Dzus Fastener Co., Inc.
Willett’s Creek and Lake Capri Cleanup
West Islip, Suffolk County

Site No. 152033
Use of Temporary Fabric Structure During Dewatering of Dredged Materials

January 2019
Project Constraints

• Space is a commodity and drives the project schedule

• Logistics related to moving, processing and transporting sediments for off-site disposal is being coordinated with existing traffic patterns and the needs of the community

• Engineering controls are specified to perform the work in a manner which is protective of human health and the environment

• Time is of the essence, since DEC’s approach will minimize occupancy of school grounds to the extent practical
Engineering Controls

- Controls applied to mitigate fugitive dust emissions:
  - Air Monitoring by Health and Safety Technician
  - No Visual Dust Requirement outside work area
  - Wetting down dry materials
  - Temporary Fabric Structure to enclose processing areas
- Fencing with privacy screening will serve as a visual barrier
- The contractor is required to have odor control misters and/or foam machines available if any odors become apparent
- Full time oversight of the contractor’s operations by DEC, which may include ordering work stoppages for any nuisance condition
Health and Safety Controls

• Work areas will be clearly delineated with fencing, cones, orange barrels and signage to separate students from the work
• Temporary chain-link security fencing will be installed at each work area and include signage indicating the work area is a construction zone
• Identified truck routes and timing coordinated with school and local traffic needs
• When working in foot bridge area, heavy equipment will not be operational when children are using foot bridges to get to and from school
• Flag persons will be available to escort pedestrians to and from foot bridges
Dust Monitoring and Controls

Community Air Monitoring Plan (CAMP)

- Continuous monitoring will be conducted in each area of contaminated material handling
- Air monitoring action levels are conservative and include a requirement for no visible dust
- Provisions for work shut down and implementing corrective measures, if needed

Controls to Prevent Migration of Dust

- Wetting the areas
- Covering loads with tarps
- Moist nature of the sediment ensures that dust is minimized
Additional Nuisance Controls

- Efforts will be made to minimize impacts, including but not limited to:
  - Covering loads with tarps prior to leaving the site
  - Using odor control foams on excavated sediment and/or activating odor control misters when necessary
  - Storm water management and erosion controls to prevent runoff from the Site and potential recontamination
  - Noise and vibration monitoring
Temporary Fabric Structures – Brief Overview

- Can be used to supplement traditional engineering controls
- Contains dust, noise, odor while keeping contaminated area out of public eye
- Readily available and constructable
Advantages of Temporary Fabric Structure

• Passive dewatering with gravity applied inside the enclosure

• Negative pressure can be maintained by air handling equipment providing additional safety factor

• Material processing can be completed within the structure – containing and minimizing any potential for dust
Temporary Fabric Structure Details

The Temporary Fabric Structure:

* Is typically made of a PVC coated flame-retardant fabric.

* The thickness of the fabric is typically on the order of 60 mm and is coated with PVC at a thickness of 240 microns, which makes it impervious.

* The dredged sediment will range from very wet when dredged to moist when ready to transport off-site (which would minimize an fugitive dust emission during handling).
Willett’s Creek

- Work will be completed upstream to downstream
- Will utilize 25 linear feet along Willett’s Creek for trucking of sediment
- Plan to partially utilize student parking lot and area behind middle school track for sediment processing areas
Schedule (with use of Barberry Road)

Please note: following completion of dredging and restoration activities on HS property (anticipated Oct 2019), the student parking lot will continue to be used to stage dewatering equipment until July 2020.

MS = Beach Street Middle School
HS = West Islip High School
LC = Lake Capri
Example Equipment

Sediment Storage – allows water to drain while waiting for loading into trucks
Example Equipment (cont’d)

Example Water Treatment Setup

Dredging Willett’s Creek via Excavation
Example Equipment (cont’d)
Public Outreach – Pre and During Construction

Pre-Construction (January 2019)
• Public availability session will be held to discuss the remedial contractor chosen and upcoming remedial activities
• Fact sheet will be distributed

During Construction
• Periodic updated from DEC
• DEC to utilize school website, newsletter, etc. to inform and update parents and surrounding community on progress of construction activities
• DEC and DOH available to answer questions before, during, and after the process
Health-Related Questions

Scarlett McLaughlin, P.G.
Public Health Specialist
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza, Corning Tower, Room 1787
Albany, NY 12237
(518)-402-7860
scarlett.mclaughlin@health.ny.gov
Thank You

Sarah Saucier
Professional Engineer 1
NYSDEC
625 Broadway
Albany, New York 12233
sarah.saucier@dec.ny.gov
518-402-9813

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