holtec has complied or demonstrated progress towards compliance with the Massachusetts standard, and (ii) the

greatest exposure that might potentially be received by an individual not only from residual radioactivity activity relative to site soils but also from any radioactivity that remains in any below-grade structure or building materials, and any residual reactivity on indoor building surfaces?

D. Removal of Structures

13. Section 10(g)(2) of Settlement Agreement says, “By the License Termination date, Holtec shall remove all structures that remain at the Pilgrim Site,” and Section 10(g)(3) says that this requirement applies “to all underground structures, including building foundations, buried piping, and contained piping, unless retention of such structures is approved by DEP through issuance of a beneficial use determination pursuant to 310 C.M.R. § 19.060.”

There are many underground pipes and tanks on the Pilgrim Site. Entergy provided a diagram of all buried pipes and tanks during license renewal litigation.

The listing in Par. 2.1 of the 2024 Revised ESA Work Plan of structures that have been or will be demolished appears to include only buildings, five storage tanks, and the low level radwaste facility.

Where in the ESAs has Holtec provided a listing of all “all underground structures” that will be removed?

By when does Holtec intend to remove all structures on the Site, except those for which it has received a beneficial use determination and structures in the ISFSI?

14. Section 10(g)(1) of the Settlement Agreement says “(1) By the Partial Site Release date, Holtec shall remove all structures at the Pilgrim Site necessary for Partial Site Release...”

What structures, including underground structures referred to in paragraph 13 above, might it be necessary to remove “for Partial Site Release?”

What portions of the ESAs deal with the requirements of Sections 10(g)(1) and (2) of the Settlement Agreement?

15. Paragraph 2.10 of the 2022 Revised Work Plan describes “site characterization ... from beneath and adjacent to underground structure.”

Will this characterization include both inside and outside of buildings and pipes for radiation?

E. Disposal and Use of Contaminated Materials

16. Section 10(h) of the Settlement Agreement says “Holtec may not dispose of any radioactive waste materials on the Site or use rubblelized radioactive waste materials as fill at the Site.”

What does the term “radioactive waste materials” encompass?

What portions of the 2022 and 2024 ESAs might help ensure that Holtec will comply with this requirement

17. Paragraph 12 of the Settlement Agreement says, “Upon approval of the revised work plan, Holtec shall ... perform all actions in the Initial Pilgrim Environmental Site Assessment work plan.”

Section 2.12 of the 2022 Revised ESA Work Plan says, “Below structure soil that is radiologically contaminated will be removed for disposal will be handled and processed as radiological waste and / or mixed waste dependent on applicable non-radiological constituents.”

Does paragraph 12 of the Settlement Agreement mean that Holtec will remove any soil below any structure having a detectible radiation level site as said in Section 2.12 of the 2022 Revised Work Plan, and will not use any such soil for fill?

F. Beneficial Use

18. Paragraph 10(g)(3) of the Settlement Agreement says, “DEP understands that Holtec will seek approval through a beneficial use determination to leave clean, uncontaminated underground structures, such as concrete foundations and similar structures, in place at depths of three (3) feet or more below the grade existing on the Effective Date.”

What does “clean, uncontaminated” mean? Does it mean there must be no detectible level of radiation above background and no hazardous material (as defined in Ch. 21E)?

As of now, does Holtec intend to seek approval to retain any structures through a beneficial use determination, with respect to what structures does Holtec intend to do so, and why does Holtec think it is desirable or necessary to do so?

19. The Commonwealth's regulations appear to say that Beneficial Use means the use of a material as an effective substitute for a commercial product or commodity, and that the material cannot be a hazardous material as defined in Ch. 21E.

Is that your understanding of the regulations applicable to a potential beneficial use determination to leave underground structures on the Pilgrim Site?"

20. According to Ch. 21E, "Hazardous material" is "material including but not limited to, any material, in whatever form, which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed.

What fill or a structure that was not removed from the Site might include "material ... which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics ... constitute[] a present or potential threat to human health, safety, welfare, or to the environment?"

21. 310 CMR 19.060(2) says "a) The applicant [for a determination of beneficial use] must demonstrate to the Department's satisfaction that the proposed secondary materials and uses are beneficial ... and "b) The Department may grant a beneficial use determination, and may allow a beneficial use determination to remain in effect, only to the extent, and only while, the Department is satisfied that such secondary materials and uses are beneficial..." and pose an insignificant potential hazard to public health, safety or the environment.

Does "beneficial" require that the use be "beneficial" to some person or entity other than the applicant?

How might the retention of "structures" on the Pilgrim Site be "beneficial" to any person or entity other than Holtec?