PROPOSED REMEDIAL ACTION PLAN

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



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

PROPOSED REMEDIAL ACTION PLAN

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

SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing 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 remedy proposed by this Proposed Remedial Action Plan (PRAP) 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 Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

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

A public comment period has been set from:

2/25/2022 to 3/28/2022

A public meeting is scheduled for the following date: 3/16/2022 at 7:00 PM

At the meeting, the findings of the remedial investigation (RI) will be presented along with a summary of the proposed remedy. If interested in attending the virtual public meeting click the link: https://bit.ly/NYSDECMar22

Or join by phone: (443)-342-4948 Conference ID 206 378 863#

After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through 3/28/2022 to:

Brianna Scharf
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
brianna.scharf@dec.ny.gov

The Department may modify the proposed remedy presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

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 Railroad 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 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. A Record of Decision will be issued for OU 06 in the future.

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 SCGs 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 have 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 is/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 OU5 of 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 Operable Unit 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 for OU1, OU2, OU3, and OU4 is complete. Residual contamination in the soil, groundwater, and sediment is being managed under an interim Site Management Plan. The below information is for OU5. This PRAP is specific to 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. Therefore, there is 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. Therefore, the concentrations identified in sediments present a low risk to aquatic life.

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 PROPOSED REMEDY

Based on the results of the investigation at the site and the evaluation presented here, the Department is proposing No Action as the remedy for the site Operable Unit 5. The findings of the investigation of this Operable Unit indicate that the Operable Unit area 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, if applicable, 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 have 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

able 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.

Sediments

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° 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;

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

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)

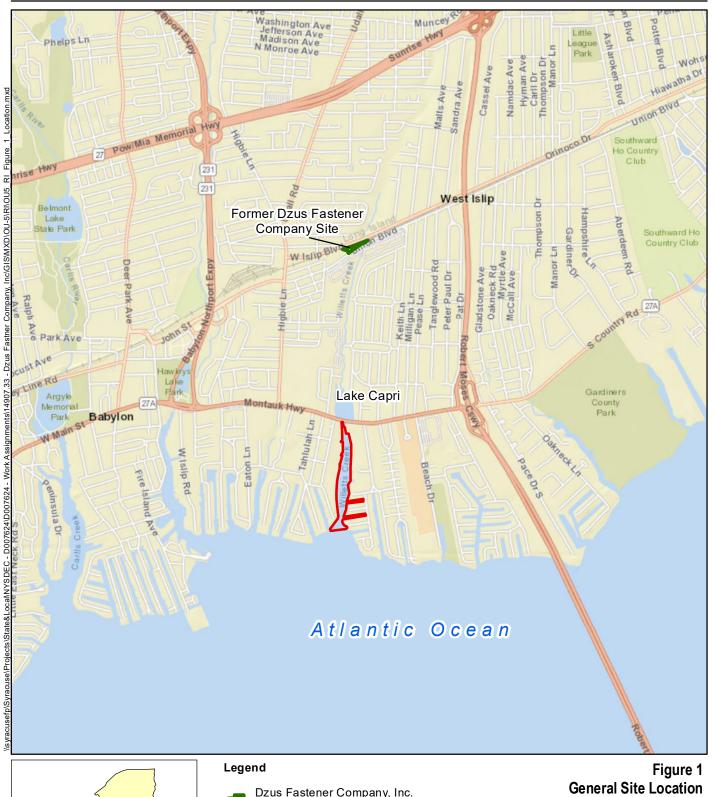
the samples, as shown in Figure 4. Results allowed sediments originally classified as Class B or Class C SGVs to be reclassed as Class A – no risk to aquatic life.

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 are not adversely impacting the benthic community 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.



0 0.25 0.5 1 Miles 1 inch = 0.5 miles

Dzus Fastener Company, Inc.
Property Boundary

Approximate OU Boundary

C Operable Unit 5

Dzus Fastener Company, Inc. Remedial Investigation Report Operable Unit 5 - Willetts Creek Tidal

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





West Islip, NY



500 250 Feet

Approximate Tax Parcel Boundary

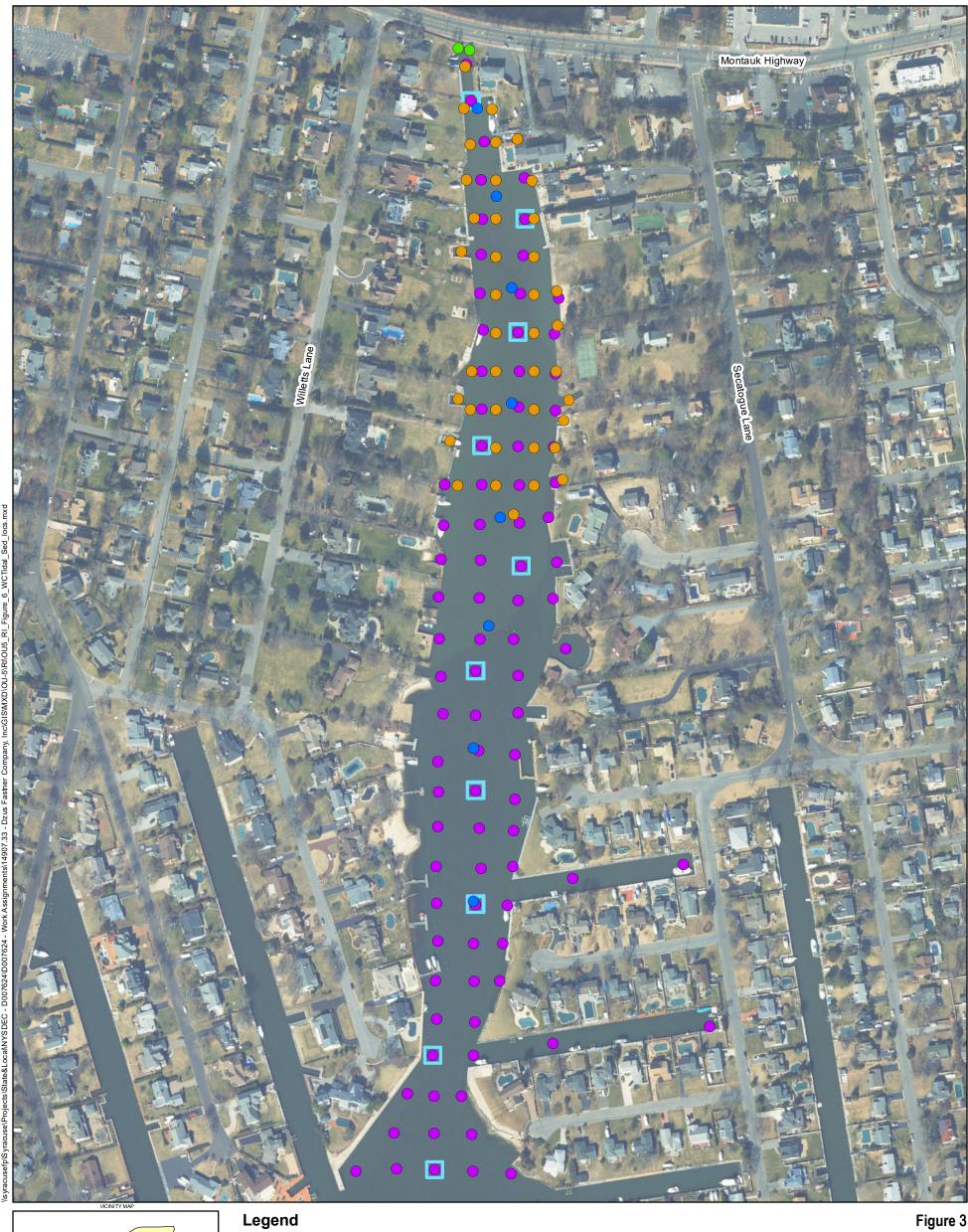
100-yr Floodplain

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





500 250 Feet

Surface Water Sampling Locations (2019)

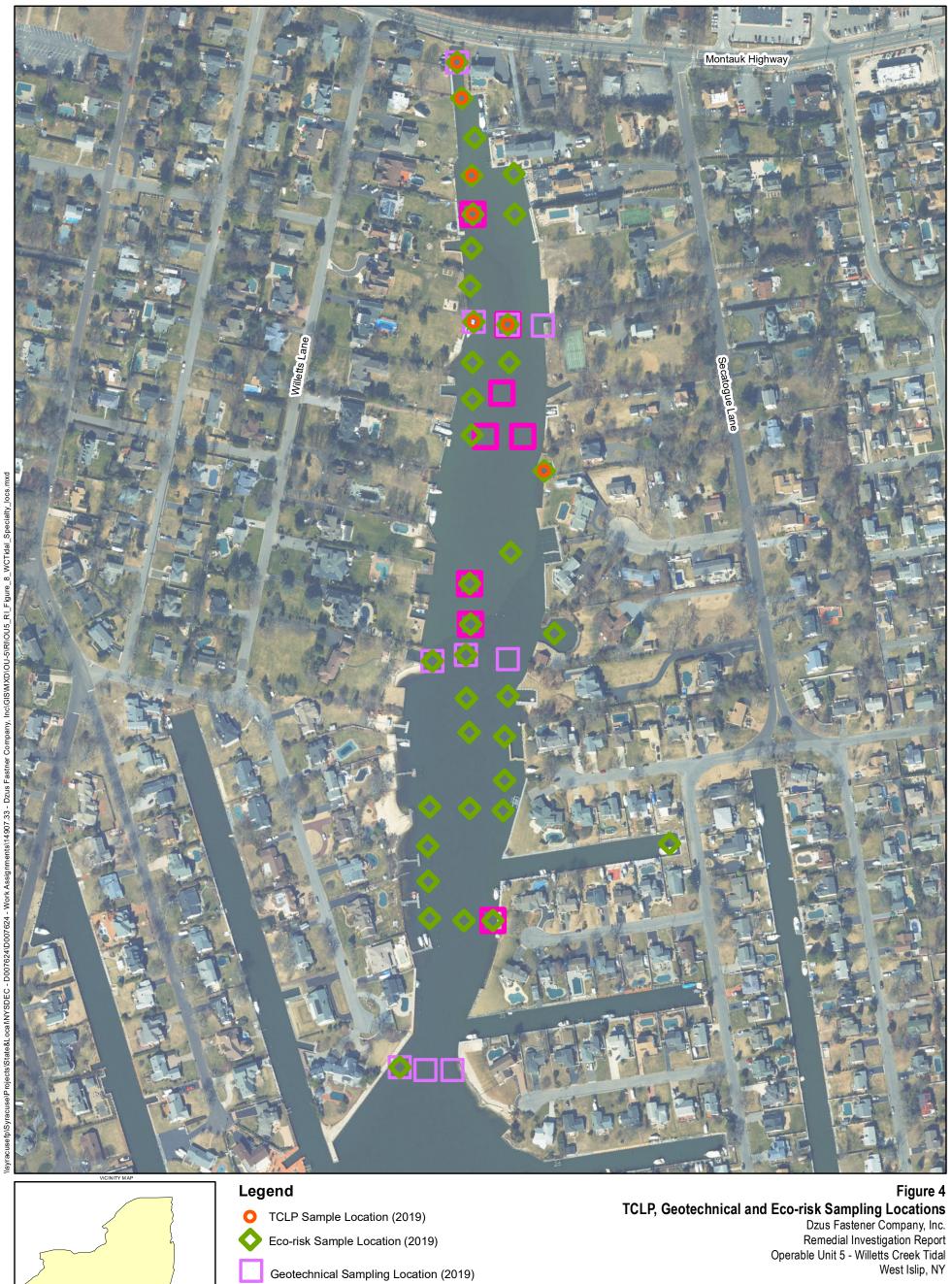
Sediment Sampling Locations

- 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





500 250 Feet

O TCLP Sample Location (2019)

Eco-risk Sample Location (2019)

Geotechnical Sampling Location (2019)

Clam Tissue Sampling Location (2019)

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

