Tobin Paint Chip Update
Community Meeting

April 13, 2023

History of Lead Use and Disposal

Why is the Tobin painted with lead paint?

- It was the industry standard for all steel structures in the united states – bridges, radio towers, etc. – to be painted with lead-based paint for decades
- This is not unique to the Tobin Bridge – it is estimated that 30% of all steel structures in the United States and Massachusetts still have lead-based paint
- Lead paint was suspended in the US for residential use in 1978 but was allowed for commercial and industrial applications.
- Lead-Based paint for most steel structures, including bridges, was largely suspended in the United States and Massachusetts in 1992

History of Lead Use and Disposal

Why are paint chips falling?

- The Tobin bridge is over 75 years old and has been painted over a number of times and that old paint has become brittle.
- Massachusetts winters over the last several years, specifically, this last freeze thaw cycle over this past year, has caused more delamination's than typical winters causing paint to flake off and fall to the ground.
- All New England states have experienced similar issues with lead paint this winter.

History of Lead Use and Disposal

Lead Waste Disposal Through Project Work

- Lead based paint is removed when bridges are repaired, cleaned, or repainted.
- Lead removal now involves putting a containment system around the bridge to prevent environmental release and then systematically removing and disposing of all lead paint.
- Approximately 4,980 tons of lead waste has been disposed through MassDOT projects from 2011-2022. This includes lead paint waste and blast material.
- On average, MassDOT disposes of 415 tons of lead paint waste plus blast material per year (2011-2022).

Paint Chip/Soil Sampling and LSP Coordination

MassDOT's LSP has been in contact with the City of Chelsea's LSP, BETA, to discuss the paint chip and soil samples. Findings from BETA's latest sampling conducted on March 20, 2023 are:

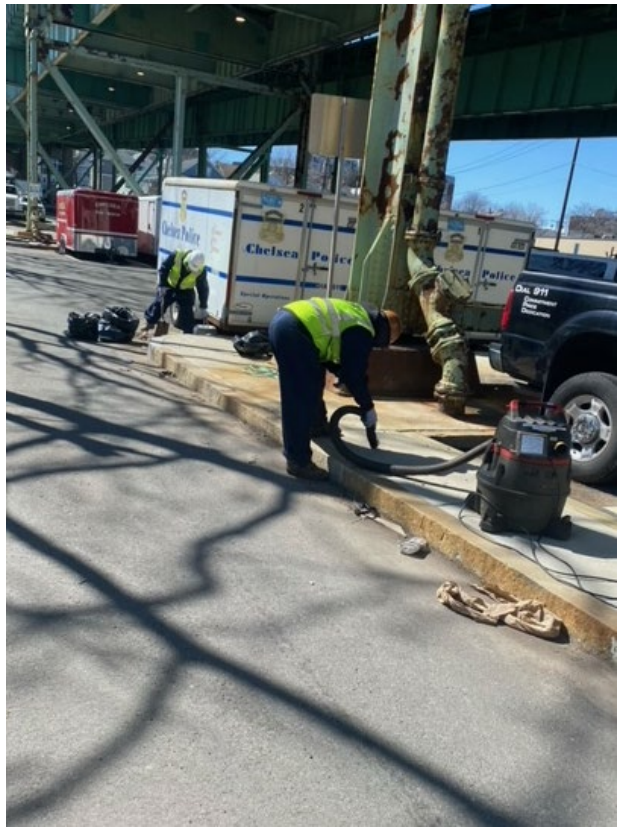
- Paint chip samples were found to contain total lead ranging from 50,200 to 80,300 mg/kg.
- Workers handling this material have proper training to clean up, manage, and dispose of this material in accordance with applicable OSHA regulations (29 CFR 1926.62).
- Soil samples were collected in the top 6" and elevated lead was not identified in this shallow soil. Usually, any impact from lead to soil is fairly shallow unless it is there for a long time. The collected shallow soil samples for lead under the bridge were below the RCS-1 standard for lead of 200 mg/kg. Potential lead concentrations in deeper fill wouldn't be due to the paint chips from the bridge, but rather due to historic fill in the area.

There are no drinking water aquifers in this area of Chelsea. Chelsea gets its drinking water from the MWRA system, whose primary source is the Quabbin Reservoir.

Paint chips from the Tobin Bridge does not impact drinking water.

Current Paint Chip Pickup

- MassDOT has been working in the area for the past few weeks and vacuuming up paint chips that have fallen from the Bridge. The paint chips are then being disposed of offsite.
- Major clean-up activities are set to conclude on April 18th (subject to change based on weather).
- MassDOT is continuing to coordinate with city officials and provide them updates multiple times a week on progress of removal.
- The Contractor has 2 crews, 8 workers plus 1 Vacuum Truck operator per day on the removal operation.
- Regular inspections and spot removal will continue to take place for several months until the larger bridge painting project is underway.
- Community hotline established (English & Spanish) for questions/concerns- **857-492-0221**



Future Project Planned- Tobin Bridge Preservation (US Route 1 over Chelsea Local Streets

Last of 4 major Tobin safety projects in Chelsea to repair structural steel, remove old pain, and repaint.
$100M + project to be advertised this Fall.

Scope:

- Erect temporary protective shielding/work platforms as necessary to perform the work for Stage 1.
- Clean existing steel and remove old paint on lower level mainline (US 1 NB), Beacon Street Ramp and upper level mainline (US 1 SB).
- Perform repairs to existing steel superstructure elements, and safety walk elements at lower level mainline, Beacon Street Ramp and upper level mainline.
- Upon completion of steel repairs, paint the existing steel. Perform repairs to substructure elements.

Future project Mitigation

- MassDOT will administer a $1 million grant program directly to abutters of the work area
- Grant program goals are still being developed and we are open to public input
- Anticipated goals are similar to prior mitigation program for Chelsea Curves – Tobin Bridge project which provided air conditioner units, air purifiers, and white noise units for impacted abutters
- Potential for to mix new funds with balance of prior MassDOT mitigation program administered by the City for last phase

Participation in EPA Cumulative Impacts Pilot

- US Environmental Protection Agency is convening a State/Federal group to review the cumulative impact of environmental issues on Chelsea
- MassDOT, EEA, and other state agencies will be participating
- The proposal has two major goals:
    1. Pilot a coherent community-driven approach to addressing cumulative impacts in the Chelsea area, and
    2. Advance EPA's development of a national framework for considering and addressing cumulative impacts.

    The pilot will engage communities, co-regulators, and stakeholders.

Questions?