National Fireworks Site

Hanover/Hanson/Pembroke
September 2023





Goals for Today's Meeting

- Introductions.
- Recap of last meetings.
- MassDEP overview of site history, funding, risks, and completed/ongoing work at the Site.
 - Superfund and NPL Listing Process.
 - Pre-remedial activities leading up to listing.
 - Outreach and engagement.

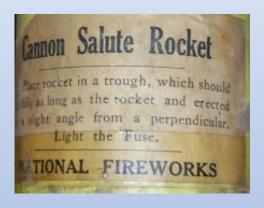


EPA, MassDEP, and Town Meetings

- Pembroke Meeting via Teams 6/6/2023.
- Hanover Meeting via Teams 6/8/2023.
- Hanson Meeting via Teams 7/10/2023.
- Joint meeting with 3 towns 7/17/2023.
- Hybrid Hanover Meeting 9/15/2023.
- Hybrid Hanson Meting 9/26/2023.
- *MassDEP continues to meet with Hanover and Hanson on a monthly basis.









Site Background and Status

- MassDEP and the towns have been working toward the same goal for many years to clean up the Former National Fireworks Site.
- Historical activities at the site included research, development, manufacture and testing of munitions and pyrotechnics for the US Government, commercial manufacture of civilian fireworks and other non-munitions related manufacturing from 1907-1970.
- Mercury, lead, organic solvents and propellants and explosives were used in the manufacturing operations at the site.
- A tremendous amount of work has been completed at the Site to identify areas of soil, sediment, surface water and groundwater contamination and to address unexploded ordnance/munitions.
- Mercury has been detected in sediment, soil, groundwater and fish tissue. Lead and other metals as well as volatile organic compounds have ben detected in soil, groundwater and sediment.
- Munitions and explosives have been found in soil and in Factory Pond.







Risks from Site Contaminants and Munitions

- No public or private water supply wells have been impacted by contaminants released at the site.
- Potential risk from direct contact with contaminant-impacted soil and sediment.
 - Southern site access is restricted and patrolled by Hanover Police Department.
 - Impacted soils are being excavated and properly disposed off-site.
 - Access to Factory Pond is restricted.
- Risks to people, fish-eating birds and wildlife from ingestion of contaminants found in fish.
 - Fish advisory for Factory Pond is in place.
- Risks to people from munitions items identified in the southern portion of the site, including in Factory Pond.
 - Access to Factory Pond is restricted.





Response Action Progress and Status

- As of August 2023, over 190,000 munitions items (35,510 lbs.-17.75 tons) have been removed from the site. 21,080 items (11%) contained explosives, posed a public safety hazard and were required to be destroyed on site by the Massachusetts State Police.
- 14 of 21 areas of munitions, soil and sediment contamination in the southern portion of the site have been investigated and cleaned up under the MassDEP regulations.
- Current site activities include off-site disposal of contaminated soil and asbestos, munitions destruction and disposal, soil sampling, and site equipment demobilization. Expect these activities to be completed by October 2024.
- The site will be secured with access restrictions to the site and to Factory Pond until site investigation and cleanup activities begin again.

Status of Tronox Inc. Expendable Trust Fund

Status of Tronox Incorporated Trust Fund – 9/14/2023

			Running Balance
Item	Description	\$ in Million	in \$ Million
Tronox Inc. Expendable Trust			
Contribution w/interest		73.84	73.84
	Investigation and Response		
Disbursed to date from Trust	activities	53.58	20.26
Prioritized Immediate Response			
Action (IRA) Work	Authorized but not yet billed	4.95	15.31
	Estimated Cost - not yet		
Prioritized IRA Work - Asbestos	approved (\$5.1)	5.10	10.21
Balance – Funds available for Safe			
Shut down and site security and any			
needed immediate response until			
site cleanup resumes			10.21



• Predicted costs to complete required environmental remediation of the site is estimated to be greater than \$200 M.

MassDEP Request for EPA Involvement: Cleanup Funding Issues

- Site work has been funded by the Tronox Inc. Expendable Trust; however remaining funding is insufficient to complete the required response actions.
- Potentially responsible parties, including the US Department of Defense:
 - Refused to plan for cleanup of the entire Site.
- Given the projected costs for the remaining cleanup and status of settlement negotiations, MassDEP reached out to the EPA as a possible option for funding the cleanup at the site – through the Superfund National Priorities List process.



What is Superfund?

- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act.
- CERCLA is informally called Superfund. It allows EPA to clean up contaminated sites. It also forces the parties responsible for the contamination to either perform cleanups or reimburse the government for EPA-led cleanup work.

• Goals:

- Protect human health and the environment by cleaning up contaminated sites.
- Make responsible parties pay for cleanup work.
- Involve communities in the Superfund process.
- Return Superfund sites to productive use.



What is the National Priorities List (NPL)?

- National list of sites that EPA determines require further detailed investigation, and potential cleanup action in accordance with CERCLA*.
- Investigations at NPL sites determine whether long-term threats to human health & environment exist.
- Where needed, comprehensive strategy to address threats is implemented.
- *CERCLA = Comprehensive Environmental Response, Compensation and Liability Act (Often referred to as Superfund)



Why add the National Fireworks Site to the NPL?



- Sites on NPL subject to detailed investigation and cleanup where warranted.
- Only sites on the NPL are eligible to receive federal Superfund resources for comprehensive cleanup.
- Federal resources can include monetary support, as well as expertise/staffing.
- Absent the use of federal resources, comprehensive cleanup strategies may not be able to be pursued.
- Given the projected costs for the remaining cleanup & status of settlement negotiations, MassDEP reached out to the EPA to address the site through NPL listing.

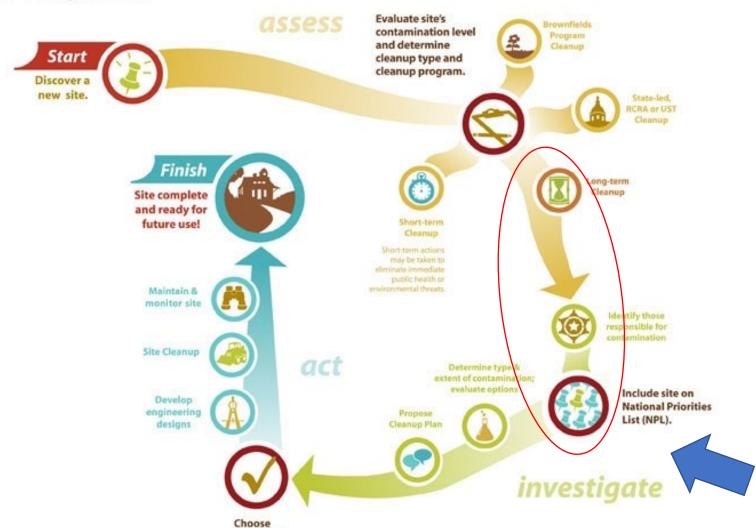
How is a Site added to the NPL?

- Sites added to NPL through federal rulemaking.
- Requires letter of concurrence from Governor.
- Site is first proposed to the NPL.
- 60-day public comment period.
- Site finalized to NPL, upon consideration of public comments received.



The Superfund Process:

Discovery and Cleanup for a Long-Term Site



Cleanup Plan.



The point where federal resources can be expended.

Order of Upcoming Activities for National Fireworks if We Pursue Listing

- Conduct a Site Reassessment (currently ongoing).
 - Review available data and reports.
- Conduct Expanded Site Inspection.
 - Address data gaps, sample, and prepare for HRS Package.
- Develop a Hazard Ranking System (HRS) package (~a year).
- Letter of concurrence from Governor.
- Propose site to NPL.
- 60-day public comment period.
- Finalize site to NPL.



Superfund in New England

- Most recent listing was the Lower Neponset River in Milton/Boston.
- 41 Superfund Sites in Massachusetts.
- 123 Superfund Sites in New England.
- 1,833 Superfund Sites nationally.

HOME→ LATEST CITY OF BOSTON NEWS→ LOWER NEPONSET RIVER DECLARED A SUPERFUND SITE

LOWER NEPONSET RIVER DECLARED A SUPERFUND SITE

Federal funds will support the remediation of a historically neglected and polluted natural space.

Last updated: March 16, 2022





Community Outreach & Engagement

- Introductory meetings with Towns:
 - Hanson, Hanover, Pembroke (June & July).
 - Joint meeting with 3 towns (July).
 - Separate meetings with town decision makers (September & October).
- Need input:
 - Virtual/Hybrid/In-Person Meetings with community members.
 - Collaborated efforts with town representatives & community leaders.



Link to EPA Publicly Available Documents





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