RECORD OF DECISION

Dzus Fastener Co., Inc.
Operable Unit Number 05: Willetts Creek Tidal
State Superfund Project
West Islip, Suffolk County
Site No. 152033
March 2022

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Dzus Fastener Co., Inc.
Operable Unit Number: 05
State Superfund Project
West Islip, Suffolk County
Site No. 152033
March 2022

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 05: Willetts Creek Tidal of the Dzus Fastener Co., Inc. site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375 and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 05 of the Dzus Fastener Co., Inc. site and the public's input to the selected remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

Based on the findings of the investigation of the site, the past disposal of hazardous waste and hazardous material at the site does not pose a threat to public health and the environment. Therefore, the selected remedy is No Action.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective.

March 31, 2022	Susan Edwards
Date	Susan . Edwards, P.E., Director Division of Environmental Remediation

RECORD OF DECISION

Dzus Fastener Co., Inc.
West Islip, Suffolk County
Site No. 152033
March 2022

SECTION 1: SUMMARY AND PURPOSE OF THE SELECTED REMEDY

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH) has selected a remedy for the above referenced site. Based on the findings of the investigation of the site the past disposal of hazardous wastes and hazardous material at the site does not pose a threat to public health and the environment. Therefore, the selected remedy is No Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

West Islip Public Library
Attn: Andrew Hamm
3 Higbie Lane
West Islip, NY 11795
Phone: (631) 661-7080

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) were presented along with a summary of the selected remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html.

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:
The Dzus Fastener Co. site is a one-acre site located at 425 Union Boulevard in a suburban area of West Islip. The site is bounded by Union Avenue to the south, the former Dzus facility and Beach Street to the west, and Long Island Rail-Road tracks to the north.

Site Features:
The site is triangular and relatively flat and is defined as the portion of the former four-acre Dzus facility where leaching pools were located. There are no buildings located on the site. Immediately to the east of the site is Willetts Creek which drains south into Lake Capri, an eight-acre man-made lake. Lake Capri drains into the tidal portion of Willetts Creek through a culvert located under Montauk Highway. There are no areas of exposed surface soils on the site.

Current Zoning and Land Use:
The site is located in a mixed residential, commercial, and industrial area. The facility is currently vacant. Current zoning for the property (including the site) is industrial-manufacturing and processing. The nearest residence is approximately 150 feet north of the site.

Past Use of the Site:
The Dzus Fastener Co. Inc. produced fasteners and springs from 1932 to 2015 and moved operations to 425 Union Boulevard in 1937. Operations included the design and manufacture of quarter-turn fasteners, quick acting latches and panel strips using steel, stainless steel, aluminum, and plastic. The products were used by the military and commercial aerospace industries. The fasteners were also used in the transportation, electronics, air handling, refrigeration, motor control and computer industries to secure access panels, covers, or detachable components. Wastes from metal plating, tumbling, electroplating, chromic acid, anodizing, and special finishing operations consisted of oils, heavy metals and salts. Leaching pools on-site were used for the disposal of wastes.

Site Geology and Hydrogeology:
Groundwater flow is to the south across the site, parallel to the flow of Willetts Creek and

towards Lake Capri, with a depth to groundwater of approximately 10 feet. Willetts Creek is a north-south flowing, slow moving creek, approximately 16-23 feet wide and less than 7 inches in depth. Willetts Creek is located immediately to the east of the Dzus facility and flows in a southerly direction approximately 4,500 ft to Lake Capri, a privately owned, 8-acre man-made lake. From Lake Capri, the tidal portion of the creek flows another 3,000 ft below the lake to Babylon Cove. The creek is fed by both upstream surface water runoff and groundwater base flow. The creek is divided into an upper and a lower reach. The upper portion is the freshwater reach located upstream of the lake; the lower portion is the tidal channelized reach downstream of the lake.

Operable Units:
The site was divided into six operable units (OU). An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Operable Unit 1 (OU1) is the on-site source area and consisted of the onsite leaching pools (the source) and areas of soil contamination at the facility, which was addressed by the selected remedy.

Operable Unit 2 (OU2) included contaminated sediments in a portion of Willetts Creek adjacent to the Beach Street Middle School footbridge, Lake Capri, and groundwater downgradient of the facility.

Operable Unit 3 (OU3) encompasses the area of off-site impacted wetlands located behind a strip mall on Union Boulevard and includes a portion of the Willetts Creek channel from the Captree 2 Plaza to 500 feet south of the high school footbridge (CR36), West Islip School properties, and low-lying residential properties.

Operable Unit 4 (OU4) includes Lake Capri sediment, the area of Willetts Creek downstream from OU3, and the surrounding floodplains.

Operable Unit 5 (OU5) includes sediment, surface water, and floodplain soils in the tidal area of Willets Creek to its intersection with Babylon Cove.

Operable Unit 6 (OU6) is an administrative OU that documents the Resource Conservation and Recovery Act closure of the former Dzus facility for the completion of regulated waste activities associated with the historical manufacturing activities.

Operable Unit (OU) Number 05 is the subject of this document.

A Record of Decision was issued previously for OU 01, 02, 03, and 04. This document pertains to OU5.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Dzus Fastener Co., Inc.

Dzus International Limited

DFCI Solutions

The Department had settled claims for OU2 with two of the three identified PRPs. As the current OU3 and OU4 were originally part of OU2, the State is precluded by prior settlements from seeking recovery of additional response costs. In addition, the AG office determined that there were insufficient grounds to pursue the third PRP for OU2 response costs.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,

- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- surface water
- soil
- sediment

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data has identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site are:

cadmium chromium (III/VI)

Based on the investigation results, comparison to the SCGs, and an evaluation of potential public health and environmental exposure routes, no remediation is required for this site. More complete information can be found in the RI Report and Exhibit A.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

The Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 05, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Remediation is complete at OU1, OU2, OU3, and OU4. Residual contamination in the soil, groundwater, and sediment is being managed under an interim Site Management Plan, after this ROD is finalized the interim site management plan will be updated to be a final Site Management Plan. The below information is for OU5.

Soils, sediment, surface water, and clam and crab tissue have been analyzed at OU5 for cadmium and chromium concentrations, the primary contaminants of concern for this site.

Soil: Soil samples were collected from 58 residential properties adjacent to the Willetts Creek Tidal Area, for a total of 503 samples, and were analyzed for cadmium, trivalent chromium, and hexavalent chromium. Detections were limited to the west side of the tidal area and were not observed greater than 1,200 feet south of Montauk Highway. Concentrations of cadmium detected ranged from ND to 8.5 parts per million (ppm), slightly above the unrestricted use and restricted residential use SCOs (UUSCO and RUSCO) of 2.5 ppm, with only 11 out of 503 samples exceeding the SCOs. Chromium concentrations ranged from 0.6 to 47 ppm, with only four samples slightly exceeding the unrestricted use SCO of 30 ppm and two samples exceeding the residential use SCO of 36 ppm. Hexavalent chromium was detected and concentrations ranging from 0.1 to 3.3 ppm. Three samples were detected with concentrations above the unrestricted use SCO of 1 ppm and no samples were detected above the residential use SCO of 22 ppm.

The flooding potential of this operable unit is substantively different than it is for the residential properties adjacent to Willets Creek and Lake Capri, which are within a more frequent FEMA 10-year floodplain. The majority of the adjacent properties within this operable unit have been built up with bulkheads and flooding within the properties has not been identified as an issue, as was noted in Willetts Creek upstream and Lake Capri, where properties gently sloped to the water and flooding was frequent. Soil samples collected from one residential property along the Willetts Creek Tidal area were identified to contain levels of cadmium above the unrestricted use SCO. Additional remedial actions were offered to the homeowner by DEC and were declined. If a future property owner wishes to have the material addressed, it will be managed as part of the site-wide Site Management Plan. As such, no other routes of human or environmental exposure were identified and no remedial actions are required to address soil within OU5.

Sediment: Sediment samples collected within OU5 were analyzed for cadmium and chromium and were screened against NYSDEC Saltwater Sediment Guidance Values. Concentrations of cadmium ranged from 0.013 to 160.0 ppm and concentrations of chromium ranged from 0.9 to

200 ppm, with the greatest concentrations detected to the north near Montauk Highway. Sediment toxicity testing and analytical tissue concentrations indicate cadmium and chromium concentrations in sediment are not adversely impacting the benthic community. Clam and crab tissue samples indicate cadmium and chromium are not substantially bioaccumulating in the organisms and found no relationship between sediment and tissue concentrations. Concentrations in tissues are similar to, or less than, reference area concentrations, and are too low to cause adverse effects or impact the food web.

Surface water: Cadmium and chromium were detected in the surface water samples collected from Willetts Creek tidal area. All detected concentrations were below the Class SC Ambient Water Quality Standards and Guidance Values.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

The potential exists for contact with contaminants in soil at one residential property. People may come in contact with site contaminants present in the shallow creek sediments while entering or exiting the creek during recreational activities.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

There are no remedial action objectives chosen for this site.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigation at the site and the evaluation presented here, the Department has selected No Action as the remedy for Operable Unit 5. The findings of the investigation of this OU indicate that the site does not pose a significant threat to human health or the environment. This remedy is effective in protecting human health and the environment and complies with the New York State standards, criteria, and guidance.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. Based upon previous investigations and operations at the site the contaminants of concern are cadmium and chromium. For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Soils, sediment, surface water, and biological samples (clam and crab tissue) have been analyzed at OU5 for cadmium and chromium concentrations, the primary contaminants of concern for this site.

Soil

Soil samples were collected from 58 residential properties adjacent to the Willetts Creek Tidal Area, for a total of 503 samples, and analyzed for cadmium, total chromium and hexavalent chromium. Samples were collected from surface soil (0 to 2 in.) and subsurface soil (deeper than 2 in.). The majority of samples collected did not contain concentrations which exceeded unrestricted use SCOs. The limited number of samples collected with concentrations that did not meet SCOs, only slightly exceeded the SCGs. The data collected is further detailed in Table 1 and shown in Figure 2.

Cadmium exceedances were limited to the floodplain on the west side of the tidal area and were not observed more than approximately 1,200 feet south of Montauk Highway. Concentrations of trivalent chromium that exceeded the residential use SCO were not spatially grouped. Hexavalent chromium was found in exceedance of the SCOs in three subsurface soil samples at 2-6 inches. Based upon the disposal history of the site and lack of significant concentration at the other OUs, hexavalent chromium was determined to not be a contaminant of concern; therefore, these samples are outliers.

Table 1 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Residential Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
Inorganics					
Cadmium	0.0072 – 8.5	2.5	11/503	2.5	11 of 503
Chromium, trivalent	0.6 – 47	30	4/503	36	2 of 503
Chromium, hexavalent	0.1 – 3.3	1	3/503	22	0/503

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Residential Use, unless otherwise noted.

The targeted depth intervals for soil sampling were within the top two feet of soil. Surface (0-2 inches) and subsurface (2-24 inches) soil samples were collected. Analytical results indicate that cadmium was detected in surface soil samples above its respective Unrestricted Use SCO of 2.5 ppm in only one sample (2.6 ppm) and chromium was detected in surface soil samples slightly above its Unrestricted Use SCO of 30 ppm in four samples (31 ppm, 33 ppm, 38 ppm and 47 ppm). These concentrations are limited in regard to number of exceedances, heterogeneity of the locations, and the minimal number of detections were only slightly greater than the SCOs. Subsurface analytical results indicate that cadmium was detected at concentrations slightly greater than the Unrestricted Use SCO of 2.5 ppm in 11 samples (maximum concentration of 8.5 ppm) and chromium was detected in only one sample at a concentration of 38 ppm, slightly greater than its Unrestricted Use SCO of 30 ppm and Restricted Use SCO of 36 ppm.

Very few soil samples contained concentrations of cadmium and chromium that exceeded SCOs for Unrestricted Use. Those that did only slightly exceeded their respective SCO and were not spatially grouped or co-located with cadmium exceedances at any residential property, indicating the concentrations may not be related to discharges from the Dzus Fastener facility. Concentrations in soils are similar to, or less than, soil cleanup objectives, and are generally covered with soil and/or sod.

The flooding potential of this operable unit is substantively different than it is for the residential properties adjacent to Willets Creek and Lake Capri, which are within a more frequent FEMA 10-year floodplain. The majority of the adjacent properties within this operable unit have been built up with bulkheads and flooding within the properties has not been identified as an issue, as was noted in Willetts Creek upstream and Lake Capri, where properties gently sloped to the water and flooding was frequent. One residential property along the Willetts Creek Tidal area was identified to levels of cadmium above the unrestricted use SCO. Additional remedial actions were offered to the homeowner by DEC and were declined. As such, no other routes of human or environmental exposure were identified and no remedial actions are required to address soil within OU5.

Surface Water

Surface water samples were collected from 10 locations within the Willetts Creek tidal area. A total of 10 surface water samples were collected. All detected concentrations were below the Class SC Ambient Water Quality Standards and Guidance values. Figure 3 and Table 2 present the surface water sampling locations and results.

Table 2 - Surface Water

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
Inorganics			
Cadmium	0.089 – 0.86	7.7	0/10
Chromium, total	1.0 – 1.7	50	0/10

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b-SCG: Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1) and 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards.

No site-related surface water contamination of concern was identified during the RI. Therefore, no remedial actions are required to address surface water at OU5.

Sediment

Sediment samples collected within the Willetts Creek Tidal area were analyzed for cadmium and chromium and were screened against NYSDEC Saltwater Sediment Guidance Values (SGVs). The SGVs identify thresholds for various contaminant concentrations in sediments that can be used as a basic screening tool to identify potential risk to aquatic life. Class A indicates the contaminant within the sediment presents little to no risk to aquatic life, Class B indicates additional information is required to determine the potential risk to aquatic life, and Class C indicates that there is a high potential for the contaminants to be toxic to aquatic life. The screening values are conservative and additional testing and screening can be completed to reclassify what initial screening has deemed Class B or Class C sediment. Figures 3 and 4 and Table 3 present the sediment sampling locations and results.

Table 3 - Sediment

Detected Constituents	Concentration Range Detected (ppm)[a]	SCG[b] Class A (ppm)	Frequency Exceeding Class A	SCG[c] Class B (ppm)	Frequency in Class B Range	SCG[d] Class C (ppm)	Frequency Exceeding Class C
Inorganics							
Cadmium	0.013 – 160.0	<1.2	274/817	1.2-9.6	189/817	>9.6	83/817
Chromium, trivalent	0.9 – 200.0	<81	31/817	81-370	31/817	>370	0/817

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in sediment;
b - SCG: Class A: The Department's Screening and Assessment of Contaminated Sediment (June 2014)
c – SCG: Class B: The Department's Screening and Assessment of Contaminated Sediments (June 2014)
d – SCG: Class C: The Department's Screening and Assessment of Contaminated Sediment (June 2014)

As part of the initial screening process, it was determined that most of the sediment in the tidal area of Willetts Creek contained concentrations below the Class A screening values for both cadmium and chromium. Sediments containing concentrations within Class B sediment screening value ranges were observed through the tidal area, in both surficial (0-6 inches) and subsurface (deeper than 6 in.) sample depths.

The maximum cadmium concentration of 160 ppm was observed approximately 155 feet (ft) south of Montauk Highway, in the center of the creek. The maximum chromium concentration of 200 ppm was observed in the 6 to 12 in. depth interval which was located approximately 1,900 ft south of Montauk Highway, near the center of the creek channel. Concentrations of cadmium in surficial sediment collected in 2019 for the ecological evaluation were generally lower than cadmium concentrations from the same locations and same depths collected during previous sampling events. It is not clear whether this reduction was due to the remedial efforts at OU3 and OU4 or if it is due to localized sediment dynamics such as tidally induced sediment deposition from cleaner sediments in Long Island Sound. Results from the sampling events in 2019 indicate that cadmium concentrations generally decrease with distance from Montauk Highway.

Toxicity testing was performed on each sample, collected from 45 locations, using the estuarine amphipod *Leptocheirus plumulosus* and it was determined that there were no impacts to survival or reproduction in any of the samples, as shown in Figure 4.

Clam and crab tissue sample analytical data indicate cadmium and chromium are not substantially bioaccumulating in the organisms and there is no relationship between sediment and tissue concentrations. A total of 15 hard shell clam (*Mercernaria mercenaria*) samples were collected over multiple sampling events. Both cadmium and chromium were detected in all samples. The concentrations of cadmium and chromium in samples collected from OU5 were slightly lower than concentrations found in the reference area clams. Concentrations in tissues are similar to, or less than, reference area concentrations, and are too low to cause adverse effects or impact the food web.

Based on the investigation, large storms were not found to result in any significant upland human health exposures. In general, bulkheads constructed along the Willetts Creek Tidal area prevent flooding of residential properties from storm events. The presence of Montauk Highway prevents sediment from being deposited upstream within Lake Capri and Willetts Creek. A culvert beneath Montauk Highway allows Willetts Creek to flow beneath highway but the small size would make sediment transport upstream unlikely. Additionally, as part of the Site Management Plan for the Dzus Fastener Site, sediment sampling within Lake Capri, adjacent to Montauk Highway, is required following large storm events to ensure sediment transport from downstream has not occurred.

Concerns related to future disturbance of sediments with minor exceedances of the SCOs by homeowner maintenance projects involving their boat slips and/or bulkheads are addressed by existing administrative controls. Repairs to bulkheads or other maintenance projects along the estuary and management of any associated dredged sediments is authorized under a permit issued pursuant Article 15, 24, 25 or 34 of the Environmental Conservation Law or a Water Quality Certification issued under section 401 of the Federal Water Pollution Control Act, typically placement behind the new bulkhead at depth. Dredged sediments which are not managed in accordance with a permit issued under the authorities listed above are a solid waste subject to regulation under 6 NYCRR Part 360 Solid Waste Management Facilities Regulations. Part 360 regulations require disposal at an authorized solid waste management facility. As an alternative to disposal in a landfill, under certain circumstances, dredged sediments can be managed in accordance with a generic or case-specific beneficial use determination (BUD). Dredged spoils which are determined to be uncontaminated, cease to be a solid waste and are unregulated when used as fill material in accordance with the generic BUD at 6 NYCRR Part 360-1.15(b)(7).

Results of the toxicity testing, and analytical tissue concentrations demonstrate cadmium and chromium concentrations in sediment did not adversely impact biota and the risk of future upland deposition of sediments with minor exceedances of the SCOs is unlikely. Therefore, no remedial actions are required to address sediment at OU5.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Dzus Fastener
Operable Unit No. 05- Willetts Creek Tidal Area
State Superfund Project
West Islip, Suffolk County New York
Site No. 152033
March 2022

The Proposed Remedial Action Plan (PRAP) for the Dzus Fastener site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 25, 2022. The PRAP outlined the remedial measure proposed for the soil, sediment, surface water, at the Dzus Fastener site, OU5 Willetts Creek Tidal area.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A virtual public meeting was held on March 16, 2022, which included a presentation of the remedial investigation SSF RI as well as a discussion of the proposed no action remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 28, 2022.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

Comments provided to DEC during the March 16, 2022 Public Meeting:

COMMENT 1: Is it Safe to eat crabs and fish caught in the Creek?

RESPONSE 1:

Based upon the toxicological studies done in the area there is little to no concern related to the Dzus Fastener site in regard to eating fish or crab collected in this area. However, it should be noted that there are several fish advisories and shellfish restrictions in place throughout the region that are unrelated to the Dzus Fastener site that should be consulted prior to doing any of these activities. These advisories and restrictions can be found on both the NYSDOH and DEC webpages:
https://www.health.ny.gov/environmental/outdoors/fish/health_advisories/regional/long_island.htm and https://www.dec.ny.gov/outdoor/345.html respectively.

COMMENT 2: Is it safe to swim in the creek – as may happen when kayaking or paddleboarding?

RESPONSE 2: The highest concentration of site-related contamination was detected in the sediments towards the northern portion of Willets Creek, south of Montauk Highway. Access to this contamination is limited, therefore, exposure to site-related contamination during swimming or boating activities are not expected.

COMMENT 3: During a storm event could sediment from OU5 be transported upriver/creek?

RESPONSE 3: It is unlikely that sediment from OU5 would be transported upriver during a storm event due to Montauk Highway acting as a natural barrier between Willets Creek/Lake Capri and Willetts Creek Tidal area. Additionally, the Site Management Plan (SMP), requires an inspection to be performed by DEC or its representative following a major storm event to evaluate the effectiveness of the remedy.

COMMENT 4: Could cadmium or chromium sediment bioavailability change during or after a storm event?

RESPONSE 4: A storm event is not expected to change bioavailability. Bioavailability controls the transfer of metals from sediments to ecological receptors and it is affected by metal geochemistry in sediments as well as the biochemistry, physiology, and behavior of benthic organisms. DEC's ecological evaluation supports the conclusion that the site samples are not statistically different from reference and toxicity results do not correlate with cadmium or chromium concentrations in the sediment. A storm event would not change this conclusion.

Additionally, there are several provisions in place to protect human health and the environment during site management from operable unit one where the Dzus factory was formerly located down through Willets Creek and Lake Capri to the estuary, including required inspections following any major storm event and the restrictions mentioned regarding fish and shellfish in the area (see response 2 and response 3). Also, a GIS layer was created for the estuary to assist identification of the possible disturbance of sediments during bulkhead installations or repairs.

<u>Gordon Cannery, Chief of Staff of Senator Boyle's office submitted written comments on March 17, 2022, which included the following comments:</u>

COMMENT 5: At the homeowner's property where concentrations of cadmium and chromium were detected in excess of acceptable levels, and where the homeowner declined to have those soils removed, did the DEC's consultant take any indoor samples, air, or interior swabbing at the house to ascertain if contamination had made its way into the house?

RESPONSE 5: Indoor samples were not collected. Surface soil (0-2") impacts were limited and achieved soil cleanup objectives appropriate to the use of the property as single family housing. While concentrations increased at depth under the lawn, exposure potential is limited. The property owner has been provided maps of the sample locations and associated analytical data.

COMMENT 6: Will the NYSDEC be periodically testing the bottom of Lake Capri in the future, to determine if any cadmium and chromium hotspots redevelop at levels that exceed the acceptable limits? If such samples are discovered, would that trigger additional testing of OU5 areas to determine if the contaminants had made their way into the Willets Creek basin?

RESPONSE 6: There are currently no plans to include periodic testing of Lake Capri. As part of the SMP, inspections are required following major storm events at the site to ensure that engineering controls remain in place and are protective of the remedy.

COMMENT 7: It was written on one of your power-point slides that future controls would be in place through the dredging and dock permit application process. Please provide further details on how exactly those controls would help to control the exposure of cadmium and chromium in the creek sediments and in soils behind the properties adjacent to the Willets Creek basin / canal. As you know, often with a complete replacement of bulkhead, it is necessary to dredge bottom sediment and sometime cut back the soils behind the bulkhead staving to replace it. All those actions have the potential to disturb locations where cadmium and chromium may exist in OU5.

RESPONSE 7: In order to perform bulkhead maintenance activities as described above, property owners would need to secure a permit from NYSDEC Region 1 in compliance with 6NYCRR 608 and Article 15 Title 5 and Article 25 under the Environmental Conservation Law. During review of the permit application, NYSDEC Region 1 will review internal GIS files which note areas of residual sediment contamination. Permit conditions that ensure the sediments are handled in accordance with applicable regulations may be applicable.

<u>Written Comment provided to the Department on March 11, 2022 by Gina Petraglia:</u>

COMMENT 8: Along the walk path that connects Everdell Avenue to Beach Street Middle school, there are retention stones for the spillway that have been displaced and are now blocking the flow of water into the creek and beneath the bridge. This water flow was an important part of this project. Can this be addressed at the public meeting on March 16, 2022?

RESPONSE 8: The subject of the meeting on March 16, 2022 pertained to the subject of OU5-Willetts Creek Tidal Area. This concern is noted and during the next site management inspection these stones will be evaluated against the long-term effectiveness of the remedy. General maintenance is the responsibility of the property owner.

Written Comments provided by the Suffolk County Health Department on March 28, 2022:

COMMENT 9: Given the dynamic nature of a tidal creek, a storm event/surge could re-suspend those sediments and potentially lead to future deposition on non-bulkheaded properties. In addition, the re-suspended sediments could be transported during a storm surge to Lake Capri through the culvert under Montauk Highway. Such movement of contaminated sediments might lead to potential future exposures not considered in the PRAP.

RESPONSE 9: Numerous coastal storms have hit this region of Long Island over the last several decades. As evidenced by floodplain sampling conducted during the RI, including from non-bulk headed properties, widespread mobilization and deposition of impacted material onto the floodplain has not occurred, suggesting that resuspension and transport of impacted sediments is of limited concern within the tidal portion of Willetts Creek.

COMMENT 10: Would a storm event change the bioavailability of cadmium and chromium in sediment?

RESPONSE 10: See response 4.

COMMENT 11: Since the homeowner declined additional remedial actions, residential soils should be considered a current exposure pathway. It is unclear how future property owners will be made aware that soils are contaminated and that NYSDEC will provide remedial actions upon request. Will institutional controls, such as a covenant, be put in place?

RESPONSE 11: DEC does not typically put institutional controls on residential properties. Future homeowners have the ability to request data pertaining to their property from DEC and if additional actions are warranted they will be addressed under site management.

COMMENT 12: Clam, but not crab, tissue was collected from a reference location for comparison to the samples collected in the tidal portion of Willets Creek. The reference for determining that the concentrations of cadmium and chromium were low in crab tissue (whole body and muscle) collected from the tidal portion of Willets Creek should be provided.

RESPONSE 12: During the remedial investigation for OU4, crab samples were collected from Willetts Creek tidal area. Since the blue crabs are highly mobile/migratory and have less direct contact with sediments compared to the hard-shell clams, the focus of the OU5 investigation were on the hard-shell clams. Additional information is provided in the ecotoxicity report, which can be found on the DECinfo locator (https://www.dec.ny.gov/data/DecDocs/152033/).

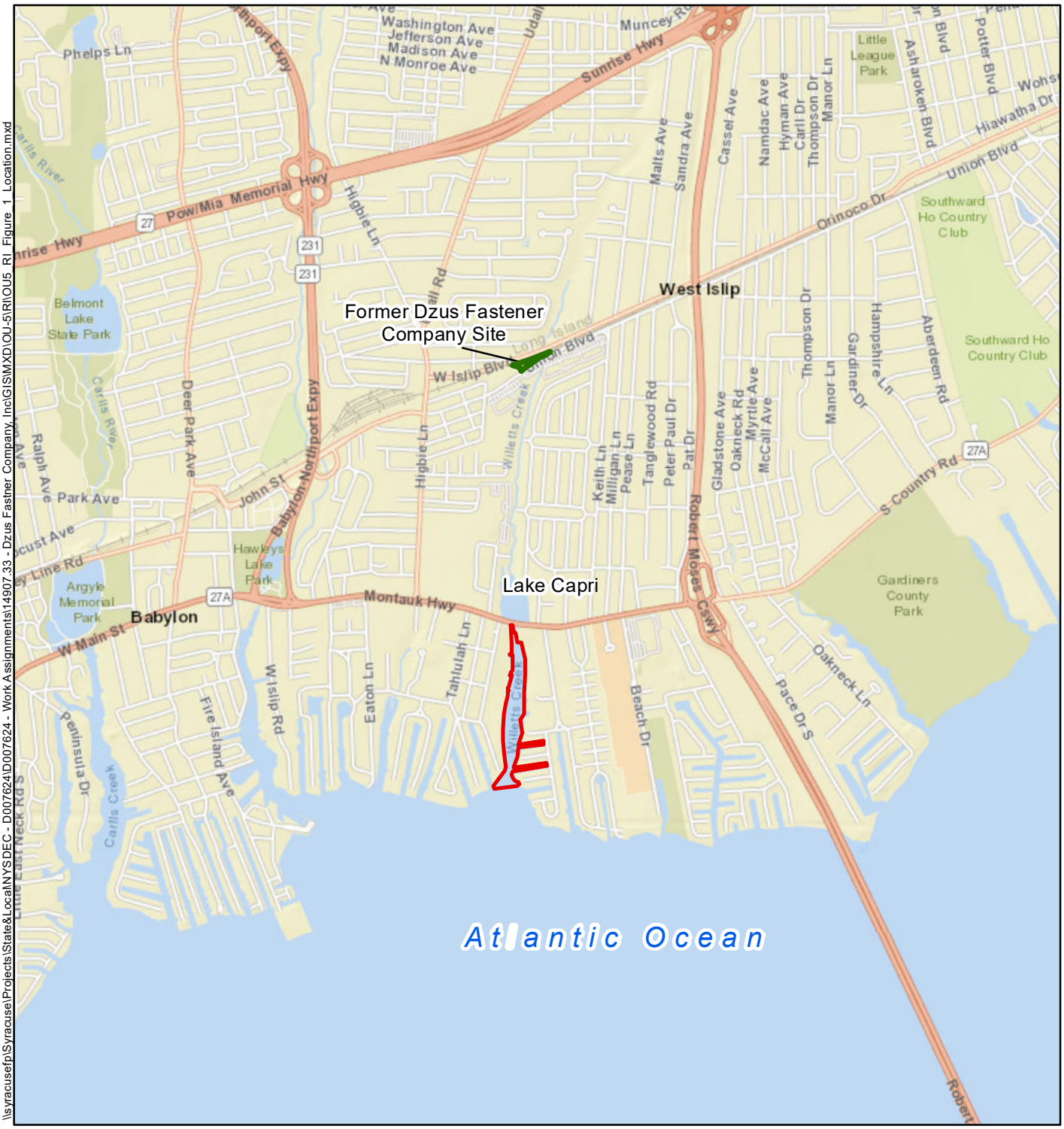
APPENDIX B

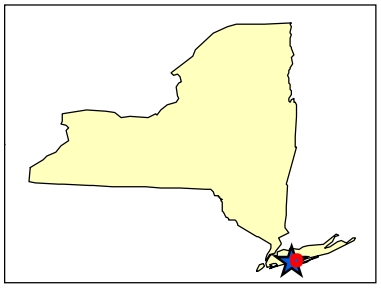
Administrative Record

Administrative Record

Dzus Fastener Co., Inc.
State Superfund Project
Town of West Islip, Suffolk County
Site No. 152033
March 2022

1. Proposed Remedial Action Plan- Dzus Fastener Site, Operable Unit No. 5- Willetts Creek Tidal Area, March 2022, prepared by the Department.
2. Remedial Investigation Report- Operable Unit No. 5- Dzus Fastener, March 2022, EA Engineering, P.C.
3. Interim Site Management Plan- Dzus Fastener Company, March 2021, EA Engineering, P.C.
4. Remedial Investigation Work Plan Addendum- Operable Unit 5- Dzus Fastener, August 2019, EA Engineering, P.C.
5. Remedial Investigation Work Plan- Operable Unit 5 - Dzus Fastener, April 2019, EA Engineering, P.C.
6. Willets Creek Tidal Area Sediment Sampling Work Plan- Dzus Fastener, May 2018, EA Engineering, P.C.
7. Referral Memorandum dated November 1, 2019 for Dzus Operable Unit 5- Willetts Creek Tidal Area remedial investigation and feasibility study be conducted under state superfund monies.





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1 inch = 0.5 miles

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Dzus Fastener Company, Inc. Property Boundary

Approximate OU Boundary

Operable Unit 5

Figure 1
General Site Location
Dzus Fastener Company, Inc.
Remedial Investigation Report
Operable Unit 5 - Willetts Creek Tidal
West Islip, NY

Map Date: 2/17/2020
Projection: NAD83 State Plane New York Long Island

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

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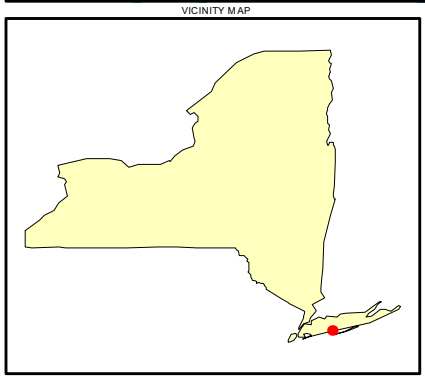

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- Approximate Tax Parcel Boundary
- 100-yr Floodplain
- Soil Sampling Locations

Figure 2
Floodplain Soil Sampling Locations
Dzus Fastener Company, Inc.
Remedial Investigation Report
Operable Unit 5 - Willetts Creek Tidal
West Islip, NY

Map Date: 4/21/2020
Projection: NAD83 State Plane New York Long Island

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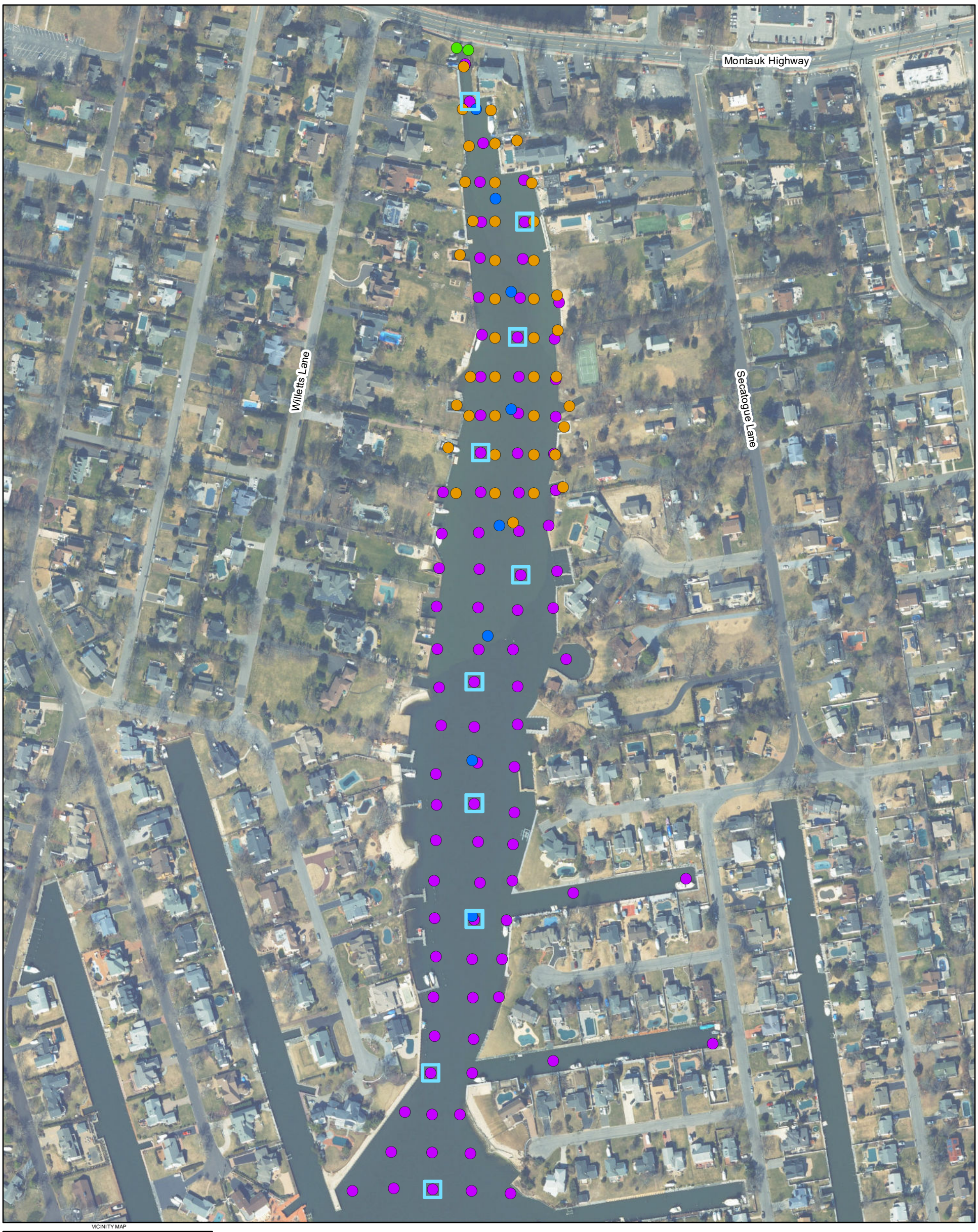

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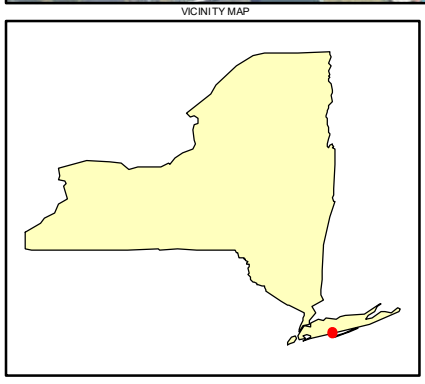

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Surface Water Sampling Locations (2019)

Sediment Sampling Locations

- 2016 Samples
- 2017 Samples
- 2018 Samples
- 2019 Samples

Figure 3
Sediment Core and Surface Water Sampling Locations
Dzus Fastener Company, Inc.
Remedial Investigation Report
Operable Unit 5 - Willetts Creek Tidal
West Islip, NY

Map Date: 2/17/2020
Projection: NAD83 State Plane New York Long Island

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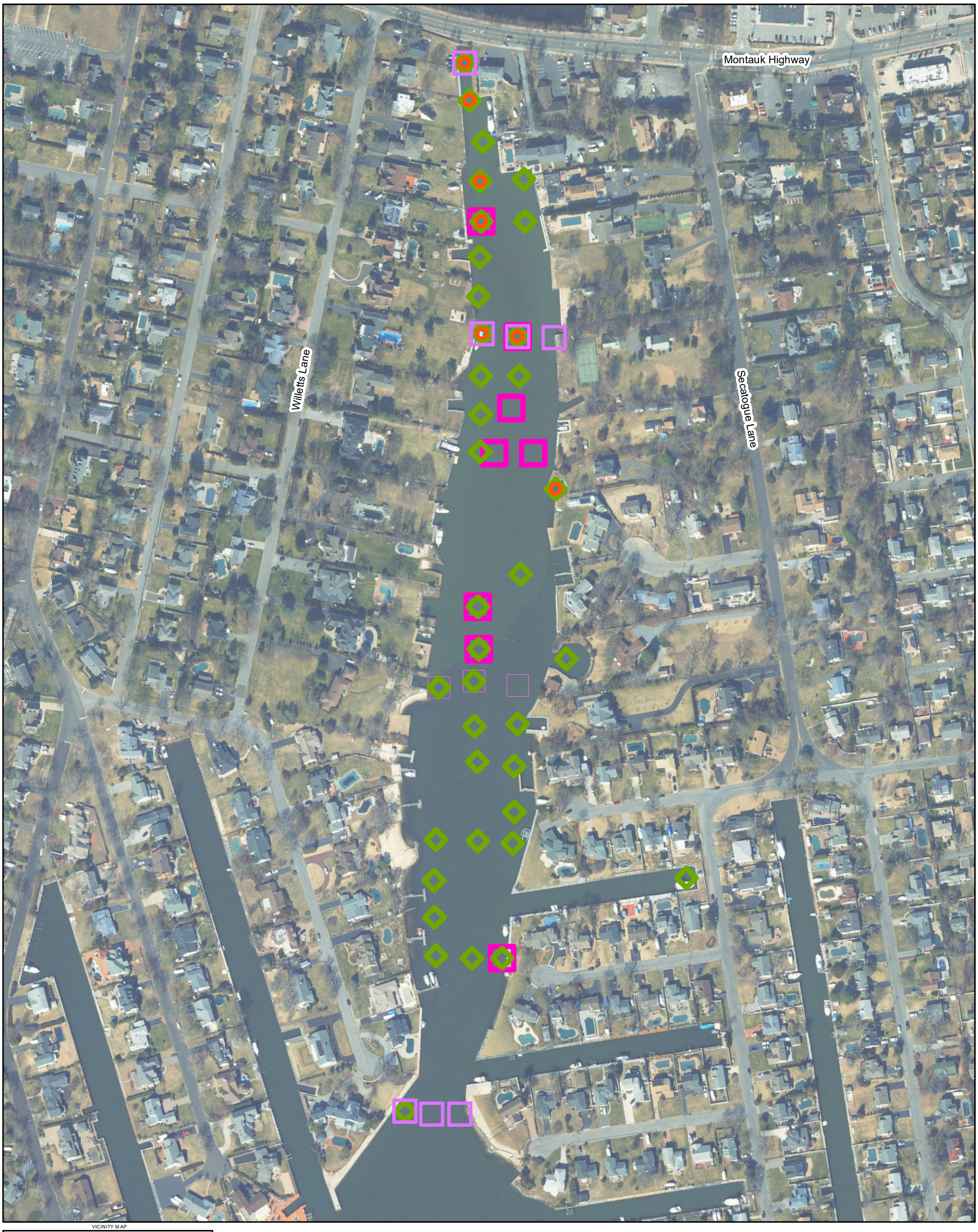

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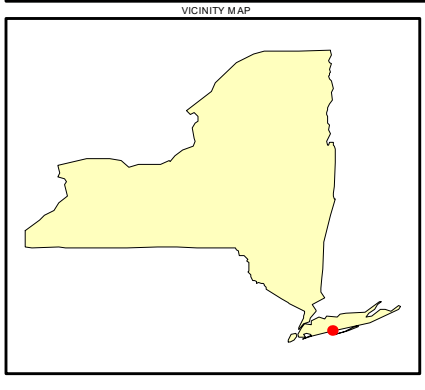

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- TCLP Sample Location (2019)
- Eco-risk Sample Location (2019)
- Geotechnical Sampling Location (2019)
- Clam Tissue Sampling Location (2019)

Figure 4
TCLP, Geotechnical and Eco-risk Sampling Locations
Dzus Fastener Company, Inc.
Remedial Investigation Report
Operable Unit 5 - Willetts Creek Tidal
West Islip, NY

Map Date: 4/28/2020
Projection: NAD83 State Plane New York Long Island

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