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Nuclear Decommissioning Citizens Advisory Panel
Working Group: Site Clean-up and Restoration
Meeting minutes: October 25, 2017

Attending group appointees: Paul Smith, (Utility Workers Union), Jack Priest (DPH Bureau of Environmental Health Radiation Control), Pine duBois (House Speaker), Dave Johnston (DEP/EEA), Pat O'Brien (Entergy), also present Mary & Jim Lampert

Absent Heather Lightner, Representative of Town of Plymouth

Appointment/selection of Pine duBois to serve as chair of this Working Group.
Double-duty: also taking the minutes of this meeting.

Discussion of the Scope of the Working Group

- Difference between Decommissioning and "Clean-up" (work of this group): Decom has to do with any work to remove and control radioactive items or contamination; cleanup is everything else, whether hazardous or non-hazardous to meet standards for site reuse. This working group must address the "everything else" category: the extent to which will be driven by whether contamination of hazardous materials are present, where, how much and in what form.
- Jack Priest offered a site map (google earth?) showing an overview of the primary site with the reactor building, turbine building, small office building with mechanical host machine area. Short discussion of Class A (rad) waste and non-resins or metals (Class C waste).
- Massachusetts is not in a Compact for Rad waste disposal as is Vermont, which is in a compact with Texas.

Scope will include:

- Ask Town of Plymouth about Re-use Goals/Options. This will guide degree of cleanup and lead to defined timeline relative to Safestor/Decommissioning.
- Coordinate with Entergy to gather the most up-to-date information on the intentions and decisions relative to options for "Safestor" or "Decom/Decontamination
- Where is the waste going to go? How long will it be on-site until moving off site?
 - Several options exist for Decom that will impact site cleanup and reduce security costs by shrinking the contaminated area. Eg...
 - Safestor might also include taking down the turbine, which is driven by a boiling water reactor, in order to get rid of most Rad components and in order to shrink the restricted area. The RAD components include reactor, turbine, spent nuclear fuel (SNF), machine shops, some, but not all of condensate storage tanks, any historic spill areas, and the Drum storage area near the ISFSI
 - Non-radiological are the office buildings
- Tritium-underground rad contamination. Source needs to be pinned down to enable site clean up. This likely includes a line and a collection tank. Hydrological mapping of the site to understand flow of contaminants. Speed and direction of groundwater

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- flow—although some is known, some is not due to the depth of the building foundations and underground maze, which can alter the flow path—either diverting it from natural pathways or providing more of a pathway to discharge. Same is true of tidal influence on groundwater level, direction and speed of flow to the bay is variable with tides, seasons, tide elevation and should be described and mapped in order to evaluate tritium and contaminate flow off site.
- What are the other Sources of Contamination?
- Waste Water Treatment Plant will serve through decommissioning. Has been inspected and cleared to date by DEP

Who Rules at the State level?

- If contamination is in a building—DPH rules (radiation)
- If contamination is outside—DEP rules (lead, volatiles, etc.)

Opinion offered by Jack Priest that DPH may support less than 10mr (millirem) exposure in a year, but it may lack regulatory authority due to Federal regs. (NRC= 25mr/y). This is something that DPH is working on—either through legislation or negotiation. In some places NRC works with a standard “as low as reasonably achievable” such as Trojan, Maine Yankee, Conn Yankee and Yankee Rowe: which show that 10mr/y IS reasonably achievable. Mr. Priest will keep us updated as decisions evolve at DPH.

Recommendation: Presentation on Standards to NDCAP and Governor: on regulations, needed legislation and possible negotiation.

Suggestion by Mary Lampert: Dr. Bill Irwin from Vt Yankee could be asked to a telcon to discuss millirem limit. (In VtY, utility agreed to 10 mr/y, but existing regulation exempts nuclear utilities.

Action Items:

- **Review reg:** NRC 10CFR 75G
- Map radioactive material stored on site and
- Research dumps of legacy materials/ hearsay or documented for map of issues

Mission Statement for this working group SC&R

- Make recommendations to full Panel about how to approach site clean up
- Inquire from Town and determine Plymouth’s plans for site as Industrial, Residential, Openspace, uses etc.
- Research and document all information on the site characteristics that would impact cleanup and restoration for those future plans, including current state of the site
- Map all Radiological (75G) and 21E historical (legacy) issues
- Study in order to recommend plan for cleanup to minimize traffic, consider use of barges and other options where disposal route could impact the community
- ISFSI Pad location consolidation and safety (how long and under what basis will pad stay at present location—what about expansion?) When will Entergy decide on location and build 2nd ISFSI pad. Panel should have impact on that decision.

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Follow-up:

- Contact RSCS (Radiological Safety & Control Services) which did (or may have) performed a Historical Site Assessment to come to a work group or Panel meeting to spell out what is known to be on the Pilgrim site
- Ocean Processes impact on site
- Plusses and Negs of immediate decommissioning. Study and present or discuss with PSDAR work group and full Panel.

NEXT MEETING: Wednesday November 29th at 4PM. Location to be determined

Adjourn: 8:36PM

Draft 4 with input by others submitted by Pine duBois