

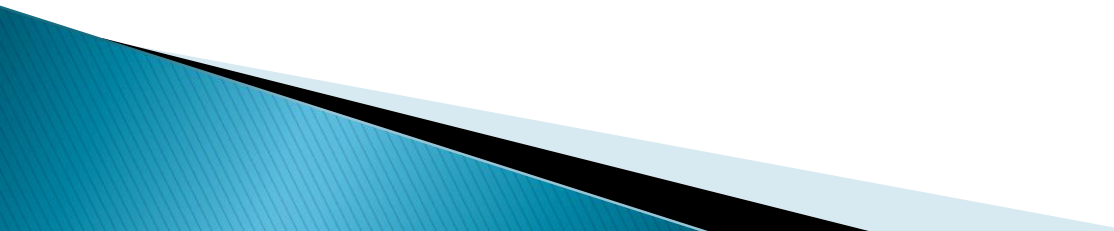
TOWN OF HANOVER



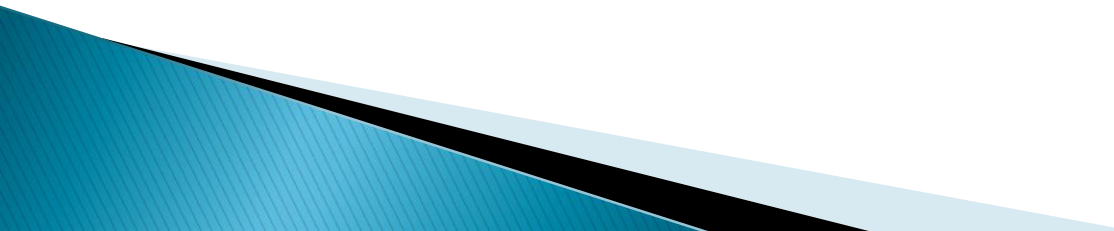
NATIONAL FIREWORKS PUBLIC MEETING
NOVEMBER 14, 2012

WELCOME & INTRODUCTIONS

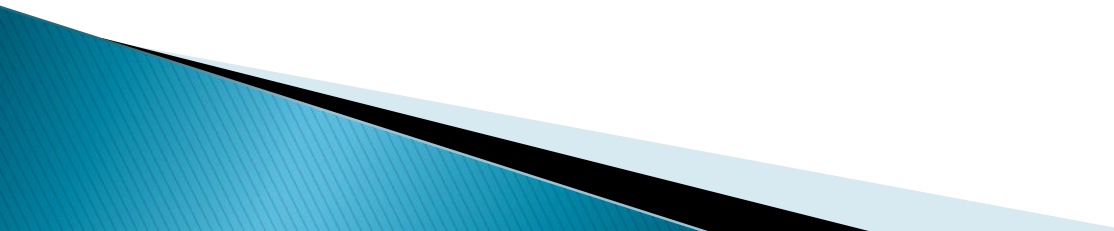
- ▶ John Barry, Chairman of the Board of Selectmen
 - ▶ Troy Clarkson, Hanover Town Manager

 - ▶ Recap Recent Outreach Activities
 - ▶ Brief History and Current Status
 - ▶ Mass DPH to Address Public Health Concerns
 - ▶ Mass DEP to Update on the Status of Site
 - ▶ Initiate a Dialogue and Answer Your Questions
 - ▶ Address Your Comments and Concerns
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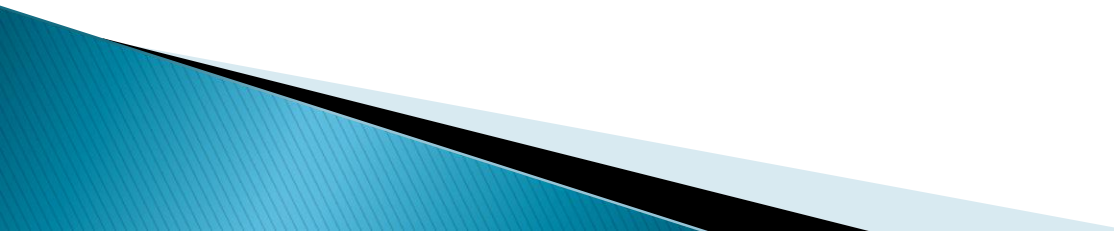
RECENT ACTIONS

- ▶ Town Officials Discouraged Federal National Priorities List(NPL) Listing.
 - ▶ Working with DEP to Move Forward with Future Site Activities and Remediation under the Massachusetts Contingency Plan (310 CMR 40.0000)
 - ▶ “Environmental Update” Newsletter sent to more than 6,000 homes and businesses – significant community feedback
 - ▶ Hanover Selectmen formed Fireworks Site Focus Committee to advise the town on post-cleanup redevelopment .
 - ▶ Town & State agencies WORKING cooperatively TOWARDS A LONG TERM SOLUTION.
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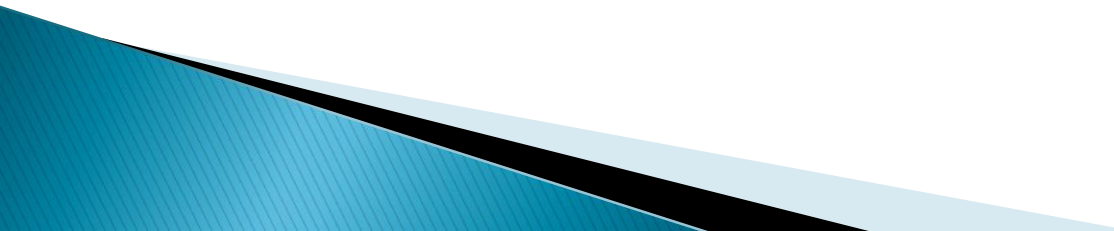
FIREWORKS BACKGROUND

- ▶ 1907 TO 1970 Companies on the National Fireworks Site Manufactured Civilian Fireworks, and Researched, Developed and Manufactured Military Munitions and Pyrotechnics.
 - ▶ Lead, Mercury, and Organic Solvents Generated During Site Processes were Disposed of on Site.
 - ▶ Soil, Sediments, Groundwater, Wetlands, and Adjacent Waterways Impacted by Pollutants.
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BACKGROUND

- ▶ 240 Acre Site located generally between King and Winter Streets in the Southwest Corner of the Town.
 - ▶ Fireworks Listed as a “CONFIRMED” Site by DEP in 1995.
 - ▶ PHASE II – Comprehensive Site Assessment performed between 1999 AND 2006.
 - ▶ PHASE III – Remedial Action Plan (RAP) submitted in 2007 and a Revised RAP in 2009.
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DPH

- ▶ Cancer Rater Correlation Local Concerns about Cancer and Background Information on Cancer
 - ▶ Summary of MDPH 2007 Report on Thyroid Cancer in Hanover
 - ▶ Review of 2004–2008 Cancer Incidence Data for Hanover
 - ▶ Discussion
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Former National Fireworks Site Hanover, Massachusetts

Massachusetts Contingency Plan (MCP)
Release Tracking Number 4-0000090

November 14, 2012



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Former National Fireworks Site

Background

- Site comprises approximately 240 acres of property generally located between King and Winter Streets in Hanover.
- Historical activities at the Site included research, development and manufacture of munitions and pyrotechnics for the United States Government, and some commercial manufacture of civilian fireworks.
- Lead, mercury, and some organic solvents, among other chemicals, were used in manufacturing operations at the Site.
- Several companies, most notably National Fireworks, Inc., operated at the Site until it closed around 1970.



Former National Fireworks Site

Background

- Northern area of the Site is now a multi-tenant commercial/industrial park.
- Central and southern areas contain open fields, dense foliage areas, and wetlands.
- Town of Hanover owns approximately 130 acres of the Site in the general area of Factory Pond; most of the land is conservation land.



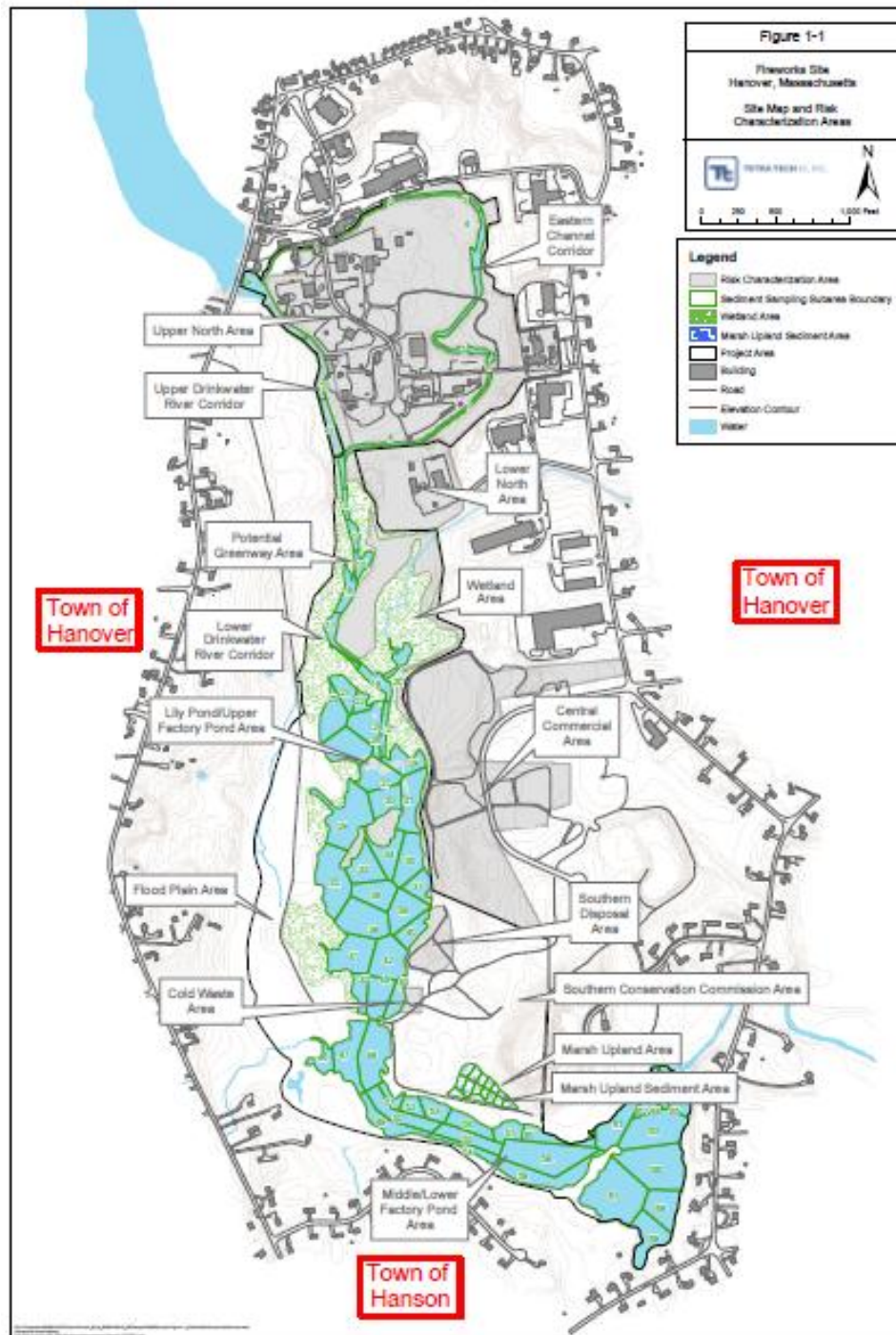
Former National Fireworks Site

Background

- Environmental investigations of the Site began in the 1980s.
- In 1993 and 1995 MassDEP conducted limited sampling in portions of the streams, ponds, and wetlands around the Site.
- MassDEP issued Notices of Responsibility in October 1995 to Kerr-McGee Chemical Corporation, the Massachusetts Institute of Technology, National Coating Corporation, Susquehanna Corporation, and the U.S. Department of Defense.
- Kerr-McGee, MIT, and National Coating (the “Cooperating Parties”), while not admitting liability, agreed to conduct environmental investigations at the Site.
- Cooperating Parties reached an agreement with the United States for reimbursement of a portion of the costs of Site investigation.



Former National Fireworks Site



Former National Fireworks Site

- The MCP is the set of regulations that govern the investigation and cleanup of oil and hazardous material contamination.
 - **Phase I:** Initial Site Investigation. Samples are collected and analyzed to determine the types, amounts, and location of contaminants
 - **Phase II:** Comprehensive Site Assessment. Nature and extent of contamination and risks posed to public health, safety, welfare, and the environment are determined
 - **Phase III:** Remedial Alternatives Analysis. Evaluation and selection of cleanup alternatives are presented
 - **Phase IV:** Remedy Implementation. Implementation of the cleanup plan
 - **Phase V:** Operation, Maintenance, and/or Monitoring. The site is monitored to track cleanup progress and success
- **Public Involvement:** Opportunities available throughout the process.



Former National Fireworks Site

MCP Site Status

- **Phase I** investigation completed in 1997. Site designated as a Tier 1A.
- **Phase II** Comprehensive Site Assessment conducted from 1998 through 2005 in four sub phases to address different environmental media and the size of the site.
 - Characterized the nature and extent of contamination in surface soil, subsurface soil, soil gas, groundwater, surface water and sediment
 - Assessed the site risk to human health, safety, public welfare and the environment
- MassDEP approved the Phase II Report in August of 2006.
- Mercury, lead and other metals detected in sediment, soil and groundwater.
- Volatile and Semi-Volatile Organic Compounds detected in soil and groundwater.
- Risks to people from exposure to contaminants found in fish, soil and sediment and risks to fish-eating birds and wildlife from contaminants found in fish.
- The major contaminant at this Site is mercury in the pond sediment and in fish tissue.
- Cleanup action is necessary and must address the identified risks - the focus for cleanup action is to reduce mercury contamination to a level of no significant risk .



Former National Fireworks Site

MCP Site Status

- **Phase III-** Identification & Selection of Cleanup Alternatives.
- Initial draft submitted to MassDEP in November 2007.
- Revised draft submitted to MassDEP in July 2009.
 - Incorporates supplemental sampling results collected in Fall 2008 and early 2009.
- Phase III develops and evaluates:
 - Cleanup objectives for soil, groundwater and sediment
 - Cleanup goals for human health and environmental receptors
 - Cleanup alternatives:
 - ✓ Effectiveness
 - ✓ Implementability
 - ✓ Cost
- Phase III Remedial Action Plan recommends a cleanup action.
- Additional focused characterization of the southern portion of the Site conducted in 2010 and early 2012
- MassDEP continuing discussions with the Cooperating Parties:
 - Additional soil and sediment sampling
 - Revision of the risk characterization
 - Development of cleanup endpoints toward a permanent cleanup solution for the site
 - Legal and financial framework for completing the cleanup



Former National Fireworks Site

Conceptual Cleanup Action

- Soil removal at source areas in the upland area to meet cleanup goals
- Sediment removal in streams and ponds to meet cleanup goals
- Non-engineering measure- Land use controls
- Long term monitoring:
 - ✓ soil, sediment, groundwater, surface water and fish
- Annual monitoring reports



Former National Fireworks Site

Next Steps

- Revision of the Phase III
 - Reflect changed Site conditions (flooding)
 - Refine remediation goals
 - Consult with Towns regarding Site access and land use
 - Coordinate with MassDEP
- Public meeting and comment period for the Revised Phase III and proposed remedy
- Finalize Phase III
- **Phase IV**- Implementation of the selected cleanup
- **Phase V**- Operation, maintenance and/or monitoring



QUESTIONS AND ANSWERS

We Encourage Your Participation and Feedback

