



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5



516246

**MEMORANDUM**

REPLY TO THE ATTENTION OF:

**SUBJECT:** Request for Approval and Funding for a Time-Critical Removal Action at the Crest Rubber Ravenna Site, Ravenna, Portage County, Ohio (Site ID # C5EF)

**FROM:** Eric Pohl, On-Scene Coordinator  
Emergency Response Section 1

Jeffrey Kimble, On-Scene Coordinator  
Emergency Response Section 2

**THRU:** Jason H. El-Zein, Chief  
Emergency Response Branch 1

**TO:** Margaret M. Guerriero, Acting Director  
Superfund Division

**I. PURPOSE**

This Action Memorandum is to document the determination of an imminent and substantial threat to human health and the environment posed by the presence, release, and threatened release of uncontrolled hazardous substances, and to request and document your approval to expend up to \$960,225 to conduct a time-critical removal action at the Crest Rubber Ravenna Site (Site) located at 645 South Chestnut Street, Ravenna, Ohio 44266. The proposed time-critical removal action will mitigate the threats from drums, boxes, sacks, small containers, tanks, and cylinders found to contain hazardous substances and pollutants and contaminants, by securing, sampling, and arranging for off-site disposal.

The response actions proposed herein are necessary in order to mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Site, which is located in a mixed use industrial and residential area. The U.S. Environmental Protection Agency (EPA) and the Ohio Environmental Protection Agency (Ohio EPA) documented the presence of hazardous substances at the Site, as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601(14).

The time-critical removal action proposed herein is to prepare site plans, including a Work Plan, site-specific Health and Safety Plan (HASP), and Emergency Contingency Plan; establish site security and safety, inventory and perform hazard characterization on substances contained in

boxes, drums, sacks, tanks, cylinders, and other containers; perform sampling and analysis; and transport and dispose off-site any hazardous substances, pollutants and contaminants at a CERCLA-approved disposal facility in accordance with EPA's Off-Site Rule, 40 Code of Federal Regulations (C.F.R.) § 300.440.

This Action Memorandum serves as approval for expenditures by EPA, as the lead technical agency, to take actions described herein to abate the imminent and substantial threat posed by hazardous substances and pollutants and contaminants at the Site. The proposed removal of hazardous substances would be taken pursuant to Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415, to abate or eliminate the immediate threats posed to the environment by the presence of the hazardous substances, pollutants, and/or contaminants.

The uncontrolled conditions of the hazardous substances, pollutants, and/or contaminants present at the Site require that this action be classified as a time-critical removal action. The work will require approximately 60 on-site working days to complete.

There are no nationally significant or precedent setting issues associated with the proposed response at this non-National Priorities List (NPL) Site.

## **II. SITE CONDITIONS AND BACKGROUND**

Superfund Site ID (SSID):	C5EF
CERCLIS Number:	OHN000507849
RCRA ID:	OHD041633512
Site Address:	645 South Chestnut Street, Ravenna, Ohio 44266
Lat/Long:	41.150505, -81.243217
NPL Status:	Non NPL
Category:	CERCLA Time-Critical Removal

### **A. Site Description**

The Crest Rubber Company historically utilized buildings located on a Ravenna, Ohio, property for receiving, storage, and warehousing. The property, which is approximately 3.35 acres in size, was acquired by C. F. Capital Investment, Ltd (C. F. Capital Investment) on May 28, 2004. On July 27, 2015, both C. F. Capital Investment and Crest Rubber Company entered receivership (AR # 5). A joint EPA & Ohio EPA limited site assessment in April 2017, described below, confirmed hazardous waste in containers of various size on the site (AR # 7, 8, 9, 10, 11).

On April 13, 2017, EPA and Ohio EPA jointly conducted a limited Site Assessment. Signed access agreements were obtained from a person with power-of-attorney for the deceased property owner's estate, to conduct the site assessment and any necessary removal actions. Site Assessment activities included a site reconnaissance, container evaluation, drum and container sampling, and photographic and written documentation of Site features.

The purpose of the Site Assessment was to identify and quantify containers that may be a potential threat to the public health and welfare or the environment. During the assessment activities, the Site was non-operational and vacant. There were limited physical security mechanisms in place -- security devices consisted primarily of a single lock on the entrance door, and chain fencing around the property perimeter and single padlocks at gates. There was no observed cautionary signage indicating the presence of hazardous substances or waste, security guard, electronic monitoring or surveillance, or deterrents to trespassing or ingress.

Visual observation of the Northern and Southern Buildings by the EPA confirmed that the buildings contained numerous open and closed drums, buckets, totes, sacks, and other containers with no secondary containment. Some containers showed signs of corrosion and deterioration. There was evidence of containers which had released contents to the ground or which were open to the ambient air. Although some containers were labeled or identified with Hazardous Materials Identification System (HMIS) information, labelling was generally in poor condition, illegible, or there was cause to suspect the accuracy of the labels since they did not appear to have been applied by the source of the material.

For many of the containers, it was not possible to determine if a container's contents matched information provided by labelling on the drum. In many interior areas of the buildings, containers were not stored safely. Labels on some drums and containers indicated that incompatible materials were placed in close proximity to one another. Containers did not appear to be stored appropriately, including containers that were not identified and segregated per hazardous properties, and in unsafe locations such as elevated on racks or platforms.

The large size of the property and lack of continuous security can allow trespassers to gain access to the building interiors. The site buildings appeared to be structurally sound, but no maintenance or upkeep is being performed. EPA did not determine if weather such as wind, rain, snow, and cold or warm temperatures impacts the buildings or its contents. It is unknown if there are structural deficits such as leaking roofs, which could expose materials to weather or the elements. The Site topography is relatively flat and level.

EPA was unable to obtain an accurate inventory during the assessment due to the large area where hazardous substances were stored, the large number of containers, and the presence of a large quantity of non-hazardous materials and debris making access more difficult in the buildings. The quantity of materials observed were generally consistent with those reported by Ohio EPA in their November 9, 2016, letter to EPA.

Portions of the buildings had previously been used as a "flea market." There are various types of non-hazardous materials and goods on each floor, and it is presumed that a previous owner or operator of the Site accumulated and stored these goods throughout each floor of the Northern building. Examples of some of the products observed included clothing, toys, motorcycle parts and chassis, and others which are comprised of combustible materials or contribute to the combustibility of materials which could include the threat of fire and increase the overall fire burden of the Site (Attachment 5: Photo Log, Photo # 2). EPA observed rubber and latex products which are also combustible.

EPA and Ohio EPA obtained seven samples from containers located on the Site to determine if hazardous substances were present in the buildings. Ohio EPA consolidated samples, and arranged for shipping and analytical services. The sample identification numbers and descriptions are as follows:

- CRC-01: Liquid sample from a 30-gallon metal drum in the Southern building. Sampled drum was in good condition with material information identified as "Vulkanol 85." Sampled material was a transparent, slightly viscous liquid.
- CRC-02: Solid sample from a sealed 5-gallon plastic container with tight-fitting bung cap in the Southern building. Labeling on the container provided shipping information, but did not detail contents of container.
- CRC-03: Solid sample from an approximately 5-gallon fiber container in the Southern building. There was no apparent leaking or spillage from this container, but the exterior appears stained in places with possible exterior contamination or impact due to contact with other materials or substances. Container labelling indicated that contents were "Ethyl Cadmate Rodform."
- CRC-04: Solid with a sludge-like consistency from a 5-gallon metal container in the Northern building found on the floor without any special precautions or protective measures taken or in place, and near cloth-like materials which could be combustible. Labelling on the drum specified, "Danger", with a flammable emblem affixed to the lid of the container.
- CRC-05: Liquid sample from a 1-gallon metal can in the Northern building. This container was found in a side room, constructed of wood and standard construction materials with other containers indicative of painting and paint related products, such as thinners, as well as other drums and containers with unknown materials, without labelling, or with inappropriate or inadequate labelling. The sample taken was a clear non-viscous liquid from a can labeled as "lacquer thinner."
- CRC-06: Liquid sample from a 5-gallon plastic container in the Northern building. The sample was a non-viscous amber colored liquid, and EPA did not document any labelling or precautionary markings affixed to the container at the time of the sampling.
- CRC-07: Liquid sample from a 55-gallon plastic drum in the Northern building. The drum was unlabeled and had an open bung which allowed the material to vent to the ambient atmosphere. Field screening with pH paper indicated that the liquid sampled, a non-viscous and deep yellow substance, exhibited a high pH consistent with a caustic or corrosive aqueous solution.

Based on the results of field tests and observations, the samples were analyzed using EPA SW-846 methods for a combination of the following parameters: toxicity characteristic leaching procedure (TCLP) Method 1311 was performed on samples CRC-01, 02, 03, 04, and 06. Flashpoint/ignitability testing using Method 1010 or 1030 for Samples CRC-02, 04, 05, and 06. Sample CRC-02 was further analyzed for volatile organic compounds (VOCs) using Method 8260. Sample CRC-03 was analyzed for eight metals using Methods 6010 and 7470. Sample CRC-07 was analyzed for corrosivity using Method 9040. The sample analysis report was provided by Ohio EPA (AR # 7, 8, 9, 10).

## **Flashpoint/Ignitability Results**

The flashpoint of samples CRC-04, CRC-05, CRC-06 met the regulatory level for classification as a hazardous substance for the characteristic of ignitability (D001) according to 40 C.F.R. § 261.21. The burn rate from sample CRC-04 was 3.87 mm/sec, exceeding the regulatory level of greater than 2.2 mm/sec. CRC-05 and CRC-06 had ignitability temperatures of 5 degrees Celsius (°C), and 24 °C respectively. Both of these are below the ignitability criteria of 60 °C (or 140 °F).

## **Corrosivity Results**

The pH of sample CRC-07 was measured at 12.9 standard units. The analytical results are greater than a pH of 12.5 standard units, which is the regulatory criteria to classify a hazardous substance as characteristic for corrosivity (D002) per 40 C.F.R. § 261.22.

## **Metals Results**

Analysis of sample CRC-03 identified Cadmium, a hazardous substance, in the amount of 1.23 milligrams per liter (mg/L), which exceeds the regulatory level of 1.0 mg/L for a substance containing cadmium to be classified as a D006 hazardous waste as defined by 40 C.F.R. § 261.22.

## **VOC Results**

Tetrachloroethene (tetrachloroethylene, perchloroethylene, PERC) was measured at 1,260 milligrams per liter (mg/L) in sample CRC-02. The analytical result for tetrachloroethene is above the toxicity characteristic defined in 40 C.F.R. § 261.24 value of 0.7 mg/L, meeting and exceeding the threshold value for a substance to be considered a (D039) hazardous waste. Trichloroethene (trichloroethylene, TCE) was also detected in sample CRC-02 at 7.39 mg/L. This value meets and exceeds the regulatory level of 0.5 milligrams per liter (mg/L) for a substance to be considered a (D040) hazardous waste as defined by 40 C.F.R. § 261.24.

EPA initiated a removal action at the Crest Rubber Alliance Site (Alliance Site), Alliance, Stark County, Ohio, in May 2017. An Action Memorandum for Alliance Site removal, CERCLIS ID: OHN000507025, was signed on March 30, 2017 (AR # 6)

Based on a conversation with a former employee of the Crest Rubber Company at the time of the limited Site Assessment in Ravenna, Ohio, EPA believes that there is a high potential for similarities in the types of hazardous substances and materials at the Crest Rubber Ravenna Site as there are at the Crest Rubber Alliance Site. As of July 2017, during the Alliance Site Removal in progress, the following interim hazardous waste streams were identified: D001 ignitable solids, ignitable liquids, and ignitable gases; D002 corrosive liquids; D008 lead substances; and U201 Resorcinol. The complete inventory and classification of substances and waste streams present at the Alliance Site will not be known until completion of the removal action. During the Alliance Site removal, the OSC confirmed that a sample of rubber material present on site exhibited characteristics consistent with a combustible solid.

## **1. Physical Location**

The Site is located in a mixed use industrial and residential area located at 645 South Chestnut Street in Ravenna, Portage County, Ohio 44266 (Attachment 4) and is adjacent to residential structures. The geographical coordinates for the site are 41.150505, -81.243217.

There are four parks located within 1-mile of the Site: Diamond Park, Crystal Lake Park, Collins Pond, and Havre's Woods Park. There are also numerous small businesses and houses of worship in the 1-mile radius extending from the Site, as well as two libraries and city and county administrative offices. A railroad line runs adjacent to the Site.

EPA conducted an Environmental Justice (EJ) analysis for the Site (see Attachment 2). Screening of the surrounding area used Region 5's EJ Screen Tool. Region 5 has reviewed environmental and demographic data for the area surrounding the Site and has determined there is high potential for EJ concerns at this location.

## **2. Site Characteristics**

C. F. Capital Investment is in receivership. The Receiver moved to abandon the Site in November 2015 and the Portage County Court of Common Pleas authorized the abandonment of the property in December 2015 (AR # 5). There are multiple buildings on the Site. Many containers of chemicals and rubber processing materials exist on the Site.

## **3. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant**

A release or threat of release of hazardous substances, pollutants, and/or contaminants is present at the Site. EPA confirmed the presence of hazardous substances as defined by Section 101(14) of CERCLA including trichloroethylene, tetrachloroethylene, and characteristic hazardous waste including ignitable and corrosive waste; and pollutants and contaminants as defined by Section 101(33) of CERCLA.

Ohio EPA reported over 250 containers, although a full and complete inventory of the Site contents will not be known until after the initiation of the removal action, and EPA catalogs quantities and materials (AR # 5). This is because containers suspected to contain hazardous substances were stored throughout the Site buildings and covered a large floor area and limited the ability to completely or accurately document all the containers without input of significant additional resources unavailable during the Site Assessment.

An additional impediment to obtaining a full pre-removal inventory was that many containers were either obscured or obstructed by other containers or non-hazardous materials, or physically inaccessible. The Site Assessment selected a limited number of containers to sample based on visual observation of container labelling or a suspicion of a container housing a hazardous substance. The Site Assessment confirmed that there are hazardous substances and waste

materials located on the Site. Some of the drums and other containers on Site were in poor condition, leaking, or open.

Exposure could occur from dermal contact with material in drums and containers, or from leaking and spillage of hazardous substances onto the floor or other surfaces; incidental ingestion of material following dermal contact; inhalation of volatile materials in open containers; inhalation via fugitive dust generation; and inhalation of unknown and/or toxic vapors, or emissions released into the air via fire produced from ignitable materials or from reactions produced by incompatible materials located in close proximity.

Potential human receptors include nearby residents, trespassers, emergency response workers, and future site workers. Residential properties are adjacent to the Site, and approximately 15 feet to the north and 120 feet to the west.

#### **4. NPL status**

The Site is not on the NPL and is not expected to be scored for the NPL.

#### **5. Maps, pictures and other graphic representations**

Attachment 4: Site Location Map

Attachment 5: Photo Log

### **B. Other Actions to Date**

#### **1. Previous actions**

There have been no previous response actions at the Site. This Action Memorandum documents previous investigatory actions in the Background section.

#### **2. Current actions**

No current actions are being taken at the Site. The Site is not currently occupied.

### **C. State and Local Authorities' Roles**

#### **1. State and local actions to date**

On October 25, 2016, the Ohio EPA conducted a hazardous waste inspection at the Site (AR # 4, 5). On November 2, 2016, the Ohio EPA sent a Notice of Violation (NOV) letter to the Crest Rubber Company and C.F. Capital. The NOV stated that Crest Rubber Company and C.F. Capital were not in compliance with Ohio Revised Code (ORC) Rule 3745-52-11 regarding the requirement for a waste generator to determine if that waste is a hazardous waste (AR # 4).

On November 9, 2016, Ohio EPA requested assistance from EPA to perform a time-critical removal action at the Site (AR # 5). On April 13, 2017, Ohio EPA and EPA conducted a joint inspection and site assessment of the Site.

On May 15, 2017, Ohio EPA sent a NOV to Crest Rubber Company and C.F. Capital. The NOV specified violations of ORC § 3734.02(E) and (F) regarding waste accumulation beyond 180 days and Ohio Administrative Code (OAC) Rule 3745-52-11 regarding the requirement for a waste generator to determine if that waste is a hazardous waste (AR # 11).

On July 27, 2017, OEPA provided EPA a copy of a response letter to their May 2017 NOV correspondence. The response stated that “there is no person in control of [the Crest Rubber Company and C.F. Capital Company] businesses...” (AR # 12). The State of Ohio has not been successful to compel any PRP to take corrective action or perform a cleanup at the site.

## **2. Potential for continued State/local response**

The Ohio EPA and Local governments do not have the resources to mitigate the threat of a release. Due to the continued non-action by the property owner, Ohio EPA requested EPA assistance on November 9, 2016 (AR # 5).

## **III. THREATS TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

Existing conditions at the Site present a substantial threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the National Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2). These criteria include, but are not limited to, the following:

### **300.415(b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.**

Hazardous substances, pollutants, and contaminants are present in drums, buckets, totes, sacks, and other containers. Hazardous substances represent an actual or potential exposure threat to nearby human populations.

Possible exposure routes for hazardous substances include dermal contact with material in drums and containers, or from leaking and spillage of hazardous substances onto the floor or other surfaces; incidental ingestion of material following dermal contact; inhalation of volatile materials in open containers; inhalation via fugitive dust generation; and inhalation of unknown and/or toxic vapors, or emissions, released into the air via fire produced from ignitable materials or from reactions produced by incompatible materials located in close proximity.

Potential human receptors include trespassers, emergency response workers, and nearby residents. Residential properties are located adjacent to the Site. Evidence of trespass was observed at the Site.

Labeled materials included caustics, volatile organics, and reactive compounds. Incompatible materials are located in close proximity in some portions of the Site. Additionally, there are



numerous unknown materials suspected to contain hazardous substances. Analytical results from the Site Assessment indicate that hazardous substances, as defined by CERCLA § 101(14), and pollutants and contaminants, are present at the Site and represent an actual or potential exposure threat to nearby human populations. These included ignitable and corrosive materials, TCE, PCE and cadmium. Information on toxicological effects of these hazardous substances, pollutants, and contaminants is listed below and referenced in the Administrative Record (Attachment 1).

#### **Trichloroethylene:**

Exposure to moderate amounts of trichloroethylene may cause headaches, dizziness, and sleepiness; large amounts may cause coma and even death. Eating or breathing high levels of trichloroethylene may damage some of the nerves in the face. Exposure to high levels can also result in changes in the rhythm of the heartbeat, liver damage, and evidence of kidney damage.

There is strong evidence that trichloroethylene can cause kidney cancer in people and some evidence for trichloroethylene-induced liver cancer and malignant lymphoma. The National Toxicology Program (NTP) has determined that trichloroethylene is a "known human carcinogen". EPA and the International Agency for Research on Cancer (IARC) have determined that trichloroethylene is "carcinogenic to humans" (AR # 3).

#### **Tetrachloroethylene:**

High concentrations of tetrachloroethylene can cause dizziness, headaches, sleepiness, confusion, nausea, impaired motor function, and death. The United States Department of Health and Human Services (DHHS) has determined that tetrachloroethylene may reasonably be anticipated to be a carcinogen (AR # 2).

#### **Cadmium:**

Breathing high levels of cadmium can severely damage the lungs. Eating food or drinking water with very high levels severely irritates the stomach, leading to vomiting and diarrhea. Long-term exposure to lower levels of cadmium in air, food, or water leads to a buildup of cadmium in the kidneys and possible kidney disease. Other long-term effects are lung damage and fragile bones.

The Department of Health and Human Services (DHHS) has determined that cadmium and cadmium compounds are known human carcinogens (AR # 1).

### **300.415(b)(2)(iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.**

Ohio EPA documented hazardous substances, or pollutants or contaminants were in approximately 250 pallets of containers which included steel 55-gallon drums, and other buckets, totes, sacks, cans, bottles, and other containers with volumes 30 gallons, 5 gallons, 1 gallon, and less than 1 gallon inside the buildings. The Site is non-operational, however, chemicals and containers holding hazardous substances are still present. Several containers showed signs of deterioration and/or corrosion. Most of the containers require assessment to determine their integrity and suitability for continued storage of chemicals, hazardous substances, or other materials.

Evidence of former releases including staining and bulk chemicals present on the ground were

observed throughout the buildings. Six of the seven samples collected during the Site Assessment meet criteria to be classified as hazardous wastes. There is a very high potential of a release of hazardous substances from the drums and other bulk storage containers, particularly where containers are stored in an unsafe or precarious manner. In some cases, incompatible materials are located in close proximity to each other.

**300.415(b)(2)(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

The Site is no longer occupied and is no longer maintained. The buildings likely will continue to deteriorate. Since there are no climate controls, there is a potential for ambient temperature and humidity changes to affect materials on the Site. Precipitation that enters the building through broken windows, leaking roofs, or other building features deteriorated due to lack of maintenance, and other ingress points can overflow open areas or contact containers and threaten to impact their integrity, causing them to release their contents, as well as wash existing spills throughout the building and beyond through floor drains and other migration routes.

The current owner of the property is not maintaining the building and it will continue to deteriorate. Visual observation of the building by OSCs during the Site Assessment showed areas where exterior paint was peeling and has lost its protective properties which allows weather to affect the building. There is no monitoring to determine if windows are intact, and broken windows will allow weather conditions to affect the building the building interior and its contents. There is potential that water-reactive chemicals exist on the Site. During cold weather, freeze/thaw cycles can stress the drums and could potentially cause them to rupture or burst.

**300.415(b)(2)(vi) Threat of fire or explosion**

The threat of fire or explosion at the Site is high based on the flammable or reactive nature of the wastes located at the Site and because the Site buildings are unoccupied and unsecured.

During the Site Assessment, three samples exhibited the characteristic of ignitibility. If incompatible materials were to come in contact with each other, an exothermic chemical reaction could occur. Many other containers, which were not sampled, had HMIS labelling which indicated combustibility, flammability or ignitability.

In addition, the storage of potentially incompatible chemicals without secondary containment could result in an unintentional fire caused by the interaction of the contents from deteriorating containers. One sampled container exhibited a pH of 12.9 and is corrosive. If high pH materials come into contact with acidic materials, an exothermic reaction can occur, producing heat, which could lead to a fire or explosion.

The Site has no known operational fire suppression system, or smoke monitoring and alerting system. The quantities of rubber, rubber products, and rubber waste also stored in the building demonstrates the large fire load contained within the Site buildings. Rubber and rubber related products are characteristically combustible and are known to be extremely difficult to extinguish if they catch fire. The organic materials and components used in and added to rubber and rubber products during their manufacture are a very effective fuel source for maintaining and continuing a fire once a combustion process has been initiated.

At the Alliance Site, it was confirmed that the rubber materials stored and used by the Crest Rubber Company are combustible and sustain flames. If a fire were to start in the buildings, the rubber materials could feed the fire and cause a large conflagration affecting most of the materials within the buildings.

**300.415(b)(2)(vii) The availability of other appropriate federal or state response mechanisms to respond to the release.**

On November 9, 2016, Ohio EPA requested assistance from EPA. The State of Ohio does not have the resources to immediately mitigate the threat of release (AR # 5).

**IV. ENDANGERMENT DETERMINATION**

Given the Site conditions, the nature of the known and suspected hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

**V. PROPOSED ACTIONS AND ESTIMATED COSTS**

**A. Proposed Actions**

**1. Proposed action description**

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Removal activities on Site will include:

- a) Develop and implement a Site-specific Health and Safety Plan, including an Air Monitoring Plan, and a Site Emergency Contingency Plan;
- b) Develop and implement a Site Work Plan and Site Security Plan;
- c) Secure and stabilize building structures as necessary to protect the health and safety of employees, workers, contractors, and others working on behalf of EPA;
- d) Inventory and perform hazard characterization on all substances contained in drums, buckets, totes, sacks, and other containers;
- e) Perform sampling and analysis;

- f) Secure, characterize, remove, transport and properly dispose of the drums, containerized wastes, spilled waste materials, associated contaminated surfaces, or materials if future sampling reveals contaminated materials or debris, hazardous substances, pollutants and contaminants located at the Site, in accordance with EPA's Off-Site Rule (40 C.F.R. § 300.440); and
- g) Take any other response actions to address any release or threatened release of a hazardous substance, pollutant or contaminant that the EPA On-Scene Coordinator (OSC) determines may pose an imminent and substantial endangerment to the public health or the environment.

All hazardous substances, pollutants, and/or contaminants removed off-Site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provisions of post-removal Site control consistent with the provisions of 40 C.F.R. § 300.415(l). Elimination of all threats presented hazardous substances in the buildings is, however, expected to eliminate the need for post-removal Site controls.

## **2. Contribution to remedial performance:**

The proposed action will not impede future actions based on available information. The proposed actions will, to the extent practicable, contribute to the efficient performance of any long-term remedial action with respect to the release or threatened release concerned. However, this action is anticipated to eliminate the need for any significant post removal control requirements.

## **3. Engineering Evaluation/Cost Analysis (EE/CA)**

Not Applicable

## **4. Applicable or relevant and appropriate requirements (ARARs)**

EPA will comply with all applicable or relevant and appropriate requirements (ARARs) of Federal and State law to the extent practicable considering the exigencies of the circumstances.

The OSC sent an email on June 8, 2017, to Frank Zingales and Marlene Kinney at the Ohio EPA requesting the identification of any applicable state ARARs (AR # 14).

Ohio EPA identified the following ARARs in a letter email dated June 12, 2017 (AR # 15). The State identified the following ARARs:

1. Chapter 3734 of the Ohio Revised Code (ORC) - Solid and Hazardous Waste. In particular, ORC § 3734.03 prohibits open dumping of solid waste.

2. Chapter 3745 of the Ohio Administrative Code (OAC). In particular, these include the general facility standards found in OAC Chapters 3745-54 and 3745-55, including the closure (decontamination/remediation) of all areas where hazardous waste was managed pursuant to OAC Rules 3745-55-10 through 3745-55-20, 3745-55-78, 3745-55-97 and corrective action pursuant to Ohio law. In addition, OAC Rule 3745-3-04 prohibits discharges and OAC Rule 3745-17-08 restricts fugitive dust. Because some of these standards address long-term impacts and objectives, it may not be feasible to comply with all closure and corrective action objectives under this removal actions.
3. Chapter 6111 of the OAC -Water Pollution Control. In particular, ORC § 6111.04 prohibits certain water pollution.

The OSC identified the following primary federal ARARs that may apply to on-Site activities:

1. Hazardous substances, pollutants or contaminants removed off-site pursuant to this emergency response action for treatment, storage and disposal shall be treated, stored, or disposed at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.
2. Subtitle D of the Resource Conservation and Recovery Act (RCRA), Sections 1008 and Section 4001, 42 U.S.C. § 6901, et seq., regulates the management of nonhazardous solid waste.
3. 49 U.S.C. § 5101, et seq. regulates the transportation of hazardous waste and hazardous substances by aircraft, railcars, vessels, and motor vehicles to or from a site.

## **5. Project Schedule**

The proposed activities listed in Section V of this memorandum will require an estimated 60 on-site working days to complete.

## **6. Disproportionate Impact**

The response actions described in this memorandum directly address the actual or threatened release at the Site of hazardous substances, pollutants, or contaminants, which may pose an imminent and substantial endangerment to public health, welfare, or the environment. EPA does not believe that these response actions will impose a disproportionate burden on the affected property.

## **Estimated Costs**

The Detailed cleanup contractor cost is presented in Attachment 6 and the Independent Government Cost Estimate is presented in Attachment 3; regional budgetary considerations may require incremental funding to allow completion of this project; estimated costs are summarized below:

REMOVAL ACTION PROJECT CEILING ESTIMATE	
<b><u>Extramural Costs:</u></b>	
<b><u>Regional Removal Allowance Costs:</u></b>	
Cleanup Contractor Costs	\$691,786
START Contractor Costs	\$80,546
<b><u>Other Extramural Costs Not Funded from the Regional Allowance:</u></b>	
Total USCG	\$27,856
Subtotal	\$800,188
Costs Contingency (20% of Subtotal)	\$160,037
<b>TOTAL REMOVAL ACTION PROJECT CEILING</b>	<b>\$960,225</b>

## **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Sections II, III and IV above, actual or threatened release of hazardous substances and pollutants or contaminants from the Site, failing to take or delaying action may present an imminent and substantial endangerment to public health, welfare, or the environment by increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

## **VII. OUTSTANDING POLICY ISSUES**

None

## **VIII. ENFORCEMENT**

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Confidential Enforcement Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,643,287<sup>1</sup>.

<sup>1</sup> Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of Site specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create

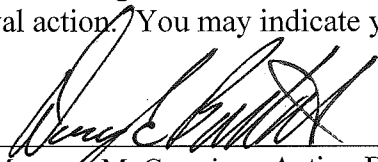
$$(\$960,225 + \$54,400) + (61.96\% \times \$1,014,625) = \$1,643,287$$

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Crest Rubber Ravenna Site, Ravenna, Portage County, Ohio, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site (Attachment 1).

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal, and I recommend your approval of the removal action proposed in this Action Memorandum. The total project ceiling, if approved, will be \$960,225 of which, as much as \$932,369 may be used from the Regional removal allowance. I recommend your approval of the proposed removal action. You may indicate your decision by signing below.

Approve:

*for*   
Margaret M. Guerriero, Acting Director  
Superfund Division

Date

*8/17/2017*

Disapprove:

\_\_\_\_\_  
Margaret M. Guerriero, Acting Director  
Superfund Division

\_\_\_\_\_  
Date

## Enforcement Addendum

### Attachments

1. Administrative Record Index
2. Region 5 EJ Analysis
3. Independent Government Cost Estimate
4. Site Location Map
5. Photo Log
6. Detailed Cleanup Contractor Costs

cc: B. Schlieger, U.S. EPA 5202G, (Email: [Schlieger.Brian@epa.gov](mailto:Schlieger.Brian@epa.gov))  
L. Nelson, U.S. Department of Interior, **w/o Enf. Addendum**  
(Email: [valincia\\_darby@ios.doi.gov](mailto:valincia_darby@ios.doi.gov))  
Craig Butler, Director, Ohio EPA **w/o Enf. Addendum**  
(Email: [craig.butler@epa.state.oh.us](mailto:craig.butler@epa.state.oh.us))  
Mike DeWine, Ohio Attorney General **w/o Enf. Addendum**  
(Email: [Mike.DeWine@ohioattorneygeneral.gov](mailto:Mike.DeWine@ohioattorneygeneral.gov))

\_\_\_\_\_  
any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States right to cost recovery.

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**NOT RELEVANT TO SELECTION  
OF REMOVAL ACTION**



**ENFORCEMENT ADDENDUM**

**HAS BEEN REDACTED – SIX PAGES**

**ENFORCEMENT CONFIDENTIAL**

**NOT SUBJECT TO DISCOVERY**

**FOIA EXEMPT**

**NOT RELEVANT TO SELECTION**

**OF REMOVAL ACTION**

**ATTACHMENT 1**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REMOVAL ACTION**

**ADMINISTRATIVE RECORD  
FOR THE  
CREST RUBBER RAVENNA SITE  
RAVENNA, PORTAGE COUNTY, OHIO**

**ORIGINAL  
JULY, 2017**

<b><u>NO.</u></b>	<b><u>SEMS ID</u></b>	<b><u>DATE</u></b>	<b><u>AUTHOR</u></b>	<b><u>RECIPIENT</u></b>	<b><u>TITLE/DESCRIPTION</u></b>	<b><u>PAGES</u></b>
1	935187	10/1/12	ATSDR	Public	ToxFAQs Fact Sheet - Cadmium - CAS #7440-43-9	2
2	935188	10/1/14	ATSDR	Public	ToxFAQs Fact Sheet - Tetrachloroethylene - CAS #127-18-4	2
3	935189	11/1/16	ATSDR	Public	ToxFAQs Fact Sheet - Trichloroethylene - CAS #79-01-6	2
4	935181	11/2/16	Kinney, M., Ohio U.S. EPA	Buchanan, T., Esq.	Letter Re: Notice of Violation	3
5	935185	11/6/16	Butler, C., Ohio U.S. EPA	Augustine, J., U.S. EPA	Time Critical Removal Action Referral Package (Attached with Cover Letter)	220
6	935190	3/30/17	Kimble, J., U.S. EPA	Guerriero, M., U.S. EPA	Crest Rubber Ravenna - 933045 Crest Rubber Alliance Site Redacted Action Memorandum	30
7	935182	4/13/17	Ohio U.S. EPA	File	Analytical Results Summary for Crest Rubber Company - Chestnut Street Facility	1
8	935183	4/27/17	Bucina, L., Microbac Laboratories	Zingales, F., Ohio U.S. EPA	Laboratory Report Number: L17040782	30
9	935184	5/10/17	Bucina, L., Microbac Laboratories	Zingales, F., Ohio U.S. EPA	Laboratory Report Number: L17050023	13

<u>NO.</u>	<u>SEMS ID</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
10	935178	5/12/17	Zingales, F., Ohio U.S. EPA	Pohl, E., and Kimble, J., U.S. EPA	Email Re: Crest Rubber - Chestnut St. Facility - Analytical Results	1
11	935180	5/15/17	Zingales, F., Ohio U.S. EPA	Crest Rubber Co.	Letter Re: FUI Notice of Violation	4
12	935195	5/26/17	Zingales, F., Ohio U.S. EPA	Private Citizen	Email Re: Crest Rubber, CF Capital NOV ( <i>Redacted</i> )	2
13	935186	6/8/17	Pohl, E., U.S. EPA	Zingales, F., and Kinney, M., Ohio U.S. EPA	Email Re: Request of ARARs - Crest Rubber Ravenna Site	1
14	935179	6/12/17	Zingales, F., Ohio U.S. EPA	Pohl, E., U.S. EPA	Email Re: Request for ARARs - Crest Rubber Ravenna Site	2
15	935196	7/27/17	Zingales, F., Ohio U.S. EPA	Pohl, E., U.S. EPA	Email Re: Crest Rubber Ravenna NOV ( <i>Redacted</i> )	1
16	-	-	Pohl, E., U.S. EPA	-	Action Memorandum Re: Request for Approval and Funding for a Time Critical Removal Action at the Crest Rubber Ravenna Site ( <i>Pending</i> )	2

**ATTACHMENT 2**

**ENVIRONMENTAL JUSTICE ANALYSIS**  
**FOR**  
**CREST RUBBER RAVENNA SITE**  
**RAVENNA, OHIO**  
**AUGUST 2017**

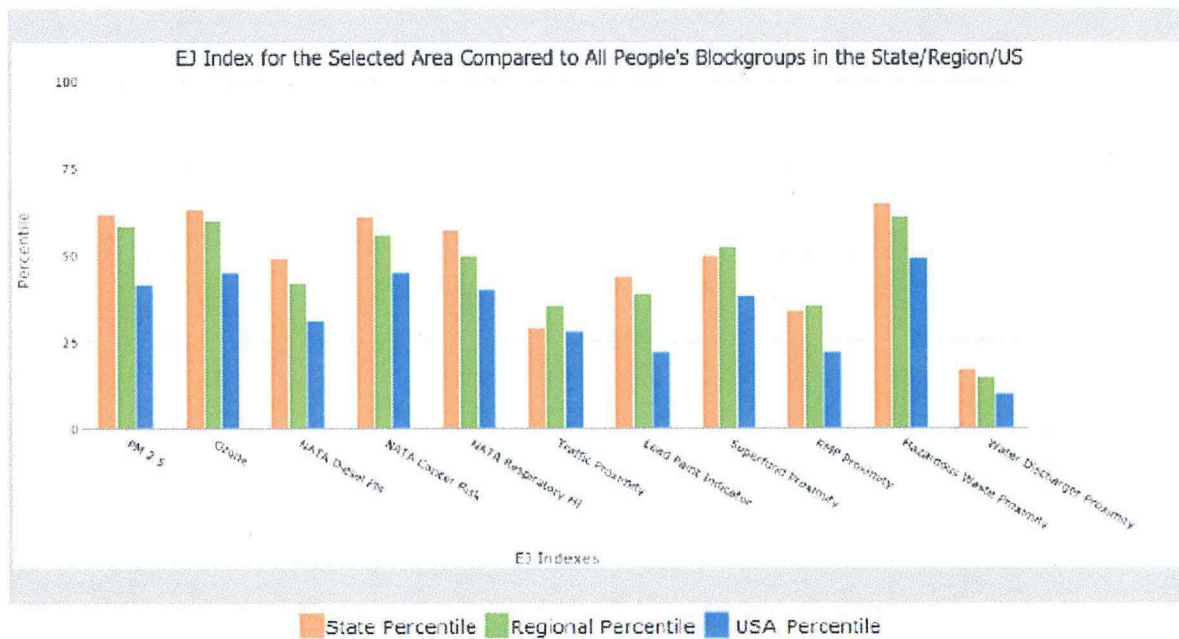
1 mile Ring Centered at 41.149810,-81.243646, OHIO, EPA Region 5

Approximate Population: 8,102

Input Area (sq. miles): 3.14

Crest Rubber Ravenna Site

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM2.5	62	58	41
EJ Index for Ozone	63	60	45
EJ Index for NATA* Diesel PM	49	42	31
EJ Index for NATA* Air Toxics Cancer Risk	61	56	45
EJ Index for NATA* Respiratory Hazard Index	57	50	40
EJ Index for Traffic Proximity and Volume	29	35	28
EJ Index for Lead Paint Indicator	44	39	22
EJ Index for Superfund Proximity	50	52	38
EJ Index for RMP Proximity	34	35	22
EJ Index for Hazardous Waste Proximity*	65	61	49
EJ Index for Water Discharger Proximity	17	15	10



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

July 03, 2017

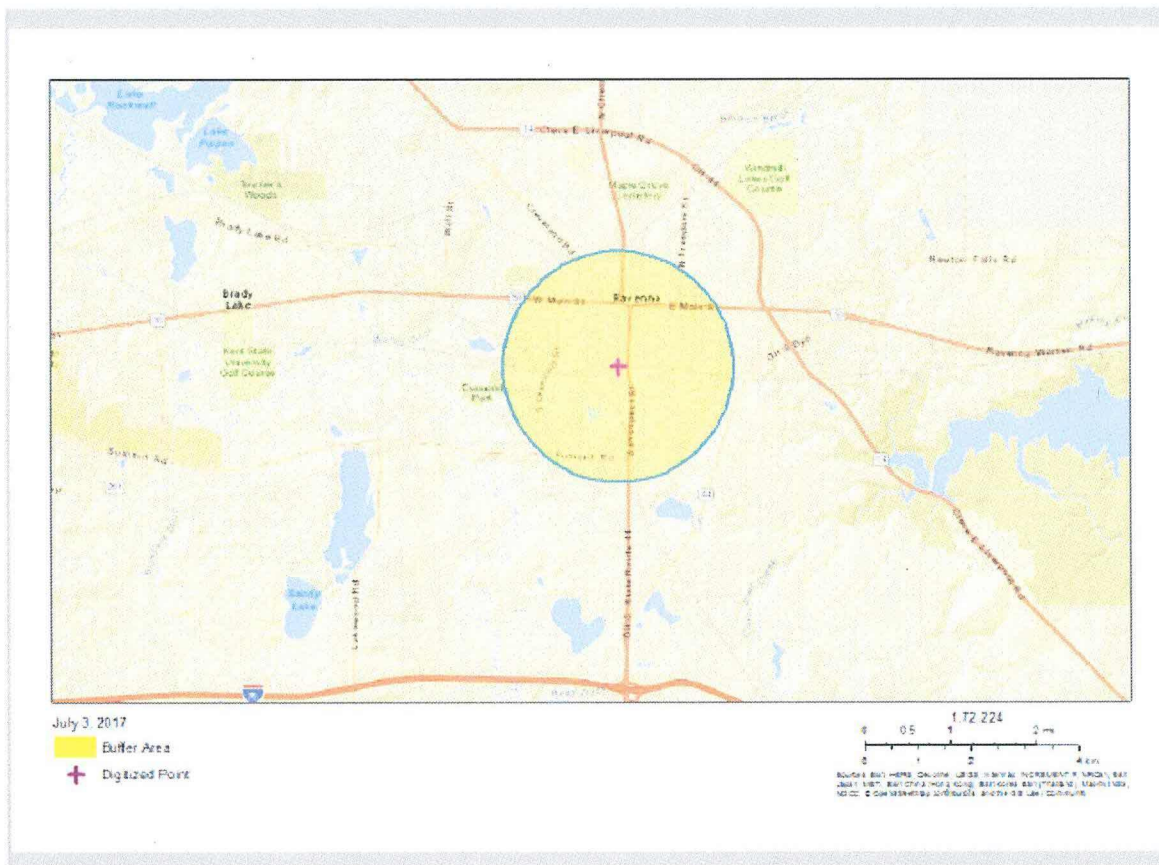
1/3

1 mile Ring Centered at 41.149810, -81.243646, OHIO, EPA Region 5

Approximate Population: 8,102

Input Area (sq. miles): 3.14

Crest Rubber Ravenna Site



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0
National Pollutant Discharge Elimination System (NPDES)	1



## EJSCREEN Report (Version 2016)

1 mile Ring Centered at 41.149810, -81.243646, OHIO, EPA Region 5

Approximate Population: 8,102

Input Area (sq. miles): 3.14

Crest Rubber Ravenna Site



Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	11.3	11.3	45	10.6	71	9.32	88
Ozone (ppb)	50	52.8	10	50.3	38	47.4	60
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	1.12	0.995	63	0.931	60-70th	0.937	70-80th
NATA* Cancer Risk (lifetime risk per million)	36	37	49	34	60-70th	40	<50th
NATA* Respiratory Hazard Index	1.7	1.8	49	1.7	60-70th	1.8	50-60th
Traffic Proximity and Volume (daily traffic count/distance to road)	150	170	75	370	62	590	58
Lead Paint Indicator (% Pre-1960 Housing)	0.67	0.42	77	0.39	78	0.3	85
Superfund Proximity (site count/km distance)	0.052	0.091	54	0.12	45	0.13	44
RMP Proximity (facility count/km distance)	0.42	0.44	71	0.51	66	0.43	72
Hazardous Waste Proximity* (facility count/km distance)	0.031	0.1	23	0.11	20	0.11	16
Water Discharger Proximity (facility count/km distance)	0.77	0.33	90	0.31	90	0.31	90
<b>Demographic Indicators</b>							
Demographic Index	28%	27%	66	29%	64	36%	47
Minority Population	11%	19%	53	24%	45	37%	25
Low Income Population	46%	34%	72	33%	74	35%	71
Linguistically Isolated Population	0%	1%	68	2%	58	5%	44
Population With Less Than High School Education	16%	11%	76	11%	77	14%	67
Population Under 5 years of age	6%	6%	56	6%	55	6%	52
Population over 64 years of age	13%	15%	45	14%	50	14%	54

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

+ The hazardous waste environmental indicator and the corresponding EJ index will appear as N/A if there are no hazardous waste facilities within 50 km of a selected location.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

July 03, 2017

3/3

**ATTACHMENT 3**

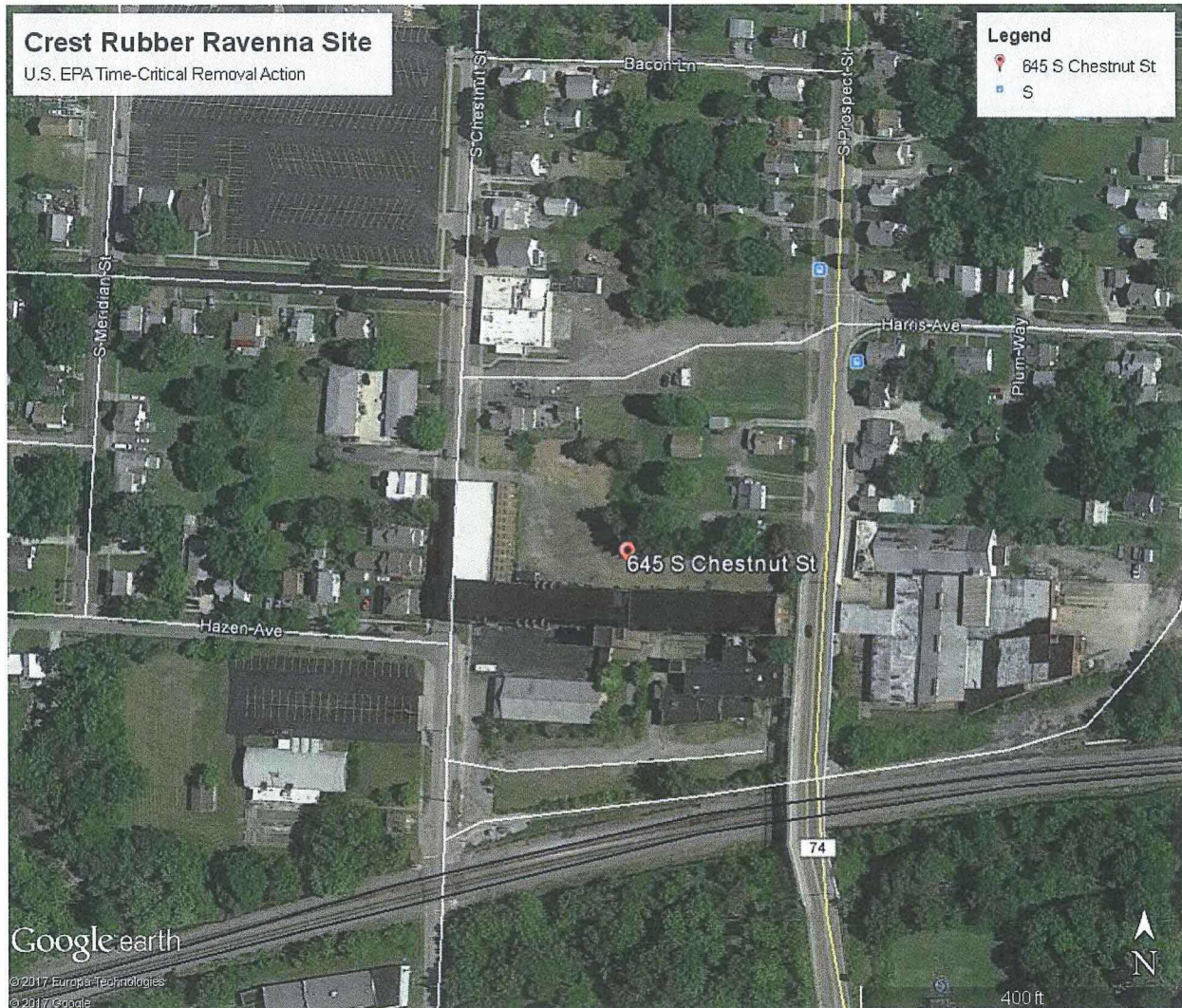
**INDEPENDENT GOVERNMENT COST  
ESTIMATE HAS BEEN REDACTED – FOUR  
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OF REMOVAL ACTION**



ATTACHMENT 4  
SITE LOCATION MAP


CREST RUBBER RAVENNA SITE


RAVENNA, OH  
AUGUST 2017






# **ATTACHMENT 5** **PHOTO LOG**

	Number	1
	Description	Crest Rubber Ravenna Chemical Storage Room, Southern Building
	Photographer	U.S. EPA
	Date	04/13/2017

	Number	2
	Description	Crest Rubber Ravenna Misc. Non-Hazardous Materials
	Photographer	U.S. EPA
	Date	04/13/2017

	Number	3
	Description	Crest Rubber Ravenna, Sample collected from metal drum (CRC-01) during Site Assessment
	Photographer	U.S. EPA
	Date	04/13/2017

	Number	4
	Description	Crest Rubber Ravenna, Misc. Small Chemical Storage Containers
	Photographer	U.S. EPA
	Date	04/13/2017

**ATTACHMENT 6**

**DETAILED CLEANUP CONTRACTOR ESTIMATE**

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OF REMOVAL ACTION**