RECORD OF DECISION

Operable Unit Four
Eighteen Mile Creek Superfund Site
Niagara County, New York

United States Environmental Protection Agency
Region 2
New York, New York
September 2018

550180

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PART 1 DECLARATION

SITE NAME AND LOCATION

Eighteen Mile Creek Superfund Site
Niagara County, New York

Superfund Site Identification Number: NYN000206456
Operable Unit: 04

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) documents the U.S. Environmental Protection Agency's (EPA's) selection of a remedy for Operable Unit 4 (OU4) of the Eighteen Mile Creek Superfund Site (Site), in Niagara County, New York, which is chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §§ 9601-9675, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. This decision document explains the factual and legal basis for selecting the OU4 remedy. The attached index (see Appendix III) identifies the items that comprise the Administrative Record for this action, upon which the selected remedy is based.

The New York State Department of Environmental Conservation (NYSDEC) was consulted on the proposed remedy in accordance with Section 121(f) of CERCLA, 42 U.S.C. § 9621(f), and concurs with the selected remedy (see Appendix IV).

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF THE SELECTED REMEDY

The selected remedy described in this document addresses a discrete portion of the Site involving contaminated soil at residential properties in the vicinity of the former Flintkote Company Plant (Flintkote) property in the City of Lockport, New York. This is the fourth remedial phase, or operable unit, for the Site, identified as OU4.

The major components of the selected remedy for the contaminated soil at the residential properties in OU4 include the following:

- Excavation of approximately 14,000 cubic yards (cy) of lead-contaminated soil that exceeds EPA's cleanup levels, from approximately 28 properties in the vicinity of the Flintkote property;
- Transportation of the contaminated soil off-site for proper disposal, with treatment as necessary;

- Backfilling of the excavated areas with clean fill;
- Restoration of the affected properties; and
- Where necessary, the potential to offer short-term temporary relocation of residents during the cleanup of their properties, if excavation activities significantly impact their ability to access or use their residences.

EPA's studies to date have identified 28 properties where action needs to be taken. Additional sampling of nearby properties will be conducted during the design and/or implementation of the selected remedy; this sampling may identify the need to remediate additional properties as part of this remedy. The Selected Remedy assumes that as many as ten additional properties may require a remedial response.

The environmental benefits of the selected remedy may be enhanced by consideration, during the design, of technologies and practices that are sustainable in accordance with EPA Region 2's Clean and Green Energy Policy and NYSDEC's Green Remediation Policy.[1] This will include consideration of green remediation technologies and practices.

DECLARATION OF STATUTORY DETERMINATIONS

The selected remedy meets the requirements for remedial actions as set forth in Section 121 of CERCLA, 42 U.S.C. § 9621, because it meets the following requirements: (1) it is protective of human health and the environment; (2) it meets a level or standard of control of the hazardous substances, pollutants and contaminants that at least attains the legally applicable or relevant and appropriate requirements under federal and state laws (unless a statutory waiver is justified); (3) it is cost-effective; and (4) it utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable. In addition, Section 121 of CERCLA includes a preference for remedies that employ treatment that permanently and significantly reduce the volume, toxicity or mobility of hazardous substances as a principal element (or justify not satisfying the preference). The selected remedy may satisfy the preference for treatment to the extent that any of the contaminated material that exceeds regulatory criteria will be treated prior to land disposal.

Because the Selected Remedy will not result in hazardous substances, pollutants, or contaminants remaining at OU4 above health-based levels, a statutory five-year review is not required.

ROD DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary section of this ROD. Additional information can be found in the Administrative Record file for this action.

- ✓ A discussion of the current nature and extent of contamination is included in the "Summary of Site Characteristics" section.
- ✓ Chemicals of concern and their respective concentrations may be found in the "Summary of Site Characteristics" section.

[1] See http://epa.gov/region2/superfund/green_remediation and http://www.dec.ny.gov/docs/remediation_hudson_pdf/der31.pdf.

- ✓ Potential adverse effects associated with exposure to Site contaminants may be found in the "Summary of Site Risks" section.
- ✓ A discussion of soil cleanup levels for chemicals of concern may be found in the "Remedial Action Objectives (RAOs)" section.
- ✓ A discussion of principle threat waste is contained in the "Principle Threat Wastes" section.
- ✓ Current and reasonably anticipated future land use assumptions are presented in the "Current and Potential Future Land and Resources Uses" section.
- ✓ RAOs to be achieved as a result of the selected remedy are discussed in the "RAOs" section.
- ✓ Estimated capital, operation and maintenance, and total present-worth costs are discussed in the "Description of Remedial Alternatives" section.
- ✓ Key factors that led to selecting the remedy (*i.e.*, how the selected remedy provides the best balance of tradeoffs with respect to the balancing and modifying criteria, highlighting criteria key to the decision) may be found in the "Comparative Analysis of Alternatives" and "Statutory Determinations" sections.

AUTHORIZING SIGNATURE

A. Carpenter

Angela Carpenter, Acting Director
Emergency and Remedial Response Division
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9-26-18

Date

PART 2 DECISION SUMMARY

1. SITE NAME, LOCATION, AND DESCRIPTION

The Eighteen Mile Creek Superfund Site (Site), Superfund Site Identification Number NYN000206456, is located in Niagara County, New York and includes contaminated sediments, soil, and groundwater in and around the Eighteen Mile Creek (Creek). The selected remedy described herein addresses a discrete portion of the Site involving contaminated soil at residential properties in the vicinity of the former Flintkote Company Plant (Flintkote) property on Mill Street (see Figure 1). The U.S. Environmental Protection Agency (EPA) is the lead agency for the Site, and the New York Department of Environmental Conservation (NYSDEC) is the support agency. The Site is currently a fund-lead site.

The headwaters of the Creek consist of an East and West Branch which begin immediately north of the New York State Barge Canal (Canal). Water from the Creek's East Branch originates at the spillway on the south side of the Canal, where it is directed northward underneath the Canal and the Mill Street Bridge through a culvert. Water from the West Branch originates from the dry dock on the north side of the Canal and then flows northward. The East and West Branches converge just south of Clinton Street in Lockport and then flow north beneath Clinton Street on the former United Paperboard Company (United Paperboard) property. There is a dam located in the Creek behind the United Paperboard building, referred to as the Clinton Street Dam, and the ponded water behind the dam is commonly referred to as Mill Pond. On the Flintkote property, the Creek splits and forms the Millrace, which is a small segment of the Creek that splits and flows around an area of soil and fill on the Flintkote property, known as the Island. The Creek flows north for approximately 15 miles and discharges to Lake Ontario in Olcott, New York.

EPA has divided the Site into separate phases, or operable units (OUs), for remediation purposes. OUl is addressing the risks associated with the residential soil contamination at nine residential properties located on Water Street as well as the threats posed from the deteriorating buildings at the Flintkote property. OU2, referred to as the Creek Corridor, is addressing the contaminated soil at the following properties: the United Paperboard property, the former White Transportation (White Transportation) property, the Flintkote property, and Upson Park. OU2 also addresses sediment contamination within the Creek Channel, which is defined as the sediment within the discrete Creek Corridor section of the Creek; an approximately 4,000-foot segment of the Creek that extends from the Canal to Harwood Street in the City of Lockport. OU3 will address the groundwater within the Creek Corridor, as well as contaminated sediments in the Creek that are not addressed by OU2, namely those from the end of the Creek Corridor to its location of discharge into Lake Ontario in Olcott, New York. OU4, the subject of this Record of Decision (ROD) addresses lead-contaminated soil at certain residential properties on Mill Street and several other adjoining residential streets east of the Flintkote property in the City of Lockport, New York. A Site location map is provided as Figure 1.

2. SITE HISTORY AND ENFORCEMENT ACTIVITIES

The Creek Corridor has a long history of industrial use dating back to the 19th Century when it was used as a source of hydropower. Various manufacturing facilities operated at the properties within the Creek Corridor, including the Flintkote Company.

The Flintkote property is approximately six acres in size and consists of two adjoining parcels at 198 and 300 Mill Street. The Flintkote property housed many different operations, beginning as a sawmill in the early 1830s. In 1884, the Lockport Paper Company was established at the property. In 1928, the Beckman Dawson Roofing Company purchased the property and began manufacturing felt and felt products. In 1935, the Flintkote Company began production of sound-deadening and tufting felt for installation and use in automobiles. Manufacturing of this product line continued until December 1971, when operations ceased and the plant closed. The disposal history at the facility is largely unknown. However, aerial photographs suggest that by 1938, fill was disposed in the section of 300 Mill Street between the Creek and the Millrace in an area known as the Island. The nature of the fill material disposed of at that time remains unknown.

In March 2006, NYSDEC selected a remedy under state law for the entire Flintkote property, and in March 2010, NYSDEC selected a remedy under state law for certain properties in the Creek Corridor, including the White Transportation property, United Paperboard property, Upson Park, and the Creek Channel. The NYSDEC March 2010 remedy also included the nine residential properties on Water Street in Lockport. With the inclusion of the Site on the National Priorities List in 2012, these State remedies ceased being implemented.

In August 2013, EPA performed a removal action at the residential properties on Water Street to mitigate the threat to residents of direct contact with contaminated soil. This removal action consisted of placing gravel or clean topsoil with vegetation in areas where residents may come into direct contact with contaminated soil. A separate short-term response action was taken at an additional Water Street property, which involved the excavation and off-site disposal of contaminated soil. The removal actions were completed by October 2013.

In September 2013, EPA issued a ROD for OU1 to address the contaminated soil at the nine residential properties on Water Street as well as the threats posed from the deteriorating Flintkote Plant building. As part of EPA's selected remedy, the residential properties were acquired and the residents were permanently relocated. Following the relocation, the residential structures were demolished. The buildings at the Flintkote property were also demolished in 2015. As indicated in the OU1 ROD, EPA acknowledged that the response action to address the soil excavation at the nine OU1 residential properties would be performed during cleanup of the sediments in the Creek Corridor so as to prevent the recontamination of the above-referenced residential properties by flooding and re-deposition of sediment and soil from the Creek.

In 2017, EPA selected a remedy for OU2, which includes bank-to-bank excavation of sediment in the Creek Corridor, excavation of contaminated soil at the Upson Park, United Paperboard Company, and White Transportation properties, and a combination of soil excavation and capping at the Flintkote property.

In 2018, EPA began a remedial investigation and feasibility study for OU3, which will address groundwater within the Creek Corridor, as well as contaminated sediments in the Creek that are not addressed by OU2, extending from Harwood Street north 15 miles to the mouth of the Creek where it discharges into Lake Ontario in Olcott, New York.

3. HIGHLIGHTS OF COMMUNITY PARTICIPATION

On July 27, 2018, EPA released a Proposed Plan for cleanup of OU4 of the Site, including the preferred remedial alternative, to the public for comment. EPA made supporting documentation comprising the administrative record for that decision available to the public at the information repositories maintained at the Lockport Public Library, 23 East Avenue in Lockport, New York, the Newfane Public Library, 2761 Maple Avenue in Newfane, New York, the EPA Region 2 Office in New York City, and EPA's website for the Site at www.epa.gov/superfund/eighteenmile-creek. EPA published notice of the start of a public comment period and the availability of the above referenced documents in the *Lockport Union-Sun Journal* on July 27, 2018. A copy of the public notice published in the *Lockport Union-Sun Journal* can be found in Appendix V. EPA accepted public comments on the Proposed Plan from July 28, 2018 through August 27, 2018.

On August 16, 2018, EPA held a public meeting at the 4-H Training Center, Niagara County Fairgrounds, located at 4487 Lake Avenue, Lockport, New York, to inform officials and interested citizens about the Superfund process, to present the Proposed Plan for OU4 of the Site, including the preferred remedial alternative, and to respond to questions and comments from the attendees. Responses to the questions and comments received at the public meeting and in writing during the public comment period are included in the Responsiveness Summary (See Appendix V).

4. SCOPE AND ROLE OF RESPONSE ACTION

Section 300.5 of the National Oil and Hazardous Substance Contingency Plan (NCP), 40 C.F.R. § 300.5, defines an OU as a discrete action that comprises an incremental step toward comprehensively addressing a site's problems. A discrete portion of a remedial response eliminates or mitigates a release, a threat of release, or a pathway of exposure. The cleanup of a site can be divided into a number of OUs, depending on the complexity of the problems associated with the site. At this Site, the cleanup is currently being addressed under four OUs.

- OU1 - addresses the soil contamination at nine residential properties on Water Street and the threats posed from the deteriorating buildings at the Flintkote property. A response action was performed to address the immediate risks associated with the contaminated residential soil, as well as the Flintkote building demolition. As indicated in the OU1 ROD, the portion of that remedial action involving the soil excavation at the nine residential properties will be performed during cleanup of the sediments in the Creek Corridor to prevent the sediment and soil in the Creek from recontaminating the above-referenced residential properties.
- OU2 - addresses the contaminated soil at the following properties: the United Paperboard property, the White Transportation property, the Flintkote property, and Upson Park. OU2 also addresses sediment contamination within the Creek Channel of the Creek Corridor.
- OU3 - addresses the contaminated sediments in the Creek that are not addressed by OU2, namely those from the end of the Creek Corridor to its location of discharge into Lake Ontario in Olcott, New York. OU3 also addresses groundwater in the Creek Corridor.
- OU4 - is the subject of this ROD, and it addresses lead-contaminated soil at certain residential properties on Mill Street and several other adjoining residential streets east of the Flintkote property. The exact number of residential properties that will require soil

remediation under the OU4 remedy will be determined upon completion of additional soil sampling activities to be conducted during the remedial design and during implementation of the remedial action.

5. SUMMARY OF REMEDIAL INVESTIGATIONS

5.1 Previous Investigations

In March 2013, EPA initiated a remedial investigation (RI) at residential properties on Water Street (OU1) to supplement an investigation performed by NYSDEC in 2002. As part of EPA's OU1 RI, five additional surface soil samples were collected in the public rights-of-way in front of residential properties along Mill Street opposite of the Flintkote property. Analytical results of these five soil samples did not reveal elevated levels of PCBs. However, lead was detected in all five Mill Street soil samples, and two out of the five Mill Street soil samples revealed lead concentrations ranging from 420 parts per million (ppm) to 470 ppm.

In June 2013, EPA conducted a second sampling event in accordance with the *Superfund Lead-Contaminated Residential Sites Handbook* (USEPA 2003) at two Mill Street properties with elevated lead levels to evaluate whether the results of the March 2013 sampling were representative of the lead concentrations in soil at these properties. The results of the June 2013 sampling revealed levels of lead at one of the properties that exceeded the EPA risk-based screening level. The property had a maximum concentration of lead of 1,800 ppm and an average concentration of lead in the surface soil that exceeded 400 ppm, which was the risk-based screening level for lead in residential soil at the time. In September 2013, EPA issued a Record of Decision for OU1 to address nine residential properties along Water Street while indicating there was a need for further evaluation of the Mill Street soil sampling results.

5.2 Results of EPA's OU4 Remedial Investigation

In 2016, in order to determine if the lead found in the soil samples from the previous investigation was related to the Site, EPA collected additional samples from certain Mill Street properties and the Flintkote property and performed a comparative forensic evaluation. The results of the analysis confirmed that the contaminated soil found on the Mill Street residential properties was related to contamination found on the Flintkote property. EPA also evaluated historical aerial photographs of the OU4 area, but this did not yield further evidence of fill from the Flintkote property being deposited at the residential properties.

To delineate the extent of the Flintkote-related lead contamination, EPA used a phased approach and conducted three separate residential soil sampling events in July, September, and November of 2017 at a total of 27 properties. The OU4 area is depicted in Figure 2. EPA issued the RI Report for OU4 in July 2018, which provides the analytical results of soil sampling conducted in 2016 and 2017 to characterize the nature and extent of contamination at this OU. The results of the sampling revealed elevated concentrations of lead in soil at 26 of the 27 residential properties sampled.

The results of the soil sampling at the residential properties showed generally shallow lead contamination at varying concentrations with no distinct pattern of distribution. The results indicated a wide range of lead concentrations from 11 ppm to 1,610 ppm, which may indicate the presence of hot spots. Many of the properties showed lead contamination in the surface soil from 0-2 inches and 2-6 inches. Most of the properties also showed elevated concentrations of lead contamination in the soil from 6-18 inches, which is indicative of fill material being placed on the property. This fill material is believed to be related to the Flintkote property.

As indicated in the OU4 Proposed Plan dated July 2018, EPA performed additional soil sampling in June 2018 at four residential properties to further delineate the extent of contamination at this OU. While the sampling was conducted prior to the release of the Proposed Plan, the validated results were not received until after the commencement of the public comment period. The results of the June 2018 soil sampling revealed elevated concentrations of lead in soil at two of the four properties. Concentrations of lead in soil at these properties ranged from 20 ppm to 1,240 ppm. The analytical results of the June 2018 sampling are provided as an addendum to the OU4 RI Report.

6. CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USE

The properties in the OU4 study area are zoned for residential use. Future land use is expected to remain the same. No commercial or industrial development is present within the boundary of OU4. However, there is industrial/commercial land use on Mill Street adjacent to OU4, as well as commercial land use along Frost Street adjacent to OU4.

7. SUMMARY OF SITE RISKS

As part of the RI/Focused Feasibility Study (FFS), EPA conducted a baseline risk assessment to estimate the current and future effects of contaminants on human health and the environment. A baseline risk assessment is an analysis of the potential adverse human health and ecological effects of releases of hazardous substances from a site or OU in the absence of any actions or controls to mitigate such releases, under current and future land and resource uses. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed if remedial action is determined to be necessary. This section of the ROD summarizes the results of the baseline risk assessment for OU4.

7.1 Baseline Human Health Risk Assessment

A four-step process is utilized for assessing site-related human health risks for a reasonable maximum exposure scenario:

- *Hazard Identification* – uses the analytical data collected to identify the Contaminants of Potential Concern (COPC) at a site for each medium, with consideration of a number of factors explained below;
- *Exposure Assessment* - estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways (e.g., ingesting contaminated well-water) by which humans are potentially exposed; *Toxicity*

Assessment - determines the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure (dose) and severity of adverse effects (response); and,

- *Risk Characterization* - summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site-related risks. The risk characterization also identifies contamination with concentrations which exceed acceptable levels, defined by the NCP as an excess lifetime cancer risk greater than 1 x 10^{-6} – 1 x 10^{-4} or a Hazard Index greater than 1; contaminant at these concentrations are considered Chemicals of Concern (COCs) and are typically those that will require remediation at a site. Also included in this section is a discussion of the uncertainties associated with these risks.

Each of these steps, as applied to OU4 of the Site, are described below:

7.1.1 Hazard Identification

The Site-specific Human Health Risk Assessment (HHRA) estimated cancer risks and noncancer health hazards from exposures to chemicals at OU4 of the Site. The HHRA quantitatively evaluates cancer risks and noncancer hazards. The Site-specific HHRA evaluated exposure to surface and subsurface soil at the residential properties. Consistent with EPA's policies and guidance, the baseline HHRA quantified cancer risks and noncancer health hazards as the total exposure to COPCs in the absence of remedial action and institutional controls.

The COPCs were selected by comparing the maximum detected concentration of each contaminant in surface soil (0-2 feet) with federal, risk-based screening values. The screening of each COPC was conducted separately for each residential property. Based on current zoning and future land use assumptions, exposure to surface soil by adults and children, the latter being the most sensitive population (0-6 years), were the media of interest and the receptors that were considered in this risk assessment. Potential exposure routes included ingestion of, dermal contact with, and inhalation of particles from surface soil. In the HHRA, 31 exposure areas representing the individual residential properties were evaluated. Antimony, PCBs, and lead were identified as COPCs for OU4.

In this step, COPCs in each medium were identified based on such factors as toxicity, frequency of occurrence, fate and transport of the contaminants in the environment, concentrations, mobility, persistence and bioaccumulation. Analytical data was used from three separate residential soil sampling events conducted by EPA in July, September, and November of 2017, totaling 27 properties. In addition, four additional properties were evaluated in June 2018. Each of the individual properties evaluated are located within a primarily residential area designated as OU4. Therefore, surface soil (0-2 feet) was the only media quantitatively evaluated in the HHRA for residential exposure scenarios.

The HHRA began with selecting COPCs in surface soil that could potentially cause adverse health effects in exposed populations. COPCs were determined for each exposure area and medium by comparing the available analytical data to appropriate risked-based screening criteria. Analytical data collected to determine the nature and extent of contamination at OU4 indicated the presence

of antimony, PCBs, and lead above screening criteria; however, the calculated cancer risks for antimony and PCBs were within the risk range and the noncancer hazards were below the goal of protection of a Hazard Index = 1 (HI = 1). Therefore, antimony and PCBs are not further discussed in this ROD. The relevant subset of information for lead is summarized in Table 7 of Appendix II. Lead is the primary Chemical of Concern (COC) for this OU, as listed in Appendix II, Table 1.

7.1.2 Exposure Assessment

Consistent with Superfund policy and guidance, the HHRA assumes no remediation or institutional controls to mitigate or remove hazardous substance releases. Cancer risks and noncancer hazard indices were calculated based on an estimate of the reasonable maximum exposure (RME) expected to occur under current and future conditions at OU4. The RME is defined as the highest exposure that is reasonably expected to occur at a site.

In the HHRA, EPA evaluated potential risks to populations associated with both current and potential future land uses. Since the OU4 area is currently zoned for residential use, which is not expected to change, exposure to surface soil by a child resident was the only receptor considered and surface soils from 0 to 2 feet below ground surface (ft bgs) was the media of interest considered in the HHRA. Each of the 31 properties were evaluated on an individual basis. The exposure areas consist of individual residences containing elevated lead concentrations. The exposure pathways assessed included incidental ingestion of and dermal contact with impacted soil, as well as the inhalation of particulates containing the COC potentially released from soil for the young child, the most sensitive receptor category. Appendix II, Table 2 provides the Selection of Exposure Pathways.

The assessment of lead exposures was based on the arithmetic mean of all samples collected from surface soil (0 to 2 ft bgs) and this concentration was used as the Exposure Point Concentration (EPC). A summary of the lead EPCs on each property is provided in Table 1 of Appendix II.

7.1.3 Toxicity Assessment

In this step, the types of adverse health effects associated with contaminant exposures and the relationship between magnitude of exposure and severity of adverse health effects were determined. Appendix II, Tables 3 and 4 provide summaries of data on lead; however, the majority of the columns are blank because the Integrated Exposure Uptake Biokinetic Model (IEUBK) is used in the assessment of lead hazards. Appendix II, Tables 5 and 6 summarizes the use of the IEUBK model to evaluate risks from exposure to lead in soil.

7.1.4 Risk Characterization

Lead was detected in OU4 media at elevated concentrations. Because there are no published quantitative toxicity values for lead, it is not possible to evaluate risks from lead exposure using the same methodology as used for other COPCs. However, because the toxicokinetics (the absorption, distribution, metabolism, and excretion of toxins in the body) of lead are well understood, lead is regulated based on blood lead level (PbB). In lieu of evaluating risk using typical intake calculations and toxicity criteria, EPA developed models which are used to predict

blood lead concentration and the probability of a child's PbB exceeding specific target concentrations based on a given multimedia exposure scenario. In a December 2016 directive (EPA OLEM Directive 9285.6-52), EPA approved the use of 5 mg/dL as the accepted blood lead reference value. The Site-specific risk reduction goal is to limit the probability of an individual's blood lead level exceeding 5 μg/dL to 5% of the population or less. The risk reduction goal for OU4 is to limit the probability of a typical child's (or that of a group of similarly exposed individual's) PbB exceeding 5 micrograms per deciliter (μg/dL) to 5 percent or less. For this HHRA, lead hazards were evaluated using EPA's IEUBK model for the child residents (1 to 6 years) exposed 350 days/year for 6 years, as the most sensitive receptor.

As summarized in Table 7 of Appendix II, the predicted probabilities of a child's PbB exceeding 5 μg/dL surpassed EPA's risk reduction goal of no more than 5 percent exceeding a 5 ug/dL PbB within each exposure area. The majority of children exposed on the sampled properties assumed to play throughout the property had PbBs greater than 5 μg/dL and the average lead concentration in soil on the properties were greater than 200 ppm.

Consistent with the Guidance, "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents", tables summarizing the results of the HHRA are provided in Tables 1 to 7, Appendix II. Consistent with the application of the IEUBK model, the tables were modified consistent with the evaluation of lead as the COC.

7.1.5 Uncertainties in the Risk Assessment

The procedures and inputs used to assess risks in this evaluation, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- environmental chemistry sampling and analysis;
- environmental parameter measurement;
- fate and transport modeling;
- exposure parameter estimation; and,
- toxicological data.

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present. Environmental chemistry-analysis error can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled. Uncertainties in the exposure assessment are related to estimates of how often an individual would contact the lead, the timeframe over which such exposure would occur, and in the models used to estimate the concentrations of the lead at the point of exposure.

Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure. These uncertainties are addressed by making conservative assumptions concerning risk and exposure parameters throughout the assessment.

More specific information concerning public health risks, including a quantitative evaluation of the degree of risk associated with various exposure pathways, is presented in the human health risk assessment that is found in the RI report.

7.2 Summary of Human Health Risks

The analytical results of the RI show that 28 of 31 properties had concentrations of lead in soil above 400 ppm or an average concentration of lead greater than 200 mg/kg. These levels are used to predict an exceedance of the target PbB of 5 µg/dL, as described in the RI report.

7.3 Ecological Risk Assessment

The main purpose of the assessment of exposures on residential properties is for human use and activities, and thus ecological function is not considered a primary goal for OU4. Further, the soils do not represent secondary sources of contamination because contaminant migration to ecological areas of concern (e.g., the Creek) is not expected. Therefore, further assessment of ecological risk for these properties is not required.

7.4 Basis for Taking Action

Based on the results of the RI/FFS and the HHRA, EPA has determined that a response action is necessary to protect public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment.

8. REMEDIAL ACTION OBJECTIVES

Remedial action objectives (RAOs) are specific goals to protect human health and the environment. These objectives are based on available information and standards, such as applicable or relevant and appropriate requirements (ARARs), to-be-considered (TBC) guidance, and site-specific, risk-based levels established using the risk assessments.

The following RAOs have been established for OU4:

- Prevent potential current and future unacceptable risks to human receptors resulting from direct contact (e.g. ingestion) with contaminated soil.
- Prevent migration of site contaminants from the OU4 properties to other areas via overland flow and air dispersion.

EPA has adopted the preliminary remediation goal identified in the Proposed Plan as the final Remediation Goal (RG) for OU4 of the Site. The two-tiered remediation goal is based on the New York State's 6 NYCRR Part 375 Residential Soil Cleanup Objective for lead and EPA Region 2's lead strategy consistent with OLEM Directive 9200.2-167.[2] The following two-tiered remediation goal has been identified for OU4:

[2] See Updated Scientific Considerations for Lead in Soil Cleanups, December 22, 2016 https://semspub.epa.gov/work/08/1884174.pdf

- Lead: 400 ppm.
- In addition to targeting detections of lead above 400 ppm, the average soil concentration across each residential property will be at or below 200 ppm.

Impact to groundwater was not evaluated as part of the OU4 RI, but given the concentrations found and the fact that the contamination is primarily located in the top two feet of soil, EPA does not anticipate this is an issue for this OU.

9. DESCRIPTION OF REMEDIAL ALTERNATIVES

Section 121(b)(1) of CERCLA, 42 U.S.C. § 9621(b)(1), mandates that remedial actions must be protective of human health and the environment, cost-effective, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions that employ, as a principal element, treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants, and contaminants at a site. Section 121(d) further specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants that at least meets ARARs under federal and state laws, unless a waiver can be justified pursuant to Section 121(d)(4) CERCLA, 42 U.S.C. §9621(d)(4).

Detailed descriptions of the remedial alternatives presented in this OU4 ROD can be found in EPA's FFS, dated July 2018.

The construction time provided for each alternative reflects only the time required to construct or implement the remedy and does not include the time required to design the remedy, negotiate the performance of the remedy with any potentially responsible parties, or procure contracts for design and construction.

On-site treatment options were not evaluated in the FFS because of the potential impracticability of performing treatment at these residential properties. These options would not be practicable because of space limitations for the placement of an on-site treatment facility and the prolonged length of time for treatment technologies to achieve the RAOs for lead.

Alternative 1: No Action

The NCP requires that a "No Action" alternative be developed and considered as a baseline for comparing other remedial alternatives. Under this alternative, no action would be taken to remediate the lead contaminated soil at the residential properties. This alternative does not include any monitoring or institutional controls. Because this alternative would result in contaminants remaining at the Site that are above levels that would otherwise allow for unrestricted use and unlimited exposure, CERCLA would require that the Site be reviewed at least once every five years. If justified by the review, additional response actions may be implemented.

Capital Cost:	$0
Annual O&M Costs:	$0
Present-Worth Cost:	$0
Construction Time:	Not Applicable

Alternative 2: Limited Soil Excavation, Soil Cover, and Institutional Controls
Under this alternative, lead-contaminated soil would be excavated at a minimum of 28 residential properties to a depth of six inches and sent for off-Site disposal. If necessary, in order to satisfy regulatory requirements, treatment of the soil would be conducted at and by the approved disposal facility. Once excavation activities have been completed, a geotextile fabric layer would be placed in the excavated areas to act as a demarcation barrier, and six inches of clean top soil would be used as backfill that would be planted with native grasses, shrubs, and/or trees. Clean backfill would meet the requirements as set forth in 6 NYCRR Part 375-6.7. Additionally, EPA would require that backfill concentrations for lead be below 200 ppm. No hardscape, such as pavement or structures would be removed under this alternative.

Because contaminated soil would remain at the Site after remediation that are above levels that, if attained, would allow for unrestricted residential use, institutional controls such as land-use restrictions would need to be implemented.

The institutional controls would require maintenance of the cover material and impose restrictions on excavation of the property. In addition, deed notices would be issued stating that contaminated soil remains on the property, and that future use restrictions and maintenance requirements exist.

This alternative includes further investigations during the remedial design to determine if additional properties require remediation. EPA has conservatively estimated, for cost estimation purposes, that additional sampling may identify up to 10 additional affected properties that would require to be remediated as part of this OU.

Because this alternative would result in contaminants remaining at the Site that are above levels that would otherwise allow for unrestricted use and unlimited exposure, CERCLA requires that the Site be reviewed at least once every five years. If justified by the review, additional response actions may be implemented.

Capital Cost:	$2,956,056
Annual O&M Costs:	$2,600
Present-Worth Cost:	$2,958,656
Construction Time:	12 Months

Alternative 3: Excavation and Off-Site Disposal
This alternative includes the excavation and off-Site disposal of lead contaminated soil at a minimum of 28 residential properties to a cleanup level of 400 ppm with an overall average not to exceed 200 ppm. This would allow for residential use. An estimated 14,000 cubic yards of soil would be removed under this alternative. Based on the existing data, an excavation depth of approximately one to two feet is currently anticipated for most of the properties. The excavation depth may increase if contamination is present at depths greater than anticipated. Verification samples would be collected to confirm that all contaminated soil in excess of the preliminary remediation goal has been removed and the remedial action objectives have been met. If necessary, in order to satisfy regulatory requirements, treatment of the soil would be conducted at and by the approved disposal facility. However, because of the concentrations found in the soil, it is not

expected that much of the soil will require treatment. Once excavation activities have been completed, clean soil would be used as backfill and the properties would be restored, including concrete and asphalt pavement replacement. Clean backfill would meet the requirements for soil as set forth in 6 NYCRR Part 375-6.7. Additionally, EPA would require that backfill concentrations for lead are below 200 ppm. Under this alternative, institutional controls would not be necessary. This alternative includes the potential to offer residents temporary short-term relocation during the cleanup of their properties, if excavation activities significantly impact their ability to access or use their properties. The short-term temporary relocation, if needed, will follow the protocols set forth in the 2002, "Superfund Response Actions: Temporary Relocations Implementation Guidance."

This alternative includes further investigations during the remedial design to determine if additional properties require remediation. EPA has conservatively estimated, for cost estimation purposes, that additional sampling may identify up to 10 additional affected properties that would be remediated as part of this OU.

Capital Cost:	$6,711,416
Annual O&M Costs:	$0
Present-Worth Cost:	$6,711,416
Construction Time:	12 Months

10. COMPARATIVE ANALYSIS OF ALTERNATIVES

In selecting a remedy for a site, EPA considers the factors set forth in Section 121 of CERCLA, 42 U.S.C. § 9621, and conducts a detailed analysis of the viable remedial alternatives in accordance with the NCP, 40 C.F.R §300.430(e)(9), EPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies*, OSWER Directive 9355.3-01, and EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, OSWER 9200.1-23.P. The detailed analysis consists of an assessment of the individual alternatives against each of the nine evaluation criteria set forth at 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis focusing upon the relative performance of each alternative against those criteria.

A comparative analysis of these alternatives based upon the nine evaluation criteria noted below follows.

Threshold Criteria *- The first two remedy selection criteria are known as "threshold criteria" because they are the minimum requirements that each response measure must meet in order to be eligible for selection as a remedy.*

10.1 Overall Protection of Human Health and the Environment

Overall protection of human health and the environment determines whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

A threshold requirement of CERCLA is that the selected remedial action be protective of human health and the environment. An alternative is protective if it reduces current and potential risk associated with each exposure pathway at a site to acceptable levels.

Alternative 1 (No Action) would not be protective of human health and the environment because it does not eliminate, reduce, or control risk of exposure to contaminated soil. Alternative 2 (Limited Action) would provide some protection to property owners/occupants from exposure to contaminated soil through a combination of the removal of contaminated soil in the top six inches, placement of clean backfill material, and institutional controls such as land-use restrictions. However, contaminated soils would remain in place above the soil cleanup goals because only the top six inches of contaminated soil would be excavated and transported off-site for proper disposal. Alternative 3 would provide the highest level of protection of human health through permanently removing the lead contaminated soil, thereby eliminating potential exposure.

10.2 Compliance with ARARs, to be Considered (TBCs) and other Guidance

Section 121 (d) of CERCLA, 42 U.S.C. § 9621(d), and Section 300.430(f)(1)(ii)(B) of the NCP, 40 CFR § 300.430(f)(1)(ii)(B), require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate federal and state requirements, standards, criteria and limitations which are collectively referred to as "ARARs," unless such ARARs are waived under Section 121(d)(4) of CERCLA.

Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other federal and state environmental statutes or provides a basis for invoking a waiver.

Compliance with ARARs is the other threshold requirement for remedy selection under CERCLA.

New York State's 6 NYCRR Part 375 is an ARAR, a TBC, or an 'other guidance' to consider in addressing contaminated soil at OU4. Alternative 1 would not achieve New York State cleanup goals for soil because no measures would be implemented and contaminated soil would remain in place. Alternative 2 would prevent direct contact with lead contaminated soil exceeding the soil cleanup goal through a combination of removal and the placement of a soil cover. Alternative 3 would prevent direct contact with lead contaminated soil exceeding the soil cleanup goal through the removal of contaminated soil exceeding the soil cleanup goal.

The Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) are federal laws that mandate procedures for managing, treating, transporting, storing and disposing of hazardous wastes and PCBs. All portions of RCRA and TSCA that are applicable or relevant and appropriate to the Alternatives 2 and 3 would be required to be met.

Primary Balancing Criteria *- The next five remedy selection criteria, 3 through 7, are known as "primary balancing criteria." These five criteria are factors with which tradeoffs between response measures are assessed so that the best option will be chosen, given site-specific data and conditions.*

10.3 Long-Term Effectiveness and Permanence

Long-term Effectiveness and Permanence considers the ability of an alternative to maintain protection of human health and the environment over time.

Alternative 1 provides no reduction in risk. Alternative 2 provides long-term effectiveness through effective maintenance of the soil cover and institutional controls such as land-use restrictions. Alternative 2 would be less permanent or effective than Alternative 3 over the long term because institutional controls may not reliably reduce future health risks to property owners/occupants associated with exposure to contaminated soil. It would be difficult to maintain institutional controls as residents would have to be restrained from common every day activities including digging gardens. Alternative 3 would be the most effective in removing long-term risks because contaminated soil would be permanently removed from the properties, and maintenance or institutional controls would not be necessary. Off-site treatment/disposal at a secure, permitted hazardous waste facility for the contaminated soil is reliable because the design of these types of facilities includes safeguards and would ensure the reliability of the technology and the security of the waste material.

10.4 Reduction in Toxicity, Mobility, or Volume Through Treatment

Reduction in Toxicity, Mobility, or Volume of Contaminants through Treatment evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment and the amount of contamination present.

Alternative 1 would not achieve any reduction in toxicity, mobility, or volume because contaminated soil would remain in place. Alternative 2 would use a combination of soil removal and the placement of a soil cover to achieve a reduction in mobility, volume, and exposure to contaminants at the residential properties. The off-site treatment, when required by the disposal facility, would reduce the toxicity of the contaminated soil prior to disposal. Alternative 2 would not reduce the toxicity of the contaminants that would remain at the residential properties. Under Alternative 3, the mobility, volume, and exposure to contaminants would be reduced through the removal and disposal of the soil at an approved off-site facility. Furthermore, off-site treatment, if required, would reduce the toxicity of the contaminated soil prior to disposal.

10.5 Short-Term Effectiveness

Short-term Effectiveness considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents and the environment during implementation.

Alternative 1 would not create new adverse short-term impacts because no actions would be taken. Alternatives 2 and 3 would cause a disturbance of the surface soil, which could present short-term risk from the potential for exposure to dust from excavation and transportation of contaminated soil. Alternative 3 presents the highest short-term risk because it involves a larger volume of contaminated soil that would be excavated and transported off-site. Alternatives 2 and 3 would also cause an increase in truck traffic, noise, and potentially dust in the surrounding community as well as potential impacts to workers during the performance of the work. These potential impacts would be related to construction activities and potential exposure to the contaminated soil being excavated and handled.

However, proven procedures including engineering controls, personal protective equipment, and safe work practices could be used to address potential impacts to workers and the community. For example, the work would be scheduled to coincide with normal working hours on week days, and no work would occur on weekends or holidays. In addition, trucking routes with the least disruption to the surrounding community would be utilized. Appropriate transportation safety measures would be required during the shipping of the contaminated material to the off-site disposal facility.

The risk of release during implementation of Alternatives 2 and 3 is principally limited to wind-blown soil transport or surface water runoff. Any potential environmental impacts associated with dust and runoff would be minimized with proper installation and implementation of dust and erosion control measures and by performing the excavation and off-site disposal with appropriate health and safety measures to limit the amount of material that may migrate to a potential receptor.

No time is required for construction of Alternative 1. The implementation of Alternative 2 is estimated to take 12 months. Alternative 3 is estimated to take 12 months.

10.6 Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility, and coordination with other governmental entities are also considered.

Alternative 1 does not involve the application of any technology, therefore, there are no issues relating to implementation. The implementation of soil excavation and installation of a cover system for Alternative 2 would use readily available services and equipment. However, the development and implementation of protective institutional controls that would be acceptable to the homeowners will be difficult to enforce. Alternative 3 would require the implementation of technologies known to be reliable and that can be readily implemented. These approaches have been used at other sites and have been shown to be reliable and effective in addressing the excavation of contaminated soil, dust control, and property restoration.

10.7 Cost

Cost includes estimated capital and annual operation and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent. (This is a standard assumption in accordance with EPA guidance.)

The estimated capital cost, operation and maintenance (O&M), and present worth cost are discussed in detail in EPA's FFS Report. The cost estimates are based on the best available information. Alternative 1 has no cost because no activities are proposed. The present worth cost for Alternatives 2 and 3 are as follows:

Alternative	Capital Cost ($)	Total O&M Cost ($)	Present Worth ($)
1.No Action	$0	$0	$0
2. Limited Soil Excavation, Soil Cover, and Institutional Controls	$2,956,056	$2,600	$2,958,656
3. **Excavation and Off-Site Disposal**	**$6,711,416**	**$0**	**$6,711,416**

Note: The selected remedy is shown in bold.

Modifying Criteria *- The final two remedy selection criteria, 8 and 9, are called "modifying criteria" because new information or comments from the state or the community on the Proposed Plan may modify the preferred response measure or cause another response measure to be considered.*

10.8 State/Support Agency Acceptance

State/Support Agency acceptance considers whether the State and/or Support Agency agrees with EPA's analyses and recommendations.

NYSDEC has consulted with the New York State Department of Health, and it concurs with the selected remedy. A letter of concurrence is attached in Appendix IV.

10.9 Community Acceptance

Community Acceptance considers whether the local community agrees with the EPA's analyses and preferred alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

EPA solicited input from the community on the remedial alternatives proposed for OU4 at the Site, including the preferred alternative. Verbal comments that were received from community members at the August 16, 2018, public meeting were generally supportive of the preferred alternative. During the comment period from July 28, 2018 to August 27, 2018, five comment letters were received via email and U.S. mail. Written comments were generally positive and

supportive of the preferred alternative. The major concerns raised were related to the potential health risks associated with lead contamination. In addition, members of the community requested sampling at additional nearby properties. An additional comment was received outside of the comment period but has also been considered by EPA. Copies of the comment letters are provided as Attachment D to Appendix IV. A summary of significant comments contained in the letters and the comments provided at the public meeting on August 16, 2018, as well as EPA's responses to those comments, are provided in the Responsiveness Summary (Appendix V).

11. PRINCIPAL THREAT WASTES

The NCP establishes an expectation that EPA will use treatment to address the principal threats posed by a site wherever practicable (40 CFR §300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund site. A source material is material that includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for the migration of contamination to groundwater, surface water, or air, or act as a source for direct exposure. Principal threat wastes are those source materials considered to be highly toxic or highly mobile which generally cannot be contained in a reliable manner or would present a significant risk to human health or the environment should exposure occur. The decision of how to treat these wastes is made on a site-specific basis through detailed analysis of alternatives, using the remedy selection criteria described above. The manner in which principal threat wastes are addressed provides a basis for making a statutory finding as to whether the remedy must employ treatment as a principal element.

There are no principal threat wastes identified for this discrete portion of the Site, identified as OU4.

12. SELECTED REMEDY

12.1 Description of the Selected Remedy

Alternative 3 is the Selected Remedy, as described in this document. It addresses a discrete portion of the Site involving contaminated soil at residential properties in the vicinity of the former Flintkote property in the City of Lockport, New York. This is the fourth OU for the Site, identified as OU4.

The major components of the Selected Remedy for the contaminated soil at the residential properties in OU4 include the following:

- Excavation of approximately 14,000 cy of lead-contaminated soil which exceed EPA's cleanup levels from approximately 28 properties in the vicinity of the Flintkote property;
- Transportation of the contaminated soil off-site for disposal, with treatment as necessary;
- Backfilling of the excavated areas with clean fill;
- Restoration of the affected properties; and
- Where necessary, the potential to offer short-term temporary relocation of residents during the cleanup of their properties, if excavation activities significantly impact their ability to access or use their properties.

EPA's studies to date have identified 28 properties where actions need to be taken. Additional sampling of nearby properties will be conducted during the design and/or implementation of the selected remedy; this sampling may identify the need to remediate some of these additional properties. The Selected Remedy assumes that as many as ten additional properties may require a remedial response.

The environmental benefits of the Selected Remedy may be enhanced by consideration, during the design, of technologies and practices that are sustainable in accordance with EPA Region 2's Clean and Green Energy Policy and NYSDEC's Green Remediation Policy.[3] This will include consideration of green remediation technologies and practices.

12.2 Summary of the Rationale for the Selected Remedy

Alternative 3 meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing criteria. Although the present worth cost associated with Alternative 3 is significantly more than Alternative 2, Alternative 3 is expected to achieve permanent risk reduction within a reasonable timeframe through excavation and off-Site disposal of lead-contaminated soil. Alternative 3 is readily implementable, as it uses technologies proven to be effective at other similar sites. Unlike Alternative 2, which would require the maintenance of a soil cover and institutional controls restricting the use of the property in perpetuity, Alternative 3 would allow for unlimited use and unrestricted exposure. Because residential use of the properties could continue without restrictions, long-term monitoring of the status of institutional controls would not be necessary. Statutory five-year reviews would not be necessary because Alternative 3 would not result in lead remaining at OU4 above health-based levels.

12.3 Summary of the Estimated Selected Remedy Costs

The total estimated present-worth cost of the selected remedy is $6,711,416. There are no anticipated annual O&M costs associated with the selected remedy because all material with contamination above EPA's cleanup levels will be removed, therefore the capital cost and present worth cost for the selected remedy are identical. The cost estimates, which are based on available information, are order-of-magnitude engineering cost estimates that are expected to be within +50 to -30 percent of the actual cost of the project. Changes to the cost estimate can occur as a result of new information and data collected during the design of the remedy.

A cost estimate summary for the selected remedy is presented in Table 8 in Appendix II.

12.4 Expected Outcomes of the Selected Remedy

The selected remedy actively addresses contaminated soil at residential properties in the vicinity of the Flintkote property. The results of the human health risk assessment indicate that the soil contamination poses an unacceptable human health risk.

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[3] See http://epa.gov/region2/superfund/green_remediation and http://www.dec.ny.gov/docs/remediation_hudson_pdf/der31.pdf.

The selected remedy will result in all soil contamination above cleanup levels being excavated and disposed off-Site, thereby addressing risks posed by contaminated soil at these properties and facilitating continued residential use without restrictions.

13. STATUTORY DETERMINATIONS

EPA has determined that the selected remedy complies with the CERCLA and NCP provisions for remedy selection, meets the threshold criteria, and provides the best balance of tradeoffs among the alternatives with respect to the balancing and modifying criteria. These provisions require the selection of remedies that are protective of human health and the environment, comply with ARARs (or justify a waiver from such requirements), are cost effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In addition, CERCLA includes a preference for remedies that employ treatment that permanently and significantly reduce the volume, toxicity, or mobility of hazardous substances as a principal element (or justify not satisfying the preference). The following sections discuss how the OU4 remedy meets those statutory requirements.

13.1 Protection of Human Health and the Environment

The Selected Remedy protects human health and the environment because it eliminates human exposure to contamination in soil through the excavation and off-Site disposal of the contaminated soil. The selected remedy will eliminate all significant direct-contact risks to human health and the environment associated with contaminated soil at the OU4 residential properties. This action will result in the reduction of exposure levels to acceptable risk levels within EPA's generally acceptable risk range of 10^{-4} to 10^{-6} for carcinogens and below a HI of 1.0 for noncarcinogens. Implementation of the selected remedy will not pose unacceptable short-term risks.

13.2 Compliance with ARARs

The selected remedy complies with chemical-specific, location-specific, and action-specific ARARs. A complete list of the ARARs, TBCs and other guidance are presented in Table 9, Table 10, and Table 11, which can be found in Appendix II.

13.3 Cost Effectiveness

A cost-effective remedy is one whose costs are proportional to its overall effectiveness (NCP § 300.430(f)(1)(ii)(D)). Overall effectiveness is based on the evaluations of long-term effectiveness and permanence, reduction in toxicity, mobility, and volume through treatment, and short-term effectiveness.

Each of the alternatives underwent a detailed cost analysis. In that analysis, capital and annual O&M costs were estimated and used to develop present-worth costs. In the present-worth cost analysis, annual O&M costs were calculated for the estimated life of Alternative 2, the only alternative with an O&M component. The total estimated present worth cost for implementing the selected remedy for OU4 is $6,711,416.

Based on the comparison of overall effectiveness to cost, the selected remedy meets the statutory requirement that Superfund remedies be cost effective (NCP § 300.430(f)(1)(ii)(D)) in that it represents reasonable value for the money to be spent. Overall effectiveness was evaluated by assessing three of the five balancing criteria in combination (long-term effectiveness and permanence; reduction in toxicity, mobility and volume through treatment; and short-term effectiveness). Overall effectiveness was then compared to costs to determine cost-effectiveness. The overall effectiveness of the selected remedy has been determined to be proportional to the costs, and the selected remedy therefore represents reasonable value for the money to be spent.

13.4 Utilization of Permanent Solutions and Alternative Treatment (or Resource Recovery) Technologies to Maximum Extent Practicable

The selected remedy complies with the statutory mandate to utilize permanent solutions, alternative treatment technologies, and resource recovery alternatives to the maximum extent practicable. Of those alternatives that are protective of human health and the environment and comply with ARARs (or provide a basis for invoking an ARAR waiver), EPA has determined that the selected remedy provides the best balance of tradeoffs among the alternatives with respect to the balancing criteria, while also considering the statutory preference for treatment as a principal element, the bias against off-Site disposal without treatment, and State/support agency and community acceptance. Implementation of the selected remedy will remove contaminated soil from the OU4 residential properties thereby eliminating the risk to human receptors in the future.

13.5 Preference for Treatment as a Principal Element

The selected remedy results in the removal of approximately 14,000 cubic yards of contaminated soil from the OU4 residential properties. The soil excavation will provide for an immediate reduction in the mobility of contaminated soil from the residential properties. Although treatment is not a principal element of the remedy, based on sampling performed to date, some of the contaminated soil may require treatment prior to land disposal at an off-Site facility. Off-site treatment, if required would reduce the toxicity of the contaminated soil prior to land disposal. This remedy only addresses a portion of the Site. Subsequent actions that are planned to identify and address fully the remaining threats posed by the Site may include treatment.

13.6 Five-Year Review Requirements

Because this remedy will not result in hazardous substances, pollutants, or contaminants remaining at this OU above health-based levels, the statutory requirement for a five-year review is not triggered by the implementation of this action.

14. DOCUMENTATION OF SIGNIFICANT CHANGES

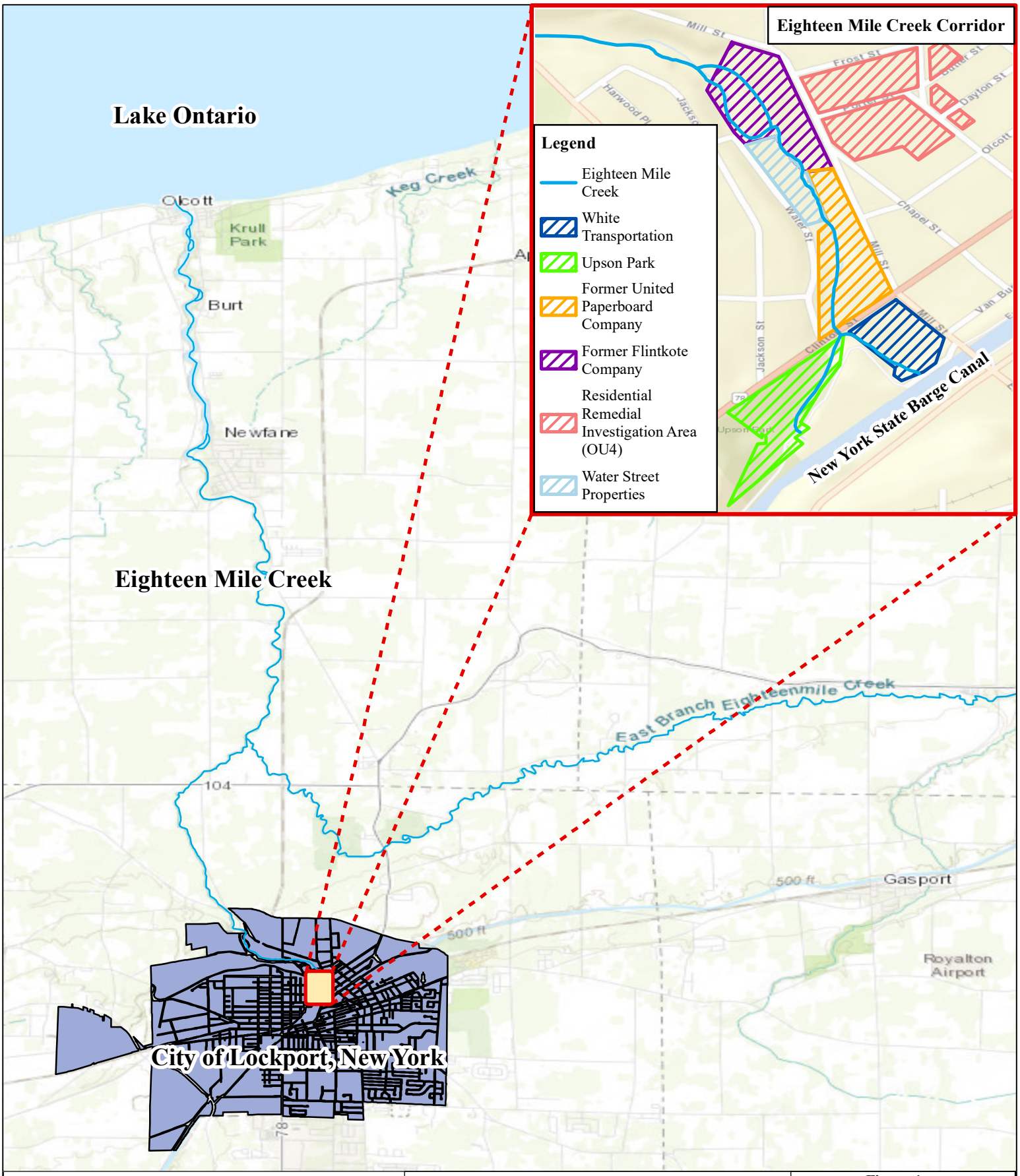
The Proposed Plan for OU4 of the Site was released on July 27, 2018. The Proposed Plan identified Alternative 3 as the preferred alternative for remediating the OU4 residential properties.

EPA considered all comments at the public meeting on August 16, 2018 and reviewed all written (including electronic formats such as e-mail) comments during the public comment period and has

determined that no significant changes to the remedy, as originally identified in the Proposed Plan, are necessary or appropriate.

APPENDIX I

FIGURES



Legend

Eighteen Mile Creek Corridor

Eighteen Mile Creek

0 0.5 1 2 3 4 Miles

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Weston Solutions, Inc.
East Division

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc.and Sovereign Consulting, Inc

Figure 1:
Site Location Map

Eighteen Mile Creek Site
Niagara County, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 9/11/2018

GIS ANALYST:	M. MANNINO
EPA OSC:	T. KISH
RST SPM:	M. GARIBALDI
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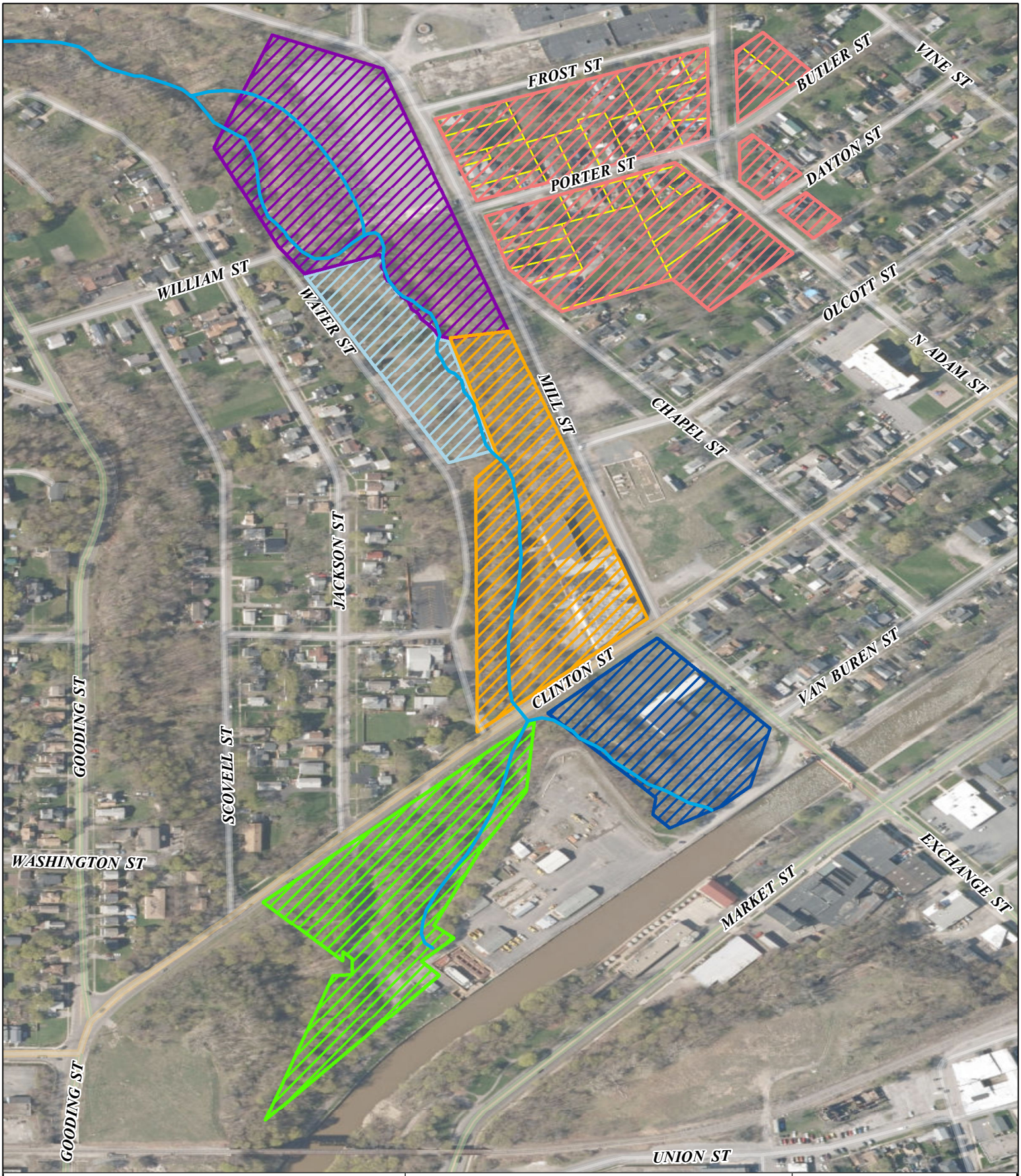

Legend

- Eighteen Mile Creek
- White Transportation
- Upson Park
- Former United Paperboard Company
- Former Flintkote Company
- Residential Remedial Investigation Area (OU4)
- Water Street Properties
- Parcel Boundary

0 0.025 0.05 0.1 0.15 0.2 Miles

N

Weston Solutions, Inc.
East Division

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc.and Sovereign Consulting, Inc

Figure 2: Eighteen Mile Creek Corridor Overview

Eighteen Mile Creek Site
Niagara County, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 9/11/2018

GIS ANALYST:	M. MANNINO
EPA OSC:	T. KISH
RST SPM:	M. GARIBALDI
FILENAME:	180517_EMC_CORRIDOR.MXD

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APPENDIX II

TABLES

Table 1
Summary of Chemicals of Concern and Medium-Specific Exposure Point Concentrations

Scenario Timeframe:	Current/Future
Medium:	Soil
Soil Exposure Medium:	0 to 2 ft bgs

Exposure Point	Chemicals of Concern	Concentration Detected	Concentration units	Frequency of Detection	Exposure Point Concentration (Average)	EPC Units	Statistical Measure
Property P002	Lead	198-414	mg/kg	100%	200.2	mg/kg	Arithmetic Mean
Property P003	Lead	126-1030	mg/kg	100%	430.8	mg/kg	Arithmetic Mean
Property P004	Lead	29-1040	mg/kg	100%	297.4	mg/kg	Arithmetic Mean
Property P005	Lead	15.7-910	mg/kg	100%	318.2	mg/kg	Arithmetic Mean
Property P021	Lead	80-836	mg/kg	100%	303.3	mg/kg	Arithmetic Mean
Property P022	Lead	41-1340	mg/kg	100%	310.8	mg/kg	Arithmetic Mean
Property P023	Lead	34.5-430	mg/kg	100%	148.7	mg/kg	Arithmetic Mean
Property P024	Lead	18.9-731	mg/kg	100%	322.4	mg/kg	Arithmetic Mean
Property P025	Lead	66-591	mg/kg	100%	294	mg/kg	Arithmetic Mean
Property P026	Lead	70.9-1180	mg/kg	100%	361.1	mg/kg	Arithmetic Mean
Property P027	Lead	73.6-482	mg/kg	100%	274.2	mg/kg	Arithmetic Mean
Property P028	Lead	166-622	mg/kg	100%	334	mg/kg	Arithmetic Mean
Property P029	Lead	144-517.5	mg/kg	100%	241.85	mg/kg	Arithmetic Mean
Property P030	Lead	37-1400	mg/kg	100%	331	mg/kg	Arithmetic Mean
Property P031	Lead	195-883	mg/kg	100%	421.4	mg/kg	Arithmetic Mean
Property P032	Lead	112-705	mg/kg	100%	394.7	mg/kg	Arithmetic Mean
Property P033	Lead	13.6-457	mg/kg	100%	169.4	mg/kg	Arithmetic Mean
Property P034	Lead	154-455	mg/kg	100%	296.1	mg/kg	Arithmetic Mean
Property P035	Lead	201-395	mg/kg	100%	292.7	mg/kg	Arithmetic Mean
Property P036	Lead	291-415	mg/kg	100%	317.2	mg/kg	Arithmetic Mean
Property P037	Lead	37.1-879	mg/kg	100%	260.8	mg/kg	Arithmetic Mean
Property P038	Lead	147-1450	mg/kg	100%	597.7	mg/kg	Arithmetic Mean
Property P039	Lead	114-816	mg/kg	100%	394.6	mg/kg	Arithmetic Mean
Property P040	Lead	277-1530	mg/kg	100%	732.1	mg/kg	Arithmetic Mean
Property P041	Lead	169-482	mg/kg	100%	285.6	mg/kg	Arithmetic Mean
Property P042	Lead	95.8-574	mg/kg	100%	269.6	mg/kg	Arithmetic Mean
Property P043	Lead	34.9-366	mg/kg	100%	160.9	mg/kg	Arithmetic Mean
Property P044	Lead	20-188	mg/kg	100%	92.1	mg/kg	Arithmetic Mean
Property P045	Lead	108-1120	mg/kg	100%	495.0	mg/kg	Arithmetic Mean
Property P046	Lead	84.4-624	mg/kg	100%	372	mg/kg	Arithmetic Mean
Property P047	Lead	39.4-308	mg/kg	100%	167	mg/kg	Arithmetic Mean

Definitions:

COC = Contaminant of concern

EPC = Exposure point concentration

ft bgs = Feet below ground surface

mg/kg = Milligrams per kilogram

Table 2
Selection of Exposure Pathways

Scenario Timeframe	Media	Exposure Medium	Exposure Point	Receptor Population	Receptor (Age)	Exposure Route	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future	Soil	Surface Soil	Residence	Resident	Child (1 to 6 years)	Dermal	Residents may come into contact with contaminants in surface soil via dermal contact.
						Ingestion	Residents may come into contact with contaminants in surface soil via ingestion.
						Inhalation	Residents may come into contact with contaminants in surface soil via inhalation of particulates.

Table 3
Noncancer Toxicity Values

Chemicals of Concern	Chronic/ Subchronic	Oral RfD Value	Oral RfD Units	Absorp. Efficiency (Dermal)	Adjusted RfD for Dermal	Adj. Dermal RfD Units	Primary Target Organ	Combined Uncertainty /Modifying Factors	Sources of RfD Target Organ	Dates of RfD
Pathway: Ingestion/Dermal										
Lead	Chronic	NA	mg/kg-day	NA	NA	mg/kg-day	See IEUBK*	NA	IEUBK	NA

Pathway Inhalation

Chemicals of Concern	Chronic/ Subchronic	Inhalation RfC Value	Inhalation RfC Units	Primary Target Organ	Combined Uncertainty /Modifying Factors	Sources of RfD Target Organ	Dates of RfC
Lead	Chronic	NA	mg/m3	NA	NA	See IEUBK*	NA

Footnotes:
(*) - Noncancer toxicity information is not provided since the assessment evaluated exposures to lead that utilizes the IEUBK model to evaluate toxicity. The Table is provided consistent with the ROD guidance.

Table 4
Cancer Toxicity Values

Chemicals of Concern	Oral Cancer Slope Factor	Oral Cancer Slope Factor Units	Adjusted Cancer Slope Factor for Dermal	Slope Factor Units	Weight of Evidence (Cancer Guidelines)	Source	Date
Pathway: Ingestion/Dermal							
Lead	NA	$(mg/kg\text{-}day)_1$	NA	$(mg/kg\text{-}day)_1$	**B2**	IRIS	11/1/1993

Pathway Inhalation

Chemicals of Concern	Unit Risks	Inhalation RfC Units	Inhalation Cancer Slope Factor	Slope Factor Units	Weight of Evidence (Cancer Guidelines)	Source	Date
Lead	NA	$(ug/m3)_1$	NA	NA	NA	NA	NA

Footnotes:

1. Risks and hazards from lead exposure are not evaluated in the same manner as the other contaminants; See Table 7 for the summary of risks resulting from lead exposure.

Definitions:
IRIS = Integrated Risk Information System
NA = not applicable
(mg/kg-day)-1 = Per milligram per kilogram per day

EPA Weight of Evidence (EPA, 1986):
B2 = Probable Human Carcinogen - based on sufficient evidence of carcinogenicity in animals and inadequate or no evidence in humans

Table 5 - Cancer Toxicity Values - Oral/Dermal Cancer Slope Factors
Table 6 - Cancer Toxicity Values - Inhalation Risk Factors

Table 5 and 6 typically summarize cancer risks and noncancer hazards, however, these values are not provided because the Chemical of Concern for the OU is lead. Consistent with guidance, lead is evaluated based on the application of the Integrated Exposure Uptake and Biokinetic Model (IEUBK), and the associated estimates of the percentage of children with blood lead levels greater than 5% of the population are provided in Table 7.

Table 7 provides results of the IEUBK analysis for lead. The model documentation provides details regarding the assumptions, and underlying toxicokinetics used in the model.

Table 7
Risk Characterization Summary - Lead Medium-Specific Exposure Point Concentration and Resultant Hazards

Scenario Timeframe: Current/Future
Receptor Population: Resident (Child)

Exposure Area	Exposure Media	Lead Exposure Point Concentration[1] (EPC)	EPC Units	Geometric Mean Blood Lead Level (ug/dL) [2]	Lead Risk [2,3]
Property P002	Surface Soil (0-2 ft bgs)	200.2	mg/kg	2.9	12
Property P003	Surface Soil (0-2 ft bgs)	430.8	mg/kg	5	50.3
Property P004	Surface Soil (0-2 ft bgs)	297.4	mg/kg	3.8	28.1
Property P005	Surface Soil (0-2 ft bgs)	318.2	mg/kg	4	31.7
Property P021	Surface Soil (0-2 ft bgs)	303.3	mg/kg	3.9	29.1
Property P022	Surface Soil (0-2 ft bgs)	310.8	mg/kg	4.6	43.6
Property P023	Surface Soil (0-2 ft bgs)	148.7	mg/kg	2.4	5.6
Property P024	Surface Soil (0-2 ft bgs)	322.4	mg/kg	4	32.5
Property P025	Surface Soil (0-2 ft bgs)	294	mg/kg	3.8	27.5
Property P026	Surface Soil (0-2 ft bgs)	361.1	mg/kg	4.4	39.2
Property P027	Surface Soil (0-2 ft bgs)	274.2	mg/kg	3.4	20.4
Property P028	Surface Soil (0-2 ft bgs)	334	mg/kg	4.1	34.5
Property P029	Surface Soil (0-2 ft bgs)	241.85	mg/kg	3.3	18.5
Property P030	Surface Soil (0-2 ft bgs)	331	mg/kg	4.1	34
Property P031	Surface Soil (0-2 ft bgs)	421.4	mg/kg	4.9	48.9
Property P032	Surface Soil (0-2 ft bgs)	394.7	mg/kg	4.7	44.7
Property P033	Surface Soil (0-2 ft bgs)	169.4	mg/kg	2.6	7.9
Property P034	Surface Soil (0-2 ft bgs)	296.1	mg/kg	3.8	27.8
Property P035	Surface Soil (0-2 ft bgs)	292.7	mg/kg	3.8	27.3
Property P036	Surface Soil (0-2 ft bgs)	317.2	mg/kg	4	31.6
Property P037	Surface Soil (0-2 ft bgs)	260.8	mg/kg	3.5	21.7
Property P038	Surface Soil (0-2 ft bgs)	597.7	mg/kg	6.5	70.7
Property P039	Surface Soil (0-2 ft bgs)	394.6	mg/kg	4.7	44.7
Property P040	Surface Soil (0-2 ft bgs)	732.1	mg/kg	7.5	80.9
Property P041	Surface Soil (0-2 ft bgs)	285.6	mg/kg	3.7	25.9
Property P042	Surface Soil (0-2 ft bgs)	269.6	mg/kg	3.5	23.2
Property P043	Surface Soil (0-2 ft bgs)	160.9	mg/kg	2.5	6.9
Property P044	Surface Soil (0-2 ft bgs)	92.1	mg/kg	1.8	1.5
Property P045	Surface Soil (0-2 ft bgs)	495.0	mg/kg	5.6	59.3
Property P046	Surface Soil (0-2 ft bgs)	372	mg/kg	4.5	41
Property P047	Surface Soil (0-2 ft bgs)	167	mg/kg	2.5	7.6

1. The concentrations provided represent a mean concentration for all data collected on the property.
2. Geometric Mean Blood Lead Level (ug/dL) was developed using the Integrated Exposure Uptake Biokinetic Model.
3. The lead risk level was developed based on the output from the Integrated Exposure Uptake Biokinetic Model output for ages 12 months to 72 months.

Table 8: Cost Estimate Summary for the Selected Remedy

Alternative 3: Excavation and Off-Site Disposal		
Description	Unit Information	Project Cost
Work Plan and Supporting Documents (HASP, SAP, QAPP)		$27,400
Site Preparation		
Mobilization/Demobilization		$57,500
Health & Safety Field Requirements	150 days @ 900	$135,000
Community Air Monitoring		$35,000
Decontamination Pad		$3,300
Surveying		$64,500
Traffic Control		$22,800
Erosion Controls		$40,000
Utility Clearance		$7,500
Site Clearing		
Cut/Chip/Grub		$40,000
Remove/Replace Existing Temporary Structures		$150,500
Soil Removal		
Soil Excavation	$50 per cubic yard	$716,750
Verification Sampling	344 samples (Lead @ $120 each)	$41,280
Disposal Sampling	1 sample per 1,000 cubic yard @ $300	$4,500
Transport to Disposal Facility (non-haz)	$52 per ton (18,386 tons)	$956,072
Transport to Disposal Facility (haz)	$52 per ton (250 tons)	$13,000
Disposal at Disposal Facility (non-haz)	$50 per ton (18,386)	$919,300
Disposal to Disposal Facility (haz)	$125 per ton (250 tons)	$31,250
Backfill and Site Restoration (of Excavated Areas)		
Fill	15,530 @ $11/ton	$170,830
Topsoil	3,106 tons @ $27/ton	$83,862
Plantings		$116,100
Haul/Spread/Compact Fill	$16 LCY	$290,188
Finish Grading & Hydroseeding	163, 231 sq. ft @ 0.54	$88,145
Restoration of asphalt/paved areas		$172,000
O&M: Watering and Maintenance (Seeding & Plantings)	Twice weekly for 1 month	$3,500
Temporary Relocation (if necessary)		$105,030
Capital Cost Subtotal		$4,295,307
25% legal, administrative, engineering, construction management		$1,073,826
25% Contingencies		$1,342,283
Total Capital Cost		$6,711,416
Total Present Worth Cost		$6,711,416

Table 9: Chemical Specific Applicable or Relevant and Appropriate Requirements (ARARs), To-Be-Considered, and Other Guidance		
ARAR Identification	Citation	Requirement Synopsis
Environmental Conservation Law, Articles 1, 3, 27, and 52; Administrative Procedures Act, Articles 301 and 305.	6 NYCRR 375	Provides soil cleanup objectives
Clean Air Act	National Ambient Air Quality Standards 40 CFR § 50.16 Establishes emission limits for six pollutants (SO2, PM10, CO, O3, NO2, and Pb). National primary and secondary ambient are quality standards for lead: 0.15 µg/m3, arithmetic mean concentration over a 3-month period	

Table 10: Location Specific Applicable or Relevant and Appropriate Requirements (ARARs), To-Be-Considered, and Other Guidance		
ARAR Identification	Citation	Requirement Synopsis
No Location-Specific ARARs, TBC, and Other Guidance Identified		

Table 11: Action Specific Applicable or Relevant and Appropriate Requirements (ARARs), To-Be-Considered, and Other Guidance		
ARAR Identification	Citation	Requirement Synopsis
General Requirements for Site Remediation		
RCRA Identification and Listing of Hazardous Wastes	42 U.S.C. §6925; 40 CFR Part 261 6NYCRR 371	Describes methods for identifying hazardous wastes and lists known hazardous wastes.
RCRA Standards Applicable to Generators of Hazardous Wastes	42 U.S.C.§§ 6906, 6912, 6922-6925, 6937, and 6938; 40 CFR Part 262	Describes standards applicable to generators of hazardous wastes.
RCRA—Standards for Owners/Operators of Treatment, Storage, and Disposal Facilities	42 U.S.C. §§6905, 6912(a), 6924, and 6925; 40 CFR Part 264	This regulation lists general facility requirements including general waste analysis, security measures, inspections, and training requirements.
New York Hazardous Waste Management System – General	6 NYCRR Part 370	This regulation provides definition of terms and general standards applicable to hazardous wastes management system.
New York Solid Waste Management Regulations	Part 360	This regulation provides requirements for solid waste management facilities
New York Identification and Listing of Hazardous Waste	ECL, Article 27; 6 NYCRR Part 370	Outlines criteria for determining if a solid waste is a hazardous waste and is subject to regulation under 6 NYCRR Parts 371- 376.
New York State Vehicle and Traffic Law, Article 386; Environmental Conservation Laws Articles 3 and 19	6 NYCRR 450	Defines maximum acceptable noise levels from heavy motor vehicles
Waste Transportation		
Hazardous Materials Transportation Regulations	49 CFR Parts 107, 171, 172, 177 to 179)	This regulation outlines procedures for the packaging, labeling, manifesting, and transporting hazardous materials.
RCRA Standards Applicable to Transporters of Hazardous Waste	42 U.S.C.§§ 6906, 6912, 6922-6925, 6937, and 6938; 40 CFR Part 263	Establishes the responsibility of off-site transporters of hazardous waste in the handling, transportation and management of the waste. Requires manifesting, recordkeeping and immediate action in the event of a discharge
New York Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities	6 NYCRR Part 372	Establishes record keeping requirements and standards related to the manifest system for hazardous wastes.

Table 11 Continued		
New York State Waste Transporter Permit Program	6 NYCRR Part 374	Establishes permit requirements for transportations of regulated waste.
RCRA Land Disposal Restrictions	40 CFR 268	This regulation identifies hazardous wastes restricted for land disposal and provides treatment standards for land disposal.
New York Standards for Universal Waste (6 NYCRR Part 374-3) and Land Disposal Restrictions (6 NYCRR Part 376)	ECL, Article 27; 6 NYCRR Part 374-3 6 NYCRR Part 376	These regulations establish standards for treatment and disposal of hazardous wastes.
Permitting Requirements for Hazardous Waste Treatment, Storage, and Disposal Facilities	40 CFR 264 6 NYCRR 373	Establishes the minimum standards that define acceptable management (treatment, storage, and disposal) of hazardous waste.
Air Pollution Control		
Clean Air Act (CAA)—National Ambient Air Quality Standards (NAAQs)	40 CFR 50	These provide air quality standards for particulate matter, lead, NO2, SO2, CO, and volatile organic matter.
New York General Prohibitions	6 NYCRR Part 211	Prohibition applies to any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emissions.
New York Air Quality Standards	DER-10 6 NYCRR Part 257	This regulation requires that maximum 24-hour concentrations for particulate matter not be exceeded more than once per year. Fugitive dust emissions from site excavation activities must be maintained below 250 micrograms per cubic meter (µg/m3).

APPENDIX III

ADMINISTRATIVE RECORD INDEX

ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/25/2018 **REGION ID: 02**

Site Name: EIGHTEENMILE CREEK
CERCLIS ID: NYN000206456
OUID: 04
SSID: A269
Action:

DocID:	Doc Date:	Title:	Image Count:	Doc Type:	Addressee Name/Organization:	Author Name/Organization:
538304	9/25/2018	ADMINISTRATIVE RECORD INDEX FOR OU4 FOR THE EIGHTEENMILE CREEK SITE	1	Administrative Record Index		(US ENVIRONMENTAL PROTECTION AGENCY)
547588	07/18/2013	FINAL DESA SAMPLING DATA - SAMPLING DATE: 06/04/2013 FOR THE EIGHTEENMILE CREEK SITE	18	Report	KISH,TERRY (US ENVIRONMENTAL PROTECTION AGENCY)	BOURBON,JOHN (US ENVIRONMENTAL PROTECTION AGENCY)
547589	11/29/2016	FINAL DESA SAMPLING REPORT - SAMPLING DATE: 10/19/2016 FOR THE EIGHTEENMILE CREEK SITE	16	Report	KISH,TERRY (US ENVIRONMENTAL PROTECTION AGENCY)	BOURBON,JOHN (US ENVIRONMENTAL PROTECTION AGENCY)
538098	04/30/2018	COMMUNITY INVOLVEMENT PLAN FOR THE EIGHTEENMILE CREEK SITE	39	Work Plan	(US ARMY CORPS OF ENGINEERS)|(US ENVIRONMENTAL PROTECTION AGENCY)	(ECOLOGY AND ENVIRONMENT INCORPORATED)
538300	07/26/2018	REMEDIAL INVESTIGATION REPORT FOR OU4 FOR THE EIGHTEENMILE CREEK SITE	22	Report		(US ENVIRONMENTAL PROTECTION AGENCY)
538301	07/26/2018	REMEDIAL INVESTIGATION REPORT FOR OU4 - APPENDICES A THROUGH G FOR THE EIGHTEENMILE CREEK SITE	1374	Report		(US ENVIRONMENTAL PROTECTION AGENCY)
538302	07/26/2018	REMEDIAL INVESTIGATION REPORT FOR OU4 - APPENDIX H - AERIAL PHOTOGRAPHS FOR THE EIGHTEENMILE CREEK SITE	17	Report		(US ENVIRONMENTAL PROTECTION AGENCY)
538331	07/26/2018	FOCUSED FEASIBILITY STUDY FOR OU4 FOR THE EIGHTEENMILE CREEK SITE	32	Report		(US ENVIRONMENTAL PROTECTION AGENCY)
538280	07/26/2018	PROPOSED PLAN FOR OU4 FOR THE EIGHTEENMILE CREEK SITE	12	Publication		(US ENVIRONMENTAL PROTECTION AGENCY)
538494	9/18/2018	REMEDIAL INVESTIGATION REPORT ADDENDUM FOR OU4 FOR THE EIGHTEENMILE CREEK SITE	212	Report		(US ENVIRONMENTAL PROTECTION AGENCY)

APPENDIX IV

STATE LETTER OF CONCURRENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

SENT VIA EMAIL ONLY

September 26, 2018

Mr. John Prince, Acting Director
Emergency and Remedial Response Division
United States Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

RE: Eighteen Mile Creek Superfund Site, Site No. 932121
Record of Decision – OU4
New York State Concurrence

Dear Mr. Prince:

The New York State Department of Environmental Conservation (NYSDEC) and Department of Health (NYSDOH) have reviewed the Record of Decision (dated September 2018). We understand the selected remedy for this site addresses contaminated soil at EPA Operable Unit 4 (NYSDEC Operable Unit 08). The remedy includes:

- Excavation of approximately 14,000 cubic yards of lead-contaminated soil from approximately 28 properties in the vicinity of the Flintkote property;
- Transportation of the contaminated soil offsite for disposal, with treatment as necessary;
- Backfilling of the excavated areas with clean fill;
- Restoration of the affected properties; and
- Where necessary, the potential to offer short-term temporary relocation of residents during the cleanup of their properties, if excavation activities significantly impact their ability to access or use their properties.

Based on this information, we concur with the proposed plan for remediation of the Eighteen Mile Creek Superfund Site, EPA Operable Unit 4.

If you have any questions or need additional information, please contact Mr. Glenn M. May at (716) 851-7220.

Sincerely,

Michael Ryan, P.E.
Director
Division of Environmental Remediation

ec: J. Prince, USEPA, Region 2, (prince.john@epa.gov)
P. Mannino, USEPA, Region 2 (mannino. pietro@epa.gov)
J. Kondrk, USEPA, Region 2 (kondrk.jaclyn@epa.gov)
C. Bethoney, NYSDOH (charlotte.bethoney@health.ny.gov)
M. Cruden, NYSDEC (michael.cruden@dec.ny.gov)
S. Radon, NYSDEC (stanley.radon@dec.ny.gov)
G. May, NYSDEC, Region 9 (glenn.may@dec.ny.gov)
S. Moeller, NYSDEC, Region 9 (steven.moeller@dec.ny.gov)

EIGHTEEN MILE CREEK SUPERFUND SITE

Operable Unit 4

RECORD OF DECISION

APPENDIX V

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
FOR THE
RECORD OF DECISION
EIGHTEEN MILE CREEK SUPERFUND SITE
OPERABLE UNIT 4
Lockport, New York

INTRODUCTION

This Responsiveness Summary provides a summary of the significant comments and concerns submitted by the public on the U.S. Environmental Protection Agency's (EPA) August 2018 Proposed Plan for the Eighteen Mile Creek Superfund Site (Site), Operable Unit 4 (OU4), and the EPA's responses to those comments and concerns. All comments summarized in this document have been considered in EPA's final decision in the selection of a remedy for OU4 at the Site.

SUMMARY OF COMMUNITY RELATIONS ACTIVITIES

The Proposed Plan for OU4 was released to the public on July 27, 2018, along with the OU4 Remedial Investigation (RI) Report, the Focused Feasibility Study, and the Human Health Risk Assessment (HHRA). These documents were made available to the public at information repositories maintained at the Lockport Public Library, located at 23 East Avenue, Lockport, New York, the Newfane Public Library at 2761 Maple Avenue in Newfane, New York, the EPA Region 2 Office in New York City, New York, and on EPA's website for the Eighteen Mile Creek Site at https://www.epa.gov/superfund/eighteenmile-creek.

On July 27, 2018, EPA published a notice in the *Lockport Union Sun and Journal* informing the public of the commencement of the public comment period for the Proposed Plan, the upcoming public meeting on August 16, 2018, a description of the preferred alternatives, contact information for EPA personnel, and the availability of the above-referenced documents. The public comment period ran from July 28, 2018 to August 27, 2018. EPA held a public meeting on August 16, 2018 at 7:00 P.M. at the 4-H Training Center, Niagara County Fairgrounds at 4487 Lake Avenue, Lockport, New York, to inform officials and those interested community members about the Superfund process, to present the Proposed Plan for OU4 at the Site, including an overview of the results of the RI, an explanation of the remedial alternatives and the preferred alternatives, and to respond to questions and comments from the attendees. Responses to the questions and comments received at the public meeting and in writing during the public comment period are included in this Responsiveness Summary.

SUMMARY OF COMMENTS AND EPA RESPONSES

Comments and/or questions were received at the public meeting; five written comments were received during the comment period from July 28, 2018 to August 27, 2018. Although an additional comment was received outside of the public comment period, it is included in this responsiveness summary and was considered by EPA. Copies of the comment letters are provided

in Attachment E of this Responsiveness Summary. A summary of significant comments provided at the public meeting and in writing, as well as EPA's responses to them, are provided below. The comments and responses have been organized into the following topics:

- **Human Health Issues**
- **Site Cleanup**
- **Nature and Extent of Contamination**
- **Other Issues**

HUMAN HEALTH ISSUES

Comment #1: *Several people were concerned about potential health risks from exposure to contaminated soil at the residential properties and the timeliness of cleanup.*

EPA Response to Comment #1: EPA has provided the sampling results to the homeowners along with recommendations to avoid disturbing the soil to reduce potential exposure before remedial action can begin. The recommendations are consistent with those provided by other public health agencies regarding how to reduce exposures to lead. The soil contamination does not present a risk to visitors to the properties or to those living in the vicinity of these properties. For sites with immediate health risks, EPA utilizes its Removal Program, which has the authority to remove hazardous waste in emergency situations. The concentrations of lead found at the OU4 properties to date have not warranted a time critical removal action by EPA.

Comment #2: *Several people expressed their concern about cancer rates and other health issues in their community and whether there was a link to the Site. Requests were made for a comprehensive health study, along with individual health testing.*

EPA Response to Comment #2: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), commonly known as the "Superfund" Act, provides the Congressional mandate to clean up abandoned and inactive hazardous waste sites and to provide federal assistance in toxic emergencies. Under CERCLA, EPA performs risk assessments based on potential current and future exposures at Superfund Sites in order to make decisions about the Site. EPA does not have the authority to conduct public health studies related to previous exposures. Risk assessments are different from public health assessments in that risk assessments use statistical and biological models to calculate the probability that adverse health effects will result from exposures to environmental hazards.

The Agency for Toxic Substances and Disease Registry (ATSDR) implements the health-related sections of laws that protect the public from hazardous wastes and environmental spills of hazardous substances. As the lead Agency for implementing the health-related provisions of CERCLA, ATSDR is charged with assessing the presence and nature of health hazards at specific Superfund sites, to help prevent or reduce further exposure and the potential illnesses that result from such exposures, and to expand the knowledge base about health effects from exposure to hazardous substances.

ATSDR, and the State Health Departments, such as the New York State Department of Health (NYSDOH), are responsible for evaluating the need for studies of human disease in a community. It is recommended that individuals contact the New York State Department of Health to discuss concerns regarding the need for a study. The webpage with additional information on these studies and data for New York State is available at: https://www.health.ny.gov/statistics/.

For concerns about cancer in communities, call 1-518-473-7817 or email nyscr@health.ny.gov. For questions about lead and other environmental health issues, contact the Bureau of Environmental Exposure Investigation at 1-518-402-7860, or email BEEI@health.ny.gov.

Comment #3: *An individual inquired as to whether the Niagara County Health Department was aware of the lead contamination at the Site and how the county is involved.*

EPA Response to Comment #3: The Niagara County Department of Health (NCDOH) is aware of the lead contamination at the Site. The Niagara County Department of Health has a grant-funded program called the Childhood Lead Poisoning Prevention Program. The program goals include: assuring all children under the age of six have been tested for lead poisoning, minimizing the risk of childhood lead exposure through education, providing information on medical evaluation and follow up, and identifying, controlling, and/or safely removing lead hazards in the child's environment. Services include lead testing and reviewing results, among other services. For more information about lead poisoning or to schedule an appointment to have your child tested, call the Niagara County Department of Health Lead Poisoning Prevention Program at (716) 278-1900. For additional information, visit http://www.niagaracounty.com/health/Services/Nursing-Division/Lead-Poisoning-Prevention.

Comment #4: *An individual expressed their concern about lead contamination in soil potentially penetrating drinking water pipes and contaminating their drinking water. The individual also inquired about drinking water quality testing.*

EPA Response to Comment #4: The lead contamination in soil is not expected to impact the residents' drinking water since the results of the soil sampling conducted at OU4 showed generally shallow lead contamination (the top two feet), whereas drinking water supply lines are generally installed at deeper depths. Municipal drinking water quality reports can be found at: http://www.niagaracounty.com/Departments/Water-District.

Comment #5: *Several people raised concerns about gardening at properties affected by lead contamination and whether they could eat vegetables grown in their garden.*

EPA Response to Comment #5: EPA recommended that residents in OU4 avoid gardening because it could disturb potentially contaminated soil. Gardening could also increase the potential for exposure to lead through the ingestion of contaminated soil. It is recommended that gardens be constructed in raised garden beds. However, if any residents decide to maintain a garden in native soil, it is advised that fruit and vegetables are washed thoroughly to fully remove all soil residue to avoid ingestion of potentially lead-contaminated soil. In general, studies have found that risk from consuming vegetables grown in heavy-metal contaminated soil is less than the risk from incidental ingestion of the contaminated soil itself.

Comment #6: *A group of individuals expressed their concern that the Human Health Risk Assessment for OU4 indicated there is a risk at OU4 of the Site.*

EPA Response to Comment #6: EPA has acknowledged that there is a risk at OU4 and believes the selected remedy will address these risks by removing the contaminated material thereby eliminating the potential for exposure. The risk assessment is a necessary step in determining a site's eligibility for receiving federal cleanup dollars.

Comment #7: *A group of individuals commented that the results of the Human Health Risk Assessment showed that the exposure to PCBs and antimony in surface soil is within EPA's target risk range for the exposure areas.*

EPA Response to Comment #7: The information presented in the Human Health Risk Assessment is used to support decisions for remedial action based on EPA's guidance related to conducting lead assessments. The results for the other contaminants are within the risk range for cancer established under the National Contingency Plan (NCP) regulation and below the goal of protection of a Hazard Index = 1 for noncancer. Based on the NCP, further remediation because of these contaminants (e.g. PCBs and antimony) is not warranted.

SITE CLEANUP

EPA Comment #8: *An individual asked how the remediation would take place and whether the properties would be restored, specifically with respect to plantings and fences.*

EPA Response to Comment #8: The contaminated soil with concentrations of lead above EPA's remediation goal will be excavated and replaced with clean backfill. Once excvation and backfill activities have been completed the properties will be restored, including plantings and fences.

Comment #9: *An indidivual inquired if EPA is waiting to start the remediation process until all of the additonal sampling is completed. Another commenter inquired whether EPA had a timeline for when the remediation would begin.*

EPA Response to Comment #9: EPA will be performing additional sampling to delineate the extent of contamination during the remedial design phase of the project. This work is not expected to impact the start of the remediaton process. The remedial design phase is expected to commence following issuance of this Record of Decision, and is expected to take one year. If funds are available for construction of the remedy, the remedy could be implemented shortly after completion of the remedial design. However, because there are not currently sufficient construction funds for all sites that are under construction or ready for construction, there may be some delay between the completion of the design and the start of construction. EPA has established a National Risk-Based Priority Panel of program experts to evaluate the risk at National Priorities List sites with respect to human health and the environment and prioritize funding for those sites. The Agency uses these evaluations to establish funding priorities for all new cleanup construction projects in the Superfund program. This national approach is intended as a way for each Region to list its priority projects and rank these projects against priority projects from other Regions,

ensuring that limited resources are allocated to the projects posing the most risk to human health and the environment.

Comment #10: *An individual raised concerns about the potential for dust in the street to potentially contain lead, and that the municipal street sweeper would cause it to become airborne. There was concern with regards to whether the municipality should cease street sweeping activities in the OU4 area.*

EPA Response to Comment #10: EPA does not anticpate there to be lead contamination in dirt that may be on the streets within the OU4 area. The lead contamination is located in the soil at the properties. It is not necessary for the municipality to cease street sweeping activities.

Comment #11: *A homeowner requested that their entire yard be removed instead of only partially removed.*

EPA Response to Comment #11: EPA anticipates conducting additional soil sampling during the remedial design at each of the properties requiring remediation. The soil sampling results will be used to determine the excavation boundary to meet the Remedation Goal as specified in Section 8 of this Record of Decision.

NATURE AND EXTENT OF CONTAMINATION

Comment #12: *Several individuals requested sampling at additional residential properties in other areas.*

EPA Response to Comment #12: EPA performed a forensic evaluation of the soil chemical profile at the Site, which showed the contamination at the OU4 residential properties is related to the Flintkote property. Therefore, EPA began sampling adjacent to the Flintkote property and continued sampling in phases based on the results of each sampling event. As indicated in the Proposed Plan, sampling of additional nearby properties will be conducted during the design and/or implementation of the selected remedy. Homeowners will be contacted directly if EPA determines sampling is necessary at their property.

Comment #13: *A group of individuals commented on the accuracy of the sampling data from previous sampling in 2013 provided in the OU4 Proposed Plan, and inquired why an action was not taken by EPA at that time.*

EPA Response to Comment #13: The information in the Proposed Plan is accurate. As described in the "Previous Investigations" section of the Proposed Plan, the March 2013 sampling was an initial screening, which revealed concentrations ranging from 420 parts per million (ppm) to 470 ppm. The June 2013 sampling event revealed lead concentrations exceeding 400 ppm, as mentioned in the Proposed Plan. While the Proposed Plan did not identify the maximum concentration of lead detected in soil across the two homes sampled during the June 2013 sampling event, the maximum lead concentration of 1,800 ppm for the June 2013 sampling event is identified in the "Results of EPA's OU4 Remedial Investigation" section in this Record of Decision. EPA communicated directly with the homeowner to share this data along with

recommendations to reduce potential exposure, while indicating there was a need for further evaluation of the soil sampling results.

Comment #14: *A group of individuals expressed their concern as to why a basement at a particular property was not sampled as part of this sampling effort.*

EPA Response to Comment #14: As indicated in EPA's Conceptual Site Model as part of the RI for the OU4 area, the homes in the OU4 area are believed to have been built before the contaminated material was deposited at the residential properties. Therefore, EPA has determined it is not necessary to investigate the basements of the residential structures.

Comment #15: *An individual expressed concern regarding the maintenance of the Eighteen Mile Creek and the potential for debris to cause flooding onto adjacent properties.*

EPA Response to Comment #15: EPA is not responsible for the removal of vegetative debris along Eighteen Mile Creek. However, as a result of the concerns raised by the homeowner, EPA discussed the issue with the New York State Electric and Gas (NYSEG) company and it is EPA's understanding that NYSEG is working to remove the vegetative debris from the Creek identified by the homeowner at this particular property. The downstream area of the Eighteen Mile Creek, designated as OU3, is currently under investigation, and EPA, as part of the investigation, will evaluate potential impacts from flooding.

OTHER ISSUES

Comment #16: *Several people expressed their concern about the potential impact of the cleanup on their property values.*

EPA Response to Comment #16: The Superfund program's primary objective is the protection of human health and the environment. The effect of the cleanup on property values is unknown. While there may be short-term impacts during implementation of the selected remedy, in the long-term, site-related contamination that presents an unacceptable risk will be removed and the properties will be restored. EPA has data that support significant economic development in communities once cleanups are completed: https://www.epa.gov/superfund/superfund-remedial-annual-accomplishments.

Comment #17: *Multiple commenters expressed their support of the selected remedy, noting they believe it is the most comprehensive and logical option.*

EPA Response to Comment #17: Comments noted.

Comment #18: *Numerous people raised a concern regarding a letter issued by the New York State Department of Conservation (NYSDEC), dated May 28, 2008, to residents living near the Eighteen Mile Creek Site. Some residents interpreted the letter to state that contamination was present on their property, and inquired as to why EPA was not sampling these properties.*

EPA Response to Comment #18: NYS regulations require that when a site is listed on the NYS Registry of Inactive Hazardous Waste Sites that a contact list be developed that includes: property

owners that are adjacent to the site, the chief executive officer of the city, town or village, and the public water supplier in the area in which the site is located. The sole purpose of this letter is to provide notice to these interested parties that the Eighteen Mile Creek Site was listed as a Class 2 Site on the New York State Registry of Inactive Hazardous Waste Disposal Sites. The NYSDEC letter explicitly states that the only residential properties with a Class 2 designation are those residential properties on Water Street which EPA is addressing as part of OU1.

EPA will not be sampling all properties that received a copy of the NYSDEC's May 28, 2008 letter. The selected remedy for this ROD and future EPA response actions will only address contaminated properties which contain Site-related contaminated fill material, are a source of contamination to the Creek, or are contaminated by the Creek. Only the properties which are considered by the EPA to be potentially impacted by the site will be sampled.

Comment #19: *An individual commented on the cost effectiveness of the Operable Unit 1 (OU1) remedy to demolish the residential structures on Water Street. Another commenter inquired as to why one particular property located at 90 Water Street was not included in the OU1 remedy.*

EPA Response to Comment #19: EPA's OU1 addresses the risks associated with the residential soil contamination at nine residential properties located on Water Street. In September 2013, EPA issued a ROD for OU1. As part of EPA's selected remedy, residents at six properties on Water Street were permanently relocated. Following the relocation of the residents, the structures at the OU1 properties were demolished. Permanent relocation addressed the uncertainty as to whether the soil cleanup could be performed effectively without the prior demolition of the residential structures.

Based on results from soil samples the EPA collected at 90 Water Street in October 2014, EPA performed a Removal Action and addressed the contaminated soil at the property through excavation and disposal off-Site at an approved facility. Unlike the properties that were acquired as part of OU1, this property is not expected to be subject to flooding and, thus, is not expected to be re-contaminated by the Creek. Further, EPA performed a Removal Action to remove the contaminated soil at that property without having to demolish the structure. Therefore, acquisition of the property at 90 Water Street was not necessary.

As indicated in the OU1 ROD, the portion of the remedy involving the soil excavation at the nine OU1 residential properties will be performed during cleanup of the sediments in the Creek Corridor to prevent the sediment and soil in the Creek from recontaminating the above-referenced residential properties.

Comment #20: *A group of individuals expressed their interest in requesting assistance in reviewing technical information through EPA's Technical Assistance Service for Communities (TASC) Program.*

EPA Response to Comment #20: EPA relies on community comments to understand local priorities and concerns during cleanup decision-making. Providing independent technical assistance to communities helps people better understand technical issues related to a cleanup and key considerations for a site's future use. With this assistance, communities are then in a better position to share their concerns and priorities with EPA.

The Technical Assistance Services for Communities (TASC) program provides services through a national EPA contract. Under the contract, a contractor provides scientists, engineers and other professionals to review and explain information to communities. TASC services are determined on a project-specific basis and provided at no cost to communities.

Based on previous discussions with the community during 2013 and 2018, EPA had determined there was not significant community interest in the TASC program. If any community member is interested in additional information regarding TASC requests, contact the Region 2 TASC Coordinator, Wanda Ayala at ayala.wanda@epa.gov.

Comment #21: *A group of individuals expressed their concern about public awareness of contamination at the Site and a lack of signage.*

EPA Response to Comment #21: EPA has installed signage at the Flintkote property indicating that it is part of a Superfund site. There is also signage posted at the OU1 Residential Properties on Water Street. EPA held multiple public meetings in the community to inform residents about the contamination at the Site and cleanup activities. The Agency has also released numerous Community Fact Sheets to inform the public about the Site, which are available at the local public libraries. EPA will continue to make every effort to update the community as the process moves forward. In addition, EPA provides updates on the Site at its webpage: www.epa.gov/superfund/eighteenmile-creek

Comment #22: *An individual raised concerns about an underground storage tank at a nearby commercial property at 89 Mill Street in Lockport.*

EPA Response to Comment #22: The Liberty Asbestos Site, located at 89 Mill Street, is not part of the Eighteen Mile Creek Superfund Site. EPA utilized its Removal Program to address risks posed by the Liberty Asbestos Site, namely asbestos and asbestos-contaminated debris present at the property. The concrete foundation does not pose a human health nor environmental threat, and therefore could not be addressed under EPA's removal authority.

With respect to the the underground storage tank on the property, NYSDEC, with EPA's collaboration, removed the tank in December 2016. For further information on this matter, please contact Mary McIntosh at NYSDEC's Division of Environmental Remediation, at 716-851-7220.

Comment #23: *Several commentors expressed their concern regarding EPA's budget and whether the remediation will be funded.*

EPA Response to Comment #23: Once the ROD is issued for this action, EPA will begin the process of securing the necessary funding to perform this work. EPA anticipates funding the design of the project in 2018. With respect to construction funding, the Site would need to be prioritized along with other sites across the country for that funding as described in response to Comment #9.

Comment #24: *An individual expressed concern regarding contamination near Burt Dam, VanDeMark Chemical Inc., and Old Niagara Street. Another commenter expressed concern about the former Simonds Saw and Steel Company Site.*

EPA Response to Comment #24: The Eighteen Mile Creek Site has been divided into four separate phases, or Operable Units. The area encompassing the Burt Dam, VanDeMark Chemical

Inc., and Old Niagara Street is part of EPA's Operable Unit 3, which is currently under investigation.

The VanDeMark Chemical Company facility is being managed by NYSDEC pursuant to its authority under the Resource Conservation and Recovery Act Program (RCRA). For information related to this facility, contact Steven Moeller at NYSDEC, Division of Environmental Remediation, at 716-851-7220. EPA is coordinating closely with the NYSDEC to ensure that other sources of potential contamination to the Creek are being properly addressed and will not adversely impact the EPA's efforts to address contamination at the Eighteen Mile Creek Superfund Site. As part of its on-going investigation effort at the Site, EPA has conducted interviews with individuals with reported knowledge of disposal activities in the vicinity of the Creek.

With respect to the Guterl Steel Site (former Simonds Saw and Steel Company), this site is being addressed under the Formerly Utilized Sites Remedial Action Program (FUSRAP) by the U. S. Army Corps of Engineers (USACE). Further information regarding on-going activities is available at: http://www.lrb.usace.army.mil/Missions/HTRW/FUSRAP/GuterlSteelSite.aspx.

Comment #25: *Several people inquired as to whether the city, state, or federal government have any obligation to disclose that a property is contaminated to any potential buyers at an auction or through a private purchase.*

EPA Response to Comment #25: While EPA has certain public participation and notice requirements such as those in Section 117 of CERCLA and the NCP, EPA is not required to in some way notify prospective purchasers specifically. The EPA and NYSDEC do not monitor disclosures made in individual property transactions.

APPENDIX V

ATTACHMENT A

PROPOSED PLAN

Eighteen Mile Creek Superfund Site
Operable Unit 4
Niagara County, New York

July 2018

EPA ANNOUNCES PROPOSED PLAN

This Proposed Plan identifies the remedial alternatives considered to address contaminated soil at residential properties in the vicinity of the former Flintkote Plant (Flintkote) property at the Eighteen Mile Creek Superfund Site (Site) in the City of Lockport, New York, and identifies the preferred remedial alternative with the rationale for this preference.

This Proposed Plan was developed by the U.S. Environmental Protection Agency (EPA), the lead agency, in consultation with the New York State Department of Environmental Conservation (NYSDEC), the support agency. EPA is issuing this Proposed Plan as part of its public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also known as Superfund), as amended, and Section 300.430(f) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

The purpose of this Proposed Plan is to inform the public of EPA's preferred remedy and to solicit public comments pertaining to all of the remedial alternatives evaluated, including the preferred alternative. The preferred alternative calls for the excavation and off-Site disposal of lead-contaminated soils at certain residential properties in the vicinity of the Flintkote property.

EPA may modify the preferred alternative or select another response action presented in this Proposed Plan if public comments or additional data indicate that such a change will result in a more appropriate remedial action. The final decision regarding the selected remedy will be made after EPA has taken all public comments into consideration.

The nature and extent of soil contamination at these residential properties is described on page 3 of this proposed Plan, and in EPA's Remedial Investigation (RI) Report, dated July 2018. The remedial alternatives summarized in this plan are described in EPA's Focused Feasibility Study (FFS) Report, dated July 2018. The RI, FFS, and other Site-related documents are included in the Administrative Record file of this action, which is available at the Public Information Repositories and online (See the "Public Information Repositories" box on page 2). EPA encourages the public to review these documents to gain a more comprehensive understanding of the Site and the Superfund activities that have been conducted.

MARK YOUR CALENDAR

PUBLIC COMMENT PERIOD:

July 28, 2018 to August 27, 2018
EPA will accept written comments on the Proposed Plan during the public comment period.

PUBLIC MEETING:

August 16, 2018 at 7:00 pm
EPA will hold a public meeting to explain the Proposed Plan. Oral and written comments will be accepted at the meeting. The meeting will be held at the 4-H Training Center, Niagara County Fairgrounds, 4487 Lake Avenue, Lockport, NY.

COMMUNITY ROLE IN SELECTION PROCESS

EPA relies on public input to ensure the concerns of the community are considered in selecting an effective remedy for each Superfund site. The public is encouraged to review this Proposed Plan and submit comments during the 30-day public comment period, which begins on July 28, 2018 and ends on August 27, 2018.

A public meeting will be held on August 16, 2018 to present the conclusions of the RI/FS, elaborate further on the reasons for recommending the preferred alternative, and receive public comments (see the "Mark Your Calendar" box above).

Comments received at the public meeting, as well as written comments received during the public comment period, will be documented in the Responsiveness Summary Section of the Record of Decision (ROD), where EPA responds to significant comments. The ROD is a document that formalizes the selection of the remedy.

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Written comments on the Proposed Plan should be addressed to:

Jaclyn Kondrk
Remedial Project Manager
Western New York Remediation Section
U.S. Environmental Protection Agency
290 Broadway – 20th Floor
New York, New York 10007-1866
Telephone: (212) 637-4317
Email: kondrk.jaclyn@epa.gov

PUBLIC INFORMATION REPOSITORIES

Copies of the Proposed Plan and supporting documentation are available at the following information repositories:

Lockport Public Library
23 East Avenue
Lockport, New York 14094
Telephone: (716) 433-5935

Newfane Public Library
2761 Maple Avenue
Newfane, New York 14108
Telephone: (716) 778-9344

USEPA – Region II
Superfund Records Center
290 Broadway, 18th Floor
New York, New York 10007-1866
(212) 637-4308
Hours: Monday – Friday: 9 AM to 5 PM

EPA's website for the Eighteen Mile Creek Site:
www.epa.gov/superfund/eighteenmile-creek

SCOPE AND ROLE OF ACTION

Site remediation activities are sometimes separated into different phases, or Operable Units (OUs), so that remediation of different aspects of a site can proceed separately, resulting in a more efficient and expeditious cleanup of the entire site. EPA is addressing the Eighteen Mile Creek Site in four OUs.

This Proposed Plan is related to OU4, which addresses lead-contaminated soil at certain residential properties on Mill Street and several other adjoining residential streets east of the Flintkote property in the City of Lockport, New York. A Site location map is provided as Figure 1 and an overview of the OU4 area is provided as Figure 2.

The number of affected residential properties referenced in this Proposed Plan is an estimate used to calculate the approximate costs of the cleanup alternatives. The exact number of residential properties to be remediated will be determined based upon the results of additional soil sampling conducted by EPA in June 2018 and any additional investigations conducted during the remedial design. A minimum of 26 properties will be remediated under this OU.

OU1 addressed the risks associated with the residential soil contamination at nine residential properties located on Water Street and the threats posed from the deteriorating Flintkote Plant building. In September 2013, EPA issued a ROD for OU1. As part of EPA's selected remedy, residents on Water Street were permanently relocated due to the impact of recurring flooding of polychlorinated biphenyl (PCB) contaminated water and sediments from the Creek. Following the relocation, the structures at the OU1 properties were demolished. The buildings at the Flintkote property were also demolished. As indicated in the OU1 ROD, the portion of that remedial action involving the soil excavation at the nine residential properties will be performed during cleanup of the sediments in the Creek Corridor (which is part of OU2, as discussed below) to prevent the sediment and soil in the Creek from recontaminating the above-referenced residential properties.

OU2 addresses the contaminated soil at the following adjacent properties: the Flintkote property, Upson Park, the White Transportation property, and the former United Paperboard Company property. OU2 also addresses contaminated sediment within the discrete segment of the Creek, commonly referred to as the Creek Corridor, which is the approximately 4,000-foot segment of Eighteen Mile Creek (Creek) that extends from the New York State Barge Canal (Canal) to Harwood Street in the City of Lockport. An overview of the Creek Corridor is provided as Figure 1. EPA issued a ROD for OU2 in 2017, which includes bank-to-bank excavation of sediment in the Creek Corridor, and a combination of soil excavation and capping at the upland properties. The implementation of this remedy is currently in the design phase.

OU3 addresses the groundwater within the Creek Corridor, as well as contaminated sediments in the Creek that are not addressed by OU2, extending from Harwood Street to the mouth of the Creek where it discharges into Lake Ontario in Olcott, New York. EPA is currently performing the remedial investigation and feasibility study for this OU.

SITE BACKGROUND

Site Description

The Site is in Niagara County, New York, and includes contaminated sediments, soil, and groundwater in and

around the Creek.

The headwaters of the Creek consist of an East and West Branch which begin immediately north of the Canal. Water from the Creek's East Branch originates at the spillway on the south side of the Canal, where it is directed northward underneath the Canal and the Mill Street Bridge through a culvert. Water from the West Branch originates from the dry dock on the north side of the Canal and then flows northward. The East and West Branches converge just south of Clinton Street in Lockport and then the Creek flows north for approximately 15 miles and discharges to Lake Ontario in Olcott, New York.

Site Geology

The topsoil at the residential properties is described as a dark brown silty soil with varying amounts of natural organic matter. Some of the topsoil also contains varying amounts of fill that consists of ash, glass, coal, slag, concrete and brick. Glacially deposited native soil in the area consists of fine grained silts. Clays underlie the fill in most areas, followed by bedrock.

Site History

The Creek Corridor has a long history of industrial use dating back to the 19th Century when it was used as a source of hydropower.

The Flintkote property is approximately six acres in size and consists of two adjoining parcels at 198 and 300 Mill Street. The Flintkote property housed many different operations, beginning as a sawmill in the early 1830s. In 1884, the Lockport Paper Company was established at the property. In 1928, the Beckman Dawson Roofing Company purchased the property and began manufacturing felt and felt products. In 1935, the Flintkote Company began production of sound-deadening and tufting felt for installation and use in automobiles. Manufacturing of this product line continued until December 1971, when operations ceased and the plant closed. The disposal history of the site is largely unknown. However, aerial photographs suggest that by 1938, fill was disposed in the section of 300 Mill Street between the Creek and the Millrace in an area known as the Island. The nature of the fill material at that time is unknown.

SUMMARY OF PREVIOUS INVESTIGATIONS

In March 2013, EPA initiated an RI at residential properties on Water Street (OU1) to supplement an investigation performed by NYSDEC. As part of EPA's OU1 investigation, five additional surface soil samples were collected in the public rights-of-way along Mill Street opposite of the Flintkote property. Analytical results of these five soil samples did not reveal elevated levels of PCBs, a contaminant of concern at the former Flintkote Plant property. However, lead was detected in all five Mill Street soil samples, and two out of the five Mill Street soil samples revealed levels of lead ranging from 420 parts per million (ppm) to 470 ppm.

In June 2013, EPA conducted a second sampling event at the two properties with elevated lead levels to further evaluate the lead concentrations in soil at these properties. The results of the June 2013 sampling showed the average concentration of lead in the surface soil at one of the properties exceeded 400 ppm, which was the risk-based screening level for lead in residential soil at the time. In September 2013, EPA issued a Record of Decision to address nine residential properties along Water Street while indicating there was a need for further evaluation of the Mill Street soil sampling results.

RESULTS OF EPA's OU4 REMEDIAL INVESTIGATION

In 2016, in order to determine if the lead found in the soil samples from the previous investigation was related to the Site, additional samples were collected at the Mill Street properties and the Flintkote property to perform a comparative forensic evaluation. The results of the analysis confirmed that the contaminated soil found on the Mill Street residential properties was related to the Flintkote property. However, an evaluation of historical aerial photographs of the OU4 area did not reveal evidence of historical fill from the Flintkote property being deposited at the residential properties.

Using a phased approach, EPA conducted three separate residential soil sampling events in July, September, and November of 2017, totaling 27 properties. EPA issued the RI Report for OU4 in July 2018, which provides the analytical results of soil sampling conducted in 2016 and 2017 to characterize the nature and extent of contamination at this OU.

The results of the soil sampling at the residential properties showed generally shallow lead contamination at varying concentrations with no distinct pattern of distribution. The results indicated a wide range of lead concentrations from 11 ppm to 1,610 ppm, which may indicate the presence of hot spots. Many of the properties showed lead contamination in the surface soil from 0-2 inches and 2-6 inches. Most of the properties also showed elevated concentrations of lead contamination in the soil from 6-18 inches, which is indicative of fill material believed to be related to the Flintkote property.

The results of the investigation determined that lead contamination was present in soil above screening levels at 26 properties. The residents have received their results as well as information on how to reduce their potential exposure until an action is implemented. In June 2018, EPA conducted soil sampling at an additional four properties along North Adams Street to delineate the extent of contamination.

Groundwater was not evaluated as part of the OU4 RI because the contamination is primarily located in the top two feet of soil; therefore, it is assumed that there would be no impacts to groundwater.

PRINCIPAL THREAT WASTE

The NCP establishes an expectation that EPA will use treatment to address the principal threats posed by a Site wherever practicable (NCP Section 300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund site. Source material includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for migration of contamination to ground water, surface water, or air, or acts as a source for direct exposure. Principal threat wastes are source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. There are no principal threat wastes identified at the residential properties associated with OU4.

RISK SUMMARY

EPA conducted a baseline Human Health Risk Assessment (HHRA) as part of the OU4 RI/FS to assess Site-related cancer risks and non-cancer health hazards in the absence of any remedial action. The four-step process includes: Hazard Identification, Exposure Assessment, Toxicity Assessment, and Risk Characterization (see the "What is Human Health Risk and How is it Calculated" box on page 5).

Human Health Risk Assessment

Contaminants of Potential Concern (COPCs) were selected by comparing the maximum detected concentration of each contaminant in surface soil (0-2 feet) with federal risk-based screening values. The screening of each COPC was conducted separately for each residential property. Based on current zoning and future land use assumptions, exposure to surface soil by adults and the most sensitive population of children (0-6 years) were the receptors and media of interest considered in this risk assessment. Potential exposure routes included ingestion of, dermal contact with, and inhalation of particles from surface soil. In the HHRA, 27 exposure areas representing the individual residential properties were evaluated. Antimony, PCBs, and lead were identified as COPCs for OU4.

Lead

Potential risks and/or hazards from exposure to lead in surface soil were evaluated for child residents (0-6 years) because they represent the most sensitive individuals for lead exposure. Potential exposures to lead are evaluated based on blood lead level (PbB), which can be correlated with both exposure and adverse health effects. The Site-specific risk reduction goal is to limit the probability of a child's PbB exceeding 5 micrograms per deciliter (μg/dL) to 5% of the population or less. To predict PbB and the probability of a child's PbB exceeding 5 μg/dL, the Integrated Exposure and Uptake Biokinetic (IEUBK) model for lead was used to calculate an exposure level that satisfies the risk reduction goal by considering lead exposure, the rate it enters the body, and the metabolism and excretion of lead from the body.

The results of the risk assessment for lead using the IEUBK model show that the risks are elevated above the EPA risk reduction goal for the Site. The percentage of children with predicted PbBs greater than 5 μg/dL, ranged from 5.6% to 76.8% on the properties assessed.

PCBs and Antimony

Consistent with EPA policy and guidance, PCBs and antimony were evaluated based on the reasonable maximum exposure (RME), which is the highest exposure reasonably anticipated to occur at the Site.

Cancer risks and non-cancer hazards were calculated for the adult and child for exposure to PCBs and antimony. The HHRA results show that exposure to PCBs and antimony in surface soil for the adult/child resident is within EPA's target cancer risk range for the exposure areas. Non-cancer hazards from exposure to PCBs and antimony on the individual properties were both below the Hazard Quotient (HQ) of 1, which meets the goal of protection for non-cancer exposures for the individual chemicals. Although PCBs and antimony did not pose a risk based on HHRA calculations, it is likely that these contaminants are collocated with the lead contamination and would be removed under the preferred alternative.

Ecological Risk Assessment

The main purpose of the assessment of exposures on residential properties is for human use and activities, and thus ecological function is not considered a primary goal for the area. Further, the soils do not represent secondary

sources of contamination because contaminant migration to ecological areas of concern (the Eighteen Mile Creek) is not expected. Therefore, further assessment of ecological risk for these properties is not required.

Conclusion

The results of the HHRA indicate that lead present in surface soil at each of the targeted exposure areas could present adverse hazards to current and future residents. It is EPA's judgment that the Preferred Alternative identified in this Proposed Plan is necessary to protect public health from actual or threatened releases of hazardous substances into the environment.

REMEDIAL ACTION OBJECTIVES

Remedial Action Objectives (RAOs) are specific goals to protect human health and the environment. These objectives are based on available information and standards such as applicable or relevant and appropriate requirements (ARARs), to-be-considered (TBC) guidance, and site-specific risk-based levels.

The following RAOs have been established for OU4:

- Prevent potential current and future unacceptable risks to human receptors resulting from direct contact (e.g. ingestion) with contaminated soil.
- Prevent migration of site contaminants from the OU4 properties to other areas via overland flow and air dispersion.

PRELIMINARY REMEDIATION GOALS

To achieve the RAOs, EPA has identified a soil cleanup goal, or Preliminary Remediation Goal (PRG), for contaminated soil to attain a degree of cleanup that ensures the protection of human health and the environment. The two-tiered PRG is based on the New York State's 6 NYCRR Part 375 Residential Soil Cleanup Objective for lead and EPA Region 2's lead strategy consistent with OLEM Directive 9200.2-167.[1]

[1] See Updated Scientific Considerations for Lead in Soil Cleanups, December 22, 2016 https://semspub.epa.gov/work/08/1884174.pdf

WHAT IS HUMAN HEALTH RISK AND HOW IS IT CALCULATED?

Human Health Risk Assessment: A Superfund baseline human health risk assessment is an analysis of the potential adverse health effects caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these releases under current- and anticipated future-land uses. A four-step process is utilized for assessing site-related human health risks for reasonable maximum exposure (RME) scenarios.

Hazard Identification: In this step, the chemicals of potential concern (COPCs) at the site in various media (*i.e.*, soil, fish, surface water, and air) are identified based on such factors as toxicity, frequency of occurrence, and fate and transport of the contaminants in the environment, concentrations of the contaminants in specific media, mobility, persistence, and bioaccumulation.

Exposure Assessment: In this step, the different exposure pathways through which people might be exposed to the contaminants in air, water, soil, etc. that were identified in the previous step are evaluated. Examples of exposure pathways include incidental ingestion of and dermal contact with contaminated soil and ingestion of and dermal contact with contaminated fish. Factors relating to the exposure assessment include, but are not limited to, the concentrations in specific media that people might be exposed to and the frequency and duration of that exposure. Using these factors, a "reasonable maximum exposure" RME scenario, which portrays the highest level of human exposure that could reasonably be expected to occur, is calculated.

Toxicity Assessment: In this step, the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure and severity of adverse effects are determined. Potential health effects are chemical-specific and may include the risk of developing cancer over a lifetime or other noncancer health hazards, such as changes in the normal functions of organs within the body (*e.g.*, changes in the effectiveness of the immune system). Some chemicals are capable of causing both cancer risks and noncancer health hazards.

Risk Characterization: This step summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site risks for all COPCs. Exposures are evaluated based on the potential risk of developing cancer and the potential for noncancer health hazards. The likelihood of an individual developing cancer is expressed as a probability. For example, a 10^{-4} cancer risk means a "one-in-ten-thousand excess cancer risk;" or one additional cancer may be seen in a population of 10,000 people as a result of exposure to Site contaminants under the conditions identified in the Exposure Assessment. Current Superfund regulations for exposures identify the range for determining whether remedial action is necessary as an individual excess lifetime cancer risk of 10^{-4} to 10^{-6}, corresponding to a one-in-ten-thousand to a one-in-a-million excess cancer risk. For noncancer health effects, a "hazard index" (HI) is calculated. The key concept for a noncancer HI is that a "threshold" (measured as an HI of less than or equal to 1) exists below which noncancer health hazards are not expected to occur. The goal of protection is 10^{-6} for cancer risk and an HI of 1 for a noncancer health hazard. Chemicals that exceed a 10^{-4} cancer risk or an HI of 1 are typically those that will require remedial action at a site and are referred to as chemicals of concern, or COCs, in the final remedial decision document or the Record of Decision.

The following two-tiered PRG has been identified for OU4:

- Lead: 400 ppm
- In addition to targeting detections of lead above 400 ppm, the average soil concentration across each residential property will be at or below 200 ppm.

Impact to groundwater was not evaluated as part of the OU4 RI, but given the concentrations found and the fact that the contamination is primarily located in the top two feet of soil, EPA does not anticipate this is an issue for this OU.

SUMMARY OF REMEDIAL ALTERNATIVES

Section 121(b)(1) of CERCLA, 42 U.S.C. §9621(b)(1), mandates that remedial actions must be protective of human health and the environment, cost-effective, comply with ARARS, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions that employ, as a principal element, treatment to reduce permanently and significantly the volume, toxicity, or mobility of the hazardous substances, pollutants, and contaminants at a site. Section 121(d), further specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants that at least attains ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA §121(d)(4), 42 U.S.C. §9621(d)(4).

Detailed descriptions of all the remedial alternatives for addressing the contamination associated with OU4 can be found in the FFS Report, dated July 2018. In this Proposed Plan, as discussed below, EPA has considered alternatives for soil contamination at residential properties near the Flintkote property.

The construction time for each alternative reflects only the actual time required to construct or implement the action and does not include the time required to design the remedy, negotiate the performance of the remedy with any potentially responsible parties, or procure the contracts for design and construction.

On-site treatment options were not evaluated in the FFS because of the potential impracticability of performing treatment at these residential properties. These options would not be practicable because of space limitations for the placement of an on-site treatment facility and the prolonged length of time for treatment technologies to achieve remedial action objectives for the COPCs.

Alternative 1: No Action

The NCP requires that a "No Action" alternative be developed and considered as a baseline for comparing other remedial alternatives. Under this alternative, no action would be taken to remediate the lead contaminated soil at the residential properties. This alternative does not include any monitoring or institutional controls. Because this alternative would result in contaminants remaining at the Site that are above levels that would otherwise allow for unrestricted use and unlimited exposure, CERCLA would require that the Site be reviewed at least once every five years. If justified by the review, additional response actions may be implemented.

Capital Cost:	$0
Annual O&M Costs:	$0
Present-Worth Cost:	$0
Construction Time:	Not Applicable

Alternative 2: Limited Soil Excavation, Soil Cover, and Institutional Controls

Under this alternative, lead-contaminated soil would be excavated at a minimum of 26 residential properties to a depth of six inches and sent for off-Site disposal. If necessary, in order to meet the requirements of the disposal facilities, treatment of the soil would be conducted at and by the approved disposal facility. Once excavation activities have been completed, a geotextile fabric layer would be placed in the excavated areas to act as a demarcation barrier, and six inches of clean top soil would be used as backfill that would be planted with native grasses, shrubs, and/or trees. Clean backfill would meet the requirements as set forth in 6 NYCRR Part 375-6.7. Additionally, EPA would require that backfill concentrations for lead be below 200 ppm. No hardscape, such as pavement or structures would be removed under this alternative.

Because contaminated soil would remain at the Site after remediation that are above levels that, if attained, would allow for unrestricted residential use, institutional controls such as land-use restrictions would need to be implemented.

The institutional controls would require maintenance of the cover material and impose restrictions on excavation of the property. In addition, deed notices would be issued stating that contaminated soil remains on the property, and that future use restrictions and maintenance requirements exist.

Depending on the results of the June 2018 sampling, this alternative may include further investigations during the remedial design to determine if additional properties require remediation. EPA has conservatively estimated that additional sampling may identify up to 12 additional affected properties that would be remediated as part of this OU.

Because this alternative would result in contaminants remaining at the Site that are above levels that would otherwise allow for unrestricted use and unlimited exposure, CERCLA requires that the Site be reviewed at least once every five years. If justified by the review, additional response actions may be implemented.

Capital Cost:	$2,956,056
Annual O&M Costs:	$2,600
Present-Worth Cost:	$2,958,656
Construction Time:	12 Months

Alternative 3: Excavation and Off-Site Disposal

This alternative includes the excavation and off-Site disposal of lead contaminated soil at a minimum of 26 residential properties to a cleanup level of 400 ppm with an overall average of 200 ppm. This would allow for residential use. An estimated 14,000 cubic yards of soil would be removed under this alternative. Based on the existing data, an excavation depth of approximately one to two feet is currently anticipated for most of the properties. The excavation depth may increase if contamination is present at depths greater than anticipated. Verification samples would be collected to confirm that the all contaminated soil in excess of the preliminary remediation goal has been removed and the remedial action objectives have been met. If necessary, in order to meet the requirements of the disposal facilities, treatment of the soil would be conducted at and by the approved disposal facility. However, due to the concentrations found in the soil, it is not expected that much of the soil will require treatment. Once excavation activities have been completed, clean soil would be used as backfill and the properties would be restored, including concrete and asphalt pavement replacement. Clean backfill would meet the requirements for soil as set forth in 6 NYCRR Part 375-6.7. Additionally, EPA would require that backfill concentrations for lead are below 200 ppm. Under this alternative, institutional controls would not be necessary. This alternative includes the potential to offer residents temporary short-term relocation during the cleanup of their properties, if excavation activities significantly impact their ability to access or use their properties.

Depending on the results of the June 2018 sampling, this alternative may include further investigations during the remedial design to determine whether additional properties require remediation. EPA has conservatively estimated that the additional sampling may identify up to 12 additional affected properties that would be remediated as part of this OU.

Capital Cost:	$6,711,416
Annual O&M Costs:	$0
Present-Worth Cost:	$6,711,416
Construction Time:	12 Months

EVALUATION OF ALTERNATIVES

EPA uses nine criteria to evaluate the remedial alternatives individually and against each other to propose a remedy. This section of the Proposed Plan profiles the relative performance of each alternative against the nine criteria, noting how it compares to the other options under consideration. A detailed description of these criteria can be found in the box on the next page, "Evaluation Criteria for Superfund Remedial Alternatives".

Overall Protection of Human Health and the Environment

A threshold requirement of CERCLA is that the selected remedial action be protective of human health and the environment. An alternative is protective if it reduces current and potential risk associated with each exposure pathway at a site to acceptable levels.

Alternative 1 (No Action) would not be protective of human health and the environment because it does not eliminate, reduce, or control risk of exposure to contaminated soil. Alternative 2 (Limited Action) would provide some protection to property owners/occupants from exposure to contaminated soil through a combination of the removal of contaminated soil in the top six inches, placement of clean backfill material, and institutional controls such as land-use restrictions. However, contaminated soils would remain in place above the soil cleanup goals because only the top six inches of contaminated soil would be excavated and transported off-site for proper disposal. Alternative 3 would provide the highest level of protection of human health through permanently removing the lead contaminated soil, thereby eliminating potential exposure.

Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)
Compliance with ARARs is the other threshold requirement for remedy selection under CERCLA.

New York State's 6 NYCRR Part 375 is an ARAR, a TBC, or an 'other guidance' to consider in addressing contaminated soil at OU4. Alternative 1 would not achieve New York State cleanup goals for soil because no measures would be implemented and contaminated soil would remain in place. Alternative 2 would prevent direct contact with lead contaminated soil exceeding the soil cleanup goal through a combination of removal and capping. Alternative 3 would prevent direct contact with lead contaminated soil exceeding the soil cleanup goal through the removal of contaminated soil exceeding the soil cleanup goal.

The Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) are federal laws that mandate procedures for managing, treating, transporting, storing and disposing of hazardous wastes and PCBs. All portions of RCRA and TSCA that are applicable or relevant and appropriate to the proposed remedy for OU4 would be required to be met with Alternatives 2 and 3.

Long-Term Effectiveness and Permanence
Alternative 1 provides no reduction in risk. Alternative 2 provides long-term effectiveness through effective maintenance of the soil cover and institutional controls such as land-use restrictions. Alternative 2 would be less permanent or effective as Alternative 3 over the long term because institutional controls may not reliably reduce future health risks to property owners/occupants associated with exposure to contaminated soil. It would be difficult to maintain institutional controls as residents would have to be restrained from normal every day activities including digging gardens. Alternative 3 would be the most effective in removing long-term risks because contaminated soil would be permanently removed from the properties, and maintenance or institutional controls would not be necessary. Off-site treatment/disposal at a secure, permitted hazardous waste facility for the contaminated soil is reliable because the design of these types of facilities includes safeguards and would ensure the reliability of the technology and the security of the waste material.

Reduction of Toxicity, Mobility, or Volume through Treatment
Alternative 1 would not achieve any reduction in toxicity, mobility, or volume because contaminated soil would remain in place. Alternative 2 would use a combination of capping and removal to achieve a reduction in mobility, volume, and exposure to contaminants at the residential properties. The off-site treatment, when required by the disposal facility, would reduce the toxicity of the contaminated soil prior to disposal. Alternative 2 would not reduce the toxicity of the contaminants that would remain at the residential properties. Under Alternative 3, the mobility, volume, and exposure to contaminants would be reduced through the removal and disposal of the soil at an

EVALUATION CRITERIA FOR SUPERFUND REMEDIAL ALTERNATIVES

Overall Protectiveness of Human Health and the Environment evaluates whether and how an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

Compliance with Applicable or Relevant and Appropriate Requirements (ARARs) evaluates whether the alternative meets federal and state environmental statutes, regulations, and other requirements that pertain to the Site, or whether a waiver is justified.

Long-term Effectiveness and Permanence considers the ability of an alternative to maintain protection of human health and the environment over time.

Reduction of Toxicity, Mobility, or Volume (TMV) of Contaminants through Treatment evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment, and the amount of contamination present.

Short-term Effectiveness considers the length of time needed to implement an alternative and the risks the alternative poses to workers, the community, and the environment during implementation.

Implementability considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.

Cost includes estimated capital and annual operations and maintenance costs, as well as present-worth cost. Present-worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.

State/Support Agency Acceptance considers whether the State agrees with EPA's analyses and recommendations, as described in the RI/FS and Proposed Plan.

Community Acceptance considers whether the local community agrees with EPA's analyses and preferred alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

approved off-site facility. Furthermore, off-site treatment, if required, would reduce the toxicity of the contaminated soil prior to disposal.

Short-Term Effectiveness
Alternative 1 would not create new adverse short-term impacts because no actions would be taken. Alternatives 2 and 3 would cause a disturbance of the surface soil, which could present short-term risk from the potential for exposure toto dust from excavation and transportation of contaminated soil. Alternative 3 presents the highest short-term risk because it involves a larger volume of contaminated soil that would be excavated and transported off-site. Alternatives 2 and 3 would also cause an increase in truck traffic, noise, and potentially dust in the surrounding community as well as potential impacts to workers during the performance of the work. These potential impacts would be related to construction activities and potential exposure to the contaminated soil being excavated and handled.

However, proven procedures including engineering controls, personal protective equipment, and safe work practices could be used to address potential impacts to workers and the community. For example, the work would be scheduled to coincide with normal working hours on week days, and no work would occur on weekends or holidays. In addition, trucking routes with the least disruption to the surrounding community would be utilized. Appropriate transportation safety measures would be required during the shipping of the contaminated material to the off-site disposal facility.

The risk of release during implementation of Alternatives 2 and 3 is principally limited to wind-blown soil transport or surface water runoff. Any potential environmental impacts associated with dust and runoff would be minimized with proper installation and implementation of dust and erosion control measures and by performing the excavation and off-site disposal with appropriate health and safety measures to limit the amount of material that may migrate to a potential receptor.

No time is required for construction of Alternative 1. Time required for implementation of Alternative 2 is estimated to take 12 months. Alternative 3 is estimated to take 12 months.

Implementability
Alternative 1 does not involve the application of any technology, therefore, there are no issues relating to implementation. The implementation of soil excavation and installation of a cover system for Alternative 2 would use readily available services and equipment. However, the development of protective institutional controls that would be both enforceable and acceptable to the homeowners is in question. Alternative 3 would require the implementation of technologies known to be reliable and that can be readily implemented. These approaches have been used at other sites and have been shown to be reliable and effective in addressing the excavation of contaminated soil, dust control, and property restoration.

Cost
The estimated capital cost, operation and maintenance (O&M), and present worth cost are discussed in detail in the FFS. The cost estimates are based on the best available information.

There is no cost associated with Alternative 1 because no activities are implemented. The present worth cost for Alternatives 2 is $2.9 million. The present worth cost for Alternative 3 is $6.7 million.

State/Support Agency Acceptance
NYSDEC concurs with the preferred alternative.

Community Acceptance
Community acceptance of the preferred alternative will be evaluated after the public comment period ends and will be described in the Responsiveness Summary section of the Record of Decision for this OU. The Record of Decision is the document that formalizes the selection of the remedy for an OU.

PREFERRED REMEDY AND BASIS FOR PREFERENCE

Basis for the Remedy Preference
Based upon an evaluation of the remedial alternatives, EPA, with the concurrence of NYSDEC, proposes Alternative 3, Excavation and Off-Site Disposal, for cleaning up lead-contaminated soil at residential properties in the vicinity of the Flintkote property. The preferred alternative has the following key components: excavation of lead-contaminated soil above PRGs, off-Site disposal (with treatment, if required), and property restoration. This alternative has the estimated present worth of $6.7 million.

Although the present worth cost associated with Alternative 3 is significantly more than Alternative 2, Alternative 3 is preferred because it is expected to achieve permanent risk reduction through excavation and off-Site disposal of lead-contaminated soil, and it is expected to allow the properties to be used for the reasonably anticipated future land use, which is residential. Alternative 3 is preferred because it reduces the risk within a reasonable time frame and provides for long-term and reliability of the remedy.

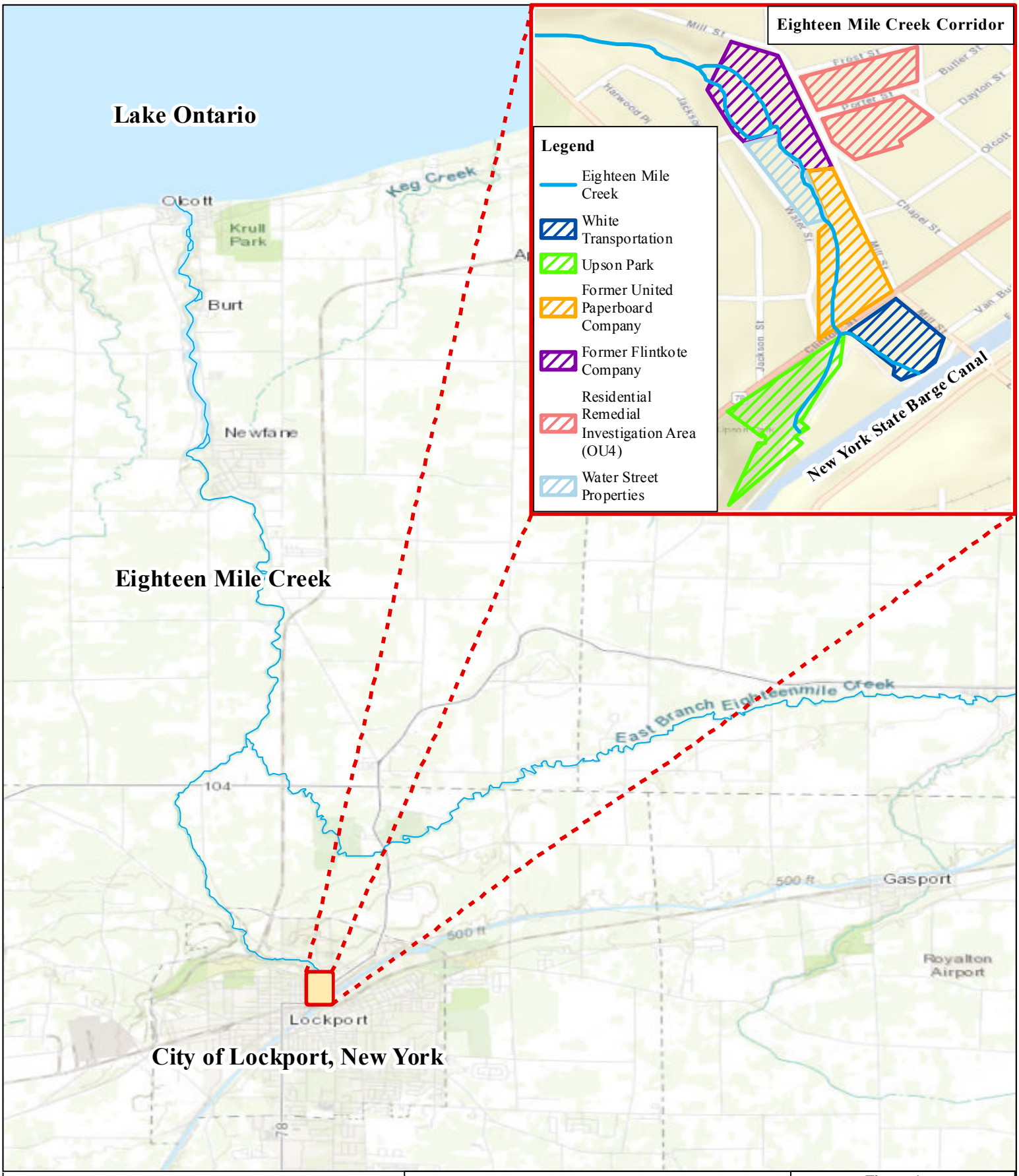
The exact number of residential properties to be remediated will be determined upon completion of additional soil sampling during the remedial design, which is expected to take approximately 1 year.

Based upon the information currently available, EPA believes the preferred alternative meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing criteria. EPA expects the preferred alternative to satisfy the following statutory requirements of Section 121(b) of CERCLA: 1) it is protective of human health and the environment; 2) it complies with ARARs; 3) it is cost effective; and 4) it utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. The preferred alternative would be readily implementable using technologies proven to be effective at other similar sites. The short-term effects of the preferred alternative include potential impacts to workers and the surrounding community, but these could be mitigated using the appropriate health and safety measures. The cost for the preferred alternative is $6.7 million.

The preferred alternative may satisfy the preference for treatment, since, if necessary, in order to meet the requirements of the disposal facilities, some of the contaminated soil would be treated prior to land disposal. The environmental benefits of the preferred alternative may be enhanced by consideration, during the design, of technologies and practices that are sustainable in accordance with the both the EPA Region 2's Clean and Green Energy Policy and NYSDEC's Green Remediation Policy.[2] This would include consideration of green remediation technologies and practices.

With respect to the two modifying criteria of the comparative analysis, state acceptance and community acceptance, NYSDEC concurs with the preferred alternative, and community acceptance will be evaluated upon the close of the public comment period.

[2] See http://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy and http://www.dec.ny.gov/docs/remediation_hudson_pdf/der31.pdf



Legend

Eighteen Mile Creek Corridor

Eighteen Mile Creek

0 0.5 1 2 3 4 Miles

N

Weston Solutions, Inc.
East Division

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc. and Sovereign Consulting, Inc

Figure 1:
Site Location Map

Eighteen Mile Creek Site
Niagara County, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

GIS ANALYST:	M. MANNINO
EPA OSC:	T. KISH
RST SPM:	M. GARIBALDI
FILENAME:	180517_UPDATEDSLM.MXD

DATE MODIFIED: 7/25/2018

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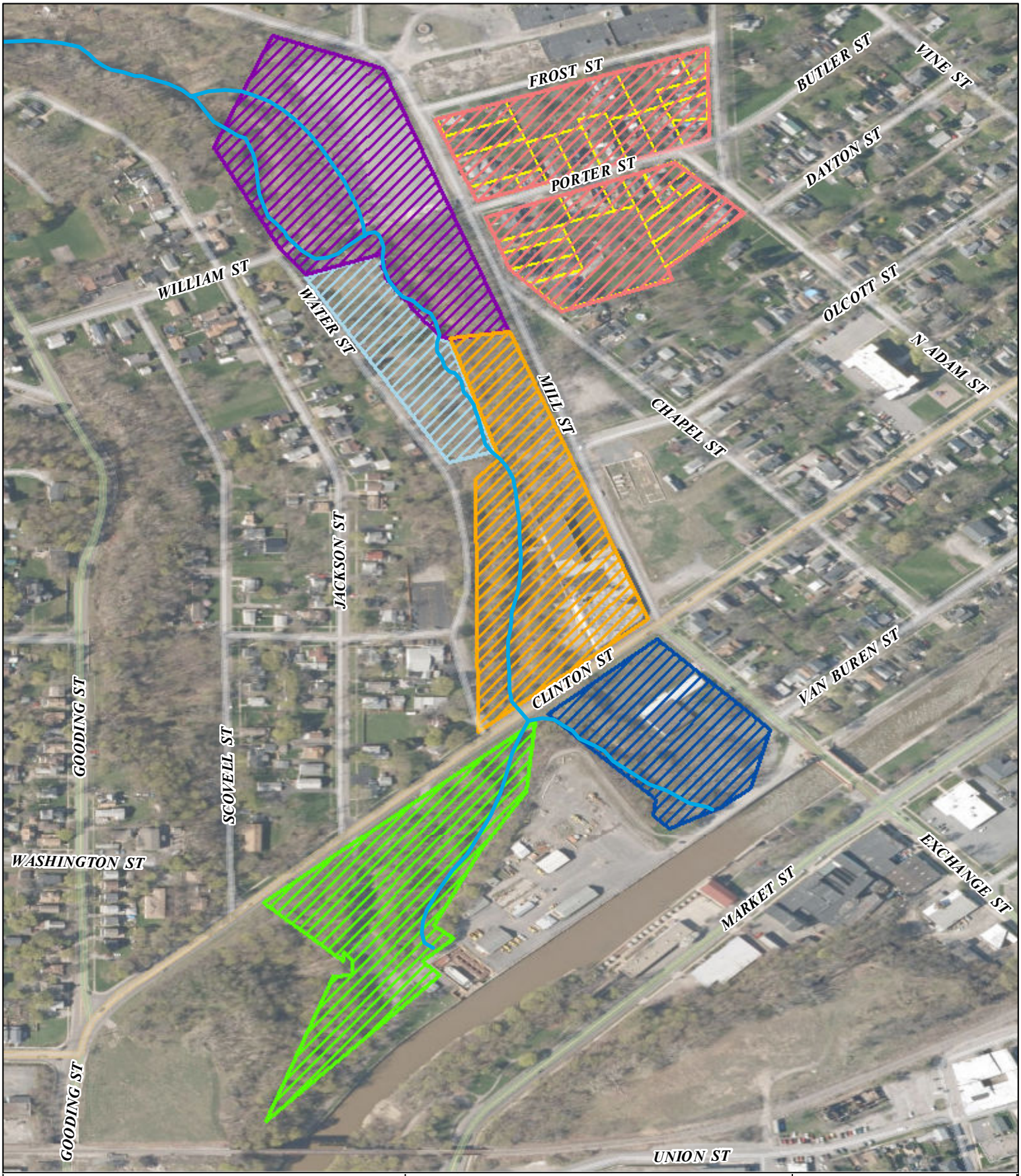

Legend

- Eighteen Mile Creek
- White Transportation
- Upson Park
- Former United Paperboard Company
- Former Flintkote Company
- Residential Remedial Investigation Area (OU4)
- Water Street Properties
- Parcel Boundaries

0 0.025 0.05 0.1 0.15 0.2 Miles

N

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Inc. and Sovereign Consulting, Inc

Figure 2: Eighteen Mile Creek Corridor Overview

Eighteen Mile Creek Site
Niagara County, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

GIS ANALYST:	M. MANNINO
EPA OSC:	T. KISH
RST SPM:	M. GARIBALDI
FILENAME:	180517_EMC_CORRIDOR.MXD

DATE MODIFIED: 7/25/2018

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APPENDIX V

ATTACHMENT B

PUBLIC NOTICE

AccuWeather 7-DAY

TODAY
Breezy with times of clouds and sun
80° 61°

SATURDAY
Periods of sun with a couple of showers
77° 59°

SUNDAY
Mainly cloudy
79° 60°

MONDAY
Intervals of clouds and sunshine
81° 61°

TUESDAY
Periods of rain
82° 67°

WEDNESDAY
Some sun with a thunderstorm possible
82° 66°

THURSDAY
Partly sunny, a couple of showers possible
82° 63°

ALMANAC

Statistics through 4 p.m. yesterday

Temperature	
High/low	83°/62°
Normal high/low	81°/61°
Last year's high/low	77°/55°
Record high	90° (2005)
Record low	51° (2013)
Humidity	
4 p.m.	43%
Barometer	
4 p.m.	29.83″ steady
Precipitation	
24 hours through 4 p.m. yest.	0.00″
Month to date	2.11″
Year to date	15.71″
Normal year to date	18.50″

NATIONAL CITIES

City	Today Hi/Lo/W	Saturday Hi/Lo/W
Anchorage	62/52/sh	64/57/c
Atlanta	92/72/pc	91/71/pc
Baltimore	89/68/t	85/65/pc
Charleston, SC	89/74/t	89/73/pc
Charlotte	91/70/pc	90/70/s
Chicago	77/61/pc	80/63/pc
Cincinnati	81/61/s	80/62/pc
Dallas	100/79/pc	101/81/pc
Denver	85/59/t	83/59/pc
Detroit	79/59/pc	78/59/pc
El Paso	95/75/pc	98/75/pc
Greensboro, NC	89/69/pc	87/69/pc
Honolulu	89/78/pc	88/77/pc
Houston	98/75/s	96/76/pc
Indianapolis	79/61/s	81/64/pc
Kansas City	82/63/pc	74/63/t
Las Vegas	113/88/pc	111/87/s
Little Rock	89/69/pc	89/69/pc
Los Angeles	91/69/pc	88/68/pc

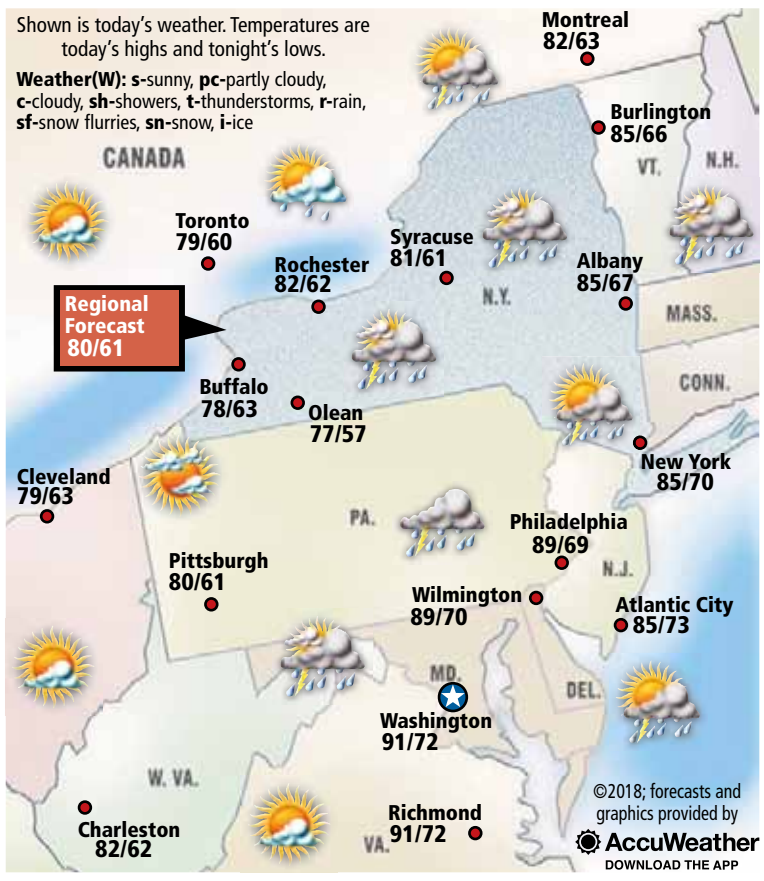
SUN AND MOON

Sunrise today	6:01 a.m.
Sunset tonight	8:43 p.m.
Moonrise today	8:44 p.m.
Moonset today	5:43 a.m.

Full	Last	New	First
Jul 27	Aug 4	Aug 11	Aug 18

- Weather Hotline: 1-900-370-8728. Forecasts for 600 cities nationwide. 75 cents, first minute 50 cents each additional minute.
- National weather service-Buffalo: 565-0802. Climate line. 24 hours, seven days a week.
- Thruway conditions: 1-800-THRUWAY

City	Today Hi/Lo/W	Saturday Hi/Lo/W
Louisville	85/65/pc	84/66/pc
Miami	89/79/pc	88/78/t
Milwaukee	76/60/pc	76/62/pc
Minneapolis	78/61/pc	79/63/pc
Nashville	88/65/pc	87/66/pc
New Orleans	95/79/pc	94/79/pc
Oklahoma City	88/68/pc	91/71/t
Orlando	91/75/t	90/73/t
Phoenix	111/89/c	106/89/c
Portland, ME	82/67/s	80/63/t
Portland, OR	91/62/s	92/64/s
Reno	102/65/s	101/65/s
St. Louis	84/64/s	82/65/pc
Salt Lake City	96/71/pc	95/69/pc
San Antonio	99/73/s	98/76/s
San Diego	80/71/pc	79/71/pc
San Francisco	70/55/pc	72/55/pc
Seattle	87/62/s	89/63/s
Tampa	89/77/t	91/76/t



BULLETIN BOARD

MONDAY

DeSales Golf tourney is Monday

The 26th annual DeSales Golf Tournament will be held at the Town & Country Club of Lockport on Monday. This year's tournament is being chaired by alumni Brian Costello, DCHS '80.

Proceeds from the annual event support the DeSales Teacher Appreciation Fund. Local companies and organizations are invited to show support for Catholic education and promote their businesses through a variety of sponsorship opportunities.

Non-golfers can join in the fun with cocktails and a delicious steak dinner immediately following the scramble format tournament. Golf includes 18 holes with a shotgun start at noon, golf cart, lunch, dinner, and beverages. To sign up, contact Kim Knuutila in the DeSales Advancement office at 433-6422 ext 407 or visit www.DeSalesCatholicSchool.org.

WEDNESDAY

Concert at the gazebo

NEWFANE – The acoustic duo Tom and Sarah Wright will perform at the Newfane Gazebo, Main Street, beginning at 7 p.m. Wednesday.

UPCOMING

Former Newfane students to host gathering

OLCOTT – Members of the Newfane Central classes of 1970 through 1979 are invited to Survivors of the '70s, a social gathering at Old Olcott Beach Fire Station, 1573 Lockport St., on Aug. 4. The dinner gathering will begin at 5 p.m.

There will be a cash bar and music by M Sound. Admission is $20 per person at the door. Advance reservations are appreciated; go to Survivors of the '70s on Facebook or call Cyn Hahn Davis at 280-8028, or Cindy Platt Bailey at 245-0316.

Computer course open at library

"Computer Basics, Internet & Email," a free computer class, will be offered from 10 a.m. to 1 p.m. on Aug. 9 at the Lockport Public Library community meeting room, 23 East Ave. The instructor is Caitlin from Niagara County Community College.

Registration is required. Go to www.lockportlibrary.org and click on the events calendar, visit the Reference Desk, or call 433-5935, extension 3.

SCHOOL NEWS

CONTRIBUTED PHOTO

Starpoint High School 11th-grader Sara Danwin's fascination for dragons has proven to be very lucrative for her. Using an oven bake polymer clay called Sculpey, the 15-year-old artist has been sculpting the mythical creatures and selling them at local craft fairs. At this year's annual Starpoint Art and Craft Fair alone, she made more than $500. Anyone interested in checking out Danwin's dragons and other sculptures can catch her noon to 5 p.m. during Oliver Street's Art Festival between Schenck and Robinson Street in North Tonawanda or you can email her at starpoint423@aol.com.

Independent Living holding BBQ event

FUNDRAISER: *Food, auction items and fun planned for August gathering in Lewiston.*

If you'd like to take the whole family to a delightful summer barbecue and know that the cost of admission goes to help people with disabilities, Independent Living of Niagara County (ILNC) has just the event for you, and, like all the organization's activities, the event is fully disability accessible.

The barbecue will take place from 1 to 3 p.m. on Aug. 5 at the Fin, Feather and Fur Conservation Club (3F Club) at 904 Swann Road, Lewiston. The caterer, Brickyard Pub and BBQ of Lewiston, will be offering signature Brickyard pulled pork, smoked chicken quarters, house salad, Brickyard cornbread, and corn on the cob.

Also available at the event will be a 50/50 split cash drawing, a drawing for a 32-inch Toshiba HD LED television ($3 for one ticket, $5 for two tickets), a large basket auction, with premium basket tickets on sale, as well.

Businesses donating baskets include Tim Hortons, Tonawanda Bowling Center, Irish Classical Theatre, A Gust of Sun Winery, Spring Lake Winery, Buffalo Harbor Tours, The Buffalo Bills, Old Fort Niagara and many more.

During the event, awards will be presented to the top finishers in ILNC's 13th Annual Bass Fishing Derby, earlier that day. Participation in the derby is not required to attend the barbecue.

Tickets are available for $25 each or $100 for a family pack of five. So that the caterer has a firm count for the preparations, the last day to purchase tickets is Sunday.

For more information, or to buy tickets by cash or check, call Marykate Waringa at (716) 836-0822, ext. 146, or email her at mwaringa@wnyil.org. For ticket purchases via PayPal, visit the organization's website at www.wnyil.org/Events/Niagara-Fishing-Derby/Registration.

Independent Living of Niagara County is a member of the Western New York Independent Living, Inc. family of agencies that offer an expanding array of services to aid individuals with disabilities to take control of their own lives.

Child car seat inspections set in Niagara County

INITIATIVE: *Child seat checks happening in August in Lewiston and Lockport.*

The New York State Department of Motor Vehicles (DMV) and the Governor's Traffic Safety Committee (GTSC) has announced that free child car seat inspections are available to parents and caregivers during the month of July in Niagara County.

As part of a year-long safety initiative, state and local law enforcement agencies, along with various community safety partners, are offering free child car seat inspections by certified child passenger safety technicians.

"Car crashes are a leading cause of death for children ages 1 to 13, which is why these inspections and the assistance provided to parents and caregivers are so important," said Acting GTSC Chair and DMV Executive Deputy Commissioner Terri Egan. "Using a child safety seat or booster seat that is appropriate for your child's age and size can help prevent injuries and fatalities caused by car crashes."

This campaign aims to ensure all parents and caregivers are properly trained to secure their children in a car safety restraint system (which can be rear-facing, forward-facing, booster seats, or seat belts) appropriate for the child's age and size, and to ensure the safety restraints are properly installed.

Trained technicians will use the model of "Learn, Practice, and Explain" to educate each caregiver on how to select a child restraint that will fit their child, fit their vehicle and be used correctly every time. Getting safety information and car seat instructions to parents and caregivers is crucial to saving young lives.

According to the National Highway Traffic Safety Administration (NHTSA), child safety seats reduce the risk of fatal injury by 71 percent for infants and by 54 percent for toddlers in passenger cars. In 2012, a survey by the NHTSA found that 20 percent of all drivers of child passengers did not read any instructions on how to properly install their child restraints, yet 90 percent felt "confident" or "very confident" that their car seats and booster seats were installed correctly.

A child safety seat check will be held from 9:30 to 11:30 a.m. Aug. 4 at Mount St. Mary's Hospital, 5300 Military Road, Lewiston.

An appointment is required and can be made by contacting Health Connections at (716) 706-2112.

A second seat check will be held from 4 to 7 p.m. at the Niagara County Public Safety Training Facility, 5574 Niagara Street Extension, Lockport.

The host agency will be the Niagara County Sheriff's Office of Traffic Safety. An appointment is required by contacting Cathleen Davis at (716) 438-3464.

EPA Invites the Public to Comment on a Proposal to Clean Up Residential Properties at the Eighteen Mile Creek Superfund Site Niagara County, Lockport, New York

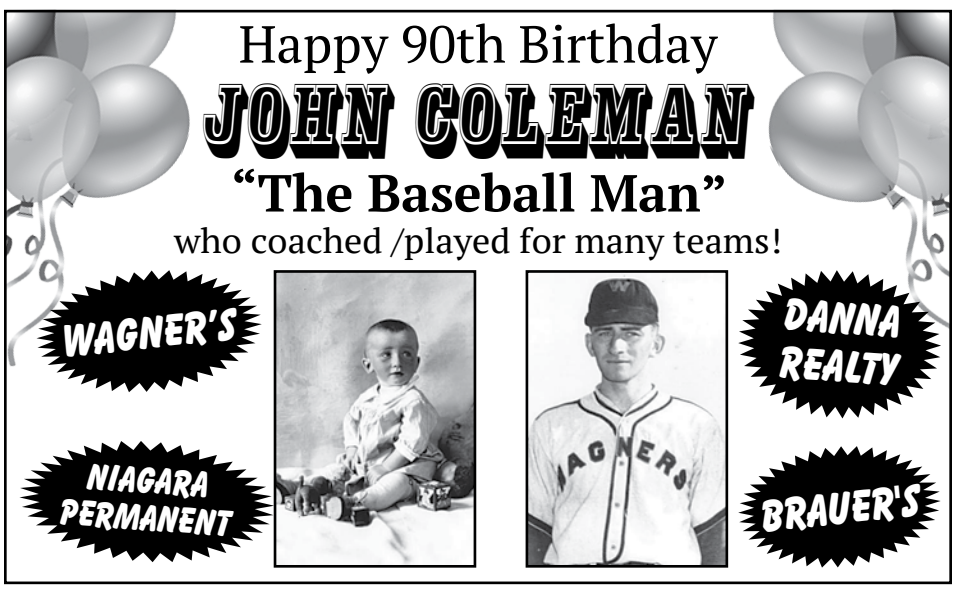
The U. S. Environmental Protection Agency (EPA) has issued a Proposed Plan for addressing lead-contaminated soils associated with the Eighteen Mile Creek Superfund site. A 30-day public comment period on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, begins on July 28 and ends on August 27, 2018. The plan addresses the cleanup of lead-contaminated soils on specific residential properties in the vicinity of the former Flintkote Plant property at the Eighteen Mile Creek Superfund site in Lockport, Niagara County, New York.

As part of the public comment period, EPA will hold a public meeting on Thursday, August 16, 2018 at 7:00 p.m., at the 4-H Training Center, Niagara County Fairgrounds, located at 4487 Lake Avenue, Lockport, New York. The meeting will address the proposed plan and will allow community members to comment on the Proposed Plan including other cleanup alternatives that were considered by EPA.

The proposal for the fourth phase of the cleanup at the site calls for the excavation of lead-contaminated soils from individual residential properties that ensures protection of human health and the environment, off-site disposal, replacement of clean fill, and property restoration.

The Proposed Plan is available at **www.epa.gov/superfund/eighteenmile-creek** and at the Lockport Public Library, 23 East Avenue Lockport, NY; Newfane Public Library, 2761 Maple Avenue, Newfane, NY; and, at the EPA Records Center, 290 Broadway, 18th floor, New York, NY.

Written comments regarding EPA's preferred remedy must be submitted by August 27, 2018 to Jaclyn Kondrk, Remedial Project Manager, EPA, 290 Broadway, 20th Floor, New York, NY 10007-1866, or email: **kondrk.jaclyn@epa.gov**.



APPENDIX V

ATTACHMENT C

PUBLIC MEETING TRANSCRIPT

MINUTES OF PUBLIC MEETING

ON THE SUPERFUND PROPOSED PLAN

FOR THE EIGHTEEN MILE CREEK SUPERFUND SITE

OPERABLE UNIT 4

Held at the 4-H Training Center, Niagara County Fairgrounds, 4487 Lake Avenue, Lockport, New York on August 16th, 2018 at 7:00 p.m.

APPEARANCES:

JACLYN KONDRK, Remedial Project Manager

JULIO VAZQUEZ, Remedial Project Manager

PETER MANNINO, WNY Remediation Section Chief

ABBEY STATES, EPA Risk Assessor

ANGELA MARTIN, NYS DOH

JIM BOWERS, NYS DOH

STAN RADON, NYS DEC

PAUL DICKY, Lockport Health Department

JOE OATES, Lockport City Alderman

SCOTT COLLINS, Remedial Action Plan Coordinator

MICHAEL BASILE, Public Affairs Specialist

S P E A K E R S:

MR. BASILE: Good evening. My name is Mike Basile. I'm the Public Affairs Specialist and Community Development Coordinator for the Environmental Protection Agency. I want to welcome you to the Eighteen Mile Creek meeting this evening. Actually, welcoming you back.

We have been very involved with Eighteen Mile Creek for about the last seven years. We've held numerous meetings in this facility and we're happy to be able to bring to you tonight another proposal, a proposed Remedial Action Plan on an Operable Unit involving residential properties, but before I do that I'd like to recognize a few people that are here, some of whom will not be participating, but will be participating possibly during the question and answer period and I ask that you hold your questions until the end of our presentation.

Our project manager will be laying out the proposed plan this evening and after that we will entertain questions. I will be standing

down front with a microphone and I'll ask you to come up. We have the stenographer that's recording all the information here this evening. You're going to have to state your name, spell your name and give us your address.

And I think with all that said, we should be able to get out of here in a very timely fashion. I want to thank you for taking the time to come out. We have a Project Manager for this site. She's going to be making the presentation tonight, Jackie Kondrk, right here.

Helping Jackie during the next few years and during this portion of the cleanup is another Remedial Project Manager from New York City, Julio Vasquez.

Also present is Western New York Remediation Section Chief, Peter Mannino. These three EPA employees work at the Region and they work at 290 Broadway in New York City.

In addition, from the same location our

EPA risk assessor, Abbey States. With the New York State Department of Health here this evening, Angela Martin. New York State Department of Health, Jim Bowers. Jim is back there and the gentlemen that's walking against the wall in a really sharp looking suit with the New York State Department of Health, Jim Bowers.

Present this evening in the audience is with the New York State Department of Environmental Conservation, Stan Radon. With the Niagara County Health Department, Mr. Paul Dickey. The gentlemen that hangs his hat right on this property, he's the Eighteen Mile Creek area of concern Remedial Action Plan Coordinator, Mr. Scott Collins. He's in the back against the wall here.

And of course, representing the City of Lockport, your Alderman, Joe Oates. Thank you.

At this time I'd like to call upon our Remedial Project Manager, Jackie Kondrk, who will give the presentation.

MS. KONDRK: Hi, everyone. As Mike said, my name is Jackie Kondrk. I'm the Remedial Project Manager for this site. I have met quite a few of you in the past. We came out here a couple of years ago to do a public meeting for the main area of this site that we're working to cleanup and we're glad to be here again tonight and looking forward to continuing the work that we're doing in the community.

So the agenda for tonight, I'll be giving a short presentation. I'll give the overview of the Superfund process, an overview of the Eighteen Mile Creek site, the results of the investigation, the cleanup options and our preferred remedy to cleanup this part of the site.

Also, I'll go over EPA's next steps in the process and at the end of the presentation we'll take questions and answers related to the residential properties which we're here to discuss tonight and afterwards we'll be happy to discuss any other questions that you might

have.

So you get a quick overview of how the Superfund process works, EPA gets alerted to a site. We do a preliminary assessment. The site is then ranked on our National Priority List which makes it a Superfund site. It's ranked and listed.

We then perform a Remedial Investigation to define the nature and extent of contamination. After Remedial Investigation we perform a feasibility study where we look at all the different options that we have to cleanup the site and we come out with our Proposed Plan with what we think would be the best way to address it.

After we take all of the community concerns into consideration, we come out with our Record of Decision that finalizes the remedy for the Site. Then we enter the design phase where we work out all the fine details of exactly how it's going to work and all the engineering plans.

Once that's completed, we enter what is

called the Remedial Action and that's when we finally put a shovel in the ground. When the Remedial Action is completed, we enter into the Completion Phase. We do any operation and maintenance that might be necessary and then the Site is beneficially reused for the community.

So to give you a brief history about the Eighteen Mile Creek Site, it was used for many different industries over the years dating back to the 19th Century. Many of these factories polluted the creek and we're left with this contamination here. New York State did a number of studies over the years before it was regulated on EPA's National Priority List in 2012 making it a federal Superfund site.

So to give you an overview of the site by what we call an Operable Unit, it's what we do to separate different parts of the site based on geographical area or different issues that may arise within the site, so we've separated the Eighteen Mile Creek Site into four

different operable units and I'll go through all of them quickly here for you.

First Operable Unit were the Water Street residential properties and the Flintkote building demolition. Now, EPA issued a final cleanup plan for the Water Street properties in 2013. These properties dealt with PCB contamination that was flooded from the creek onto their properties. They were in a low-lying area.

We acquired those properties and relocated those residents permanently and the soil at those residential properties will be excavated as part of the cleanup at the OU2 area which I'm about to show you now.

So just to show you on the laser pointer, this is the OU1 Water Street property and these are the OU2 properties. This is OU2 down here, so it's blown up there. This was while we were demolishing the Flintkote building and this is the Water Street property post demolition.

OU2 is also commonly referred to as the

Creek Corridor area. It includes the sediment within the 4000 foot or so part of the creek and also includes the soil at the Flintkote property, the former United Paperboard property, the White Transportation property and Upson Park.

EPA issued a Final Cleanup Plan in 2017. We're going to be removing all of the sediment within that area of the creek and we'll also be doing excavation at the commercial properties and a combination of excavation and capping at the Flintkote property. This remedy is currently in the design phase.

At OU3 which is the downstream portion of the Site, it begins where OU2 ends and goes all the way up to Lake Ontario. It includes the sediment in the creek and also we'll look at the groundwater and the Creek Corridor portion of the site.

We went out this summer and took additional samples along the creek. We took water sediment soil samples. We're currently evaluating that data. As we get that data

back we'll be going back in phases to collect that data, so this investigation is ongoing.

OU4 addresses lead-contaminated soil at certain residential properties adjacent to the former Flintkote property, and OU4 is the subject of tonight's public meeting and in this figure you can see the residential properties are located adjacent to the former Flintkote property highlighted in purple here on the figure.

So for OU4 we use a phased approach. We went out and collected samples across from the Flintkote property and based on the information that we gathered, we then stepped out and did additional sampling based on those results.

Three separate sampling events were conducted in 2017 totaling 27 properties. Four additional properties were sampled in 2018. So the results of the sampling showed varying concentrations with no distinct real pattern. We saw a wide range of concentrations from 11 parts per million to

1600 parts per million. Those highest concentrations were seen deeper in the soil.

So as part of the investigation we also performed a Human Health Risk Assessment. That calculates risks under current conditions and future conditions. Mainly it found that there was a risk based on ingestion of soil and that was based on long-term chronic exposure as opposed to immediate acute exposure.

EPA had given the residents the results of the sampling and we also gave some recommendations to reduce potential exposure in the interim before any action can be taken at the properties. These measures included washing your hands after coming in contact with soil, taking your shoes off at the door to make sure you don't track any dirt into the home, trying to keep the home as dust-free as possible, bathing pets to make sure they don't drag dirt into the house and avoiding activities that would disturb the soil, including gardening.

So now I'll go through our proposed plan and it outlines the objectives of our cleanup, establishes what our cleanup levels will be, and it evaluates each cleanup option and proposes EPA's preferred cleanup option.

So our main goals at the site for Operable Unit 4 are to prevent a risk to human health from the ingestion of soil. Our second goal is to prevent the migration of any site contamination to other areas. So our Preliminary Remediation Goal is a two-tiered approach. We'll be removing any points that are above 400 and, in addition, the average across the yard we would like to bring below or to 200.

So the remedial alternatives or the different options that we looked at were No Action, a Limited Soil Excavation, Soil Cover and Institutional Controls and a Full Excavation and Off-Site Disposal.

So under the first alternative, no remediation would take place. The contaminated soil would remain at the

properties and this would not include any monitoring or institutional controls.

The second alternative, Limited Soil Excavation, Soil Cover and Institutional Controls, that would remove lead-contaminated soil within the first top six inches. Then a soil barrier would be placed and clean soil would be placed over top. This would include property restoration and planting and land use restrictions would be put into place. This alternative has an estimated cost of $2.9 million.

Alternative 3, Soil Excavation and Off-Site Disposal. The lead-contaminated soil above the cleanup levels would be removed. Clean soil would be backfilled. The properties would be restored along with the plantings. No land use restrictions would be put into place and there's a potential for temporary relocation during the construction if the construction significantly impacts the residents' ability to access the home or impacts the use of the property. And this is

estimated to cost $6.7 million.

So after looking at the three alternatives, we weighed them against nine criteria. We do this at every Superfund Site. The first two are the threshold criteria, meaning they must be met in order for this alternative to be chosen as our preferred remedy; that is the overall protection of human health and environment and compliance with applicable or relevant appropriate requirements.

The next five are what we call the balancing criteria and we look at them weighed against each other to try to come up with what is the best weighted option. We look at the long-term effectiveness, the reduction of toxicity, mobility and volume of the contamination. We look at how easily is it implementable, what is the cost, the short term effectiveness.

All these things we take into consideration and also take into consideration what we call the balancing criteria which is

the State concurrence and the community support or community acceptance.

So after going through all of the nine criteria, EPA is proposing the third alternative, the Excavation and Off-Site Disposal which would cleanup the contaminated soil above our cleanup levels. It would be backfilled with clean soil on the properties. Properties would be restored and there would be no restrictions at the property after the cleanup was completed.

As I mentioned, this could potentially include a temporary relocation if it significantly impacts the residents' ability to use the home and it's estimated to cost $6.7 million.

So under the Preferred Alternative, depending on the results of the June 2018 sampling, there may be additional properties that could be included in this cleanup depending on the results. So the next steps in the process we are accepting public comment through August 27th. We'll be accepting those

comments tonight here at the meeting and also be accepting them in writing.

Once we've gathered all of the public comment, we will be responding to those in what we call our Record of Decision which documents the final remedy for our Site. If you'd like to review the Proposed Plan or any other Site-related documents, including the Remedial Investigation, you can access any of these documents at the local libraries in Lockport and there is also a new repository, informational repository, in Newfane that was just created and has all of the Site documents.

There's also a repository in New York City and the documents are all available on the Eighteen Mile Creek website. If you go online and you click Site Documents, it will bring you to the administrative record for Operable Unit 4 and you'll see listed all of the documents that you can download there. If you have any problems accessing these I'm available to help you at any time.

If you'd like to send any written comments to me, this is my contact information. You're welcome to send me also through email and as I mentioned the Site documents are available on the website including this presentation will also be available.

So at this time we'd like to open it up to the questions and answers session. We'd like to start with the questions related to the cleanup for the Operable Unit 4 and, as Mike mentioned, we're going to call people up to ask questions up in the front so our stenographer can capture all of the information.

MR. BASILE: Thank you very much, Jackie. That was a great presentation. I think she laid out exactly what the plan is and we're now going to entertain questions from you, the residents that are here this evening, but it would be remiss, and I think this is a perfect time to do this, to recognize someone that is not with us this evening. A woman who kind of touched me back

in 2012. And her picture is on this little flyer that was passed out this evening before this meeting.

And of course, her name is Shirley Nichols. Shirley, one of your neighbors, a resident who really reached out to your community and took up the charge and spent a lot of time on the phone with Jackie and I over the years and, of course, unfortunately passed away in January and I think at this time before we start the questions and answer period it's an excellent time just to pause for a moment and reflect on -- if Shirley were here I would almost be forced to recognize her for the first question, so let's just pause a moment and think about Shirley Nichols.

(Pause in proceedings)

MR. BASILE: Thank you very much. We're open up for questions. We're set. So first question. I'm going to ask you again -- I have to remind you Rebecca DiBello is our

stenographer. Just state your name, spell it and your address as well and then state the question.

MS. SPERANZA: Carla Speranza, resident at 6438 Lincoln Avenue in the Town of Lockport. C-A-R-L-A S-P-E-R-A-N-Z-A. First of all, a comment. I'm pleased that the EPA's preferred method is Number 3, the most expensive but also the most comprehensive, so I say thank you for that. Frankly, if your choice were anything else we probably would have a riot on your hands.

Now, that being said, I also want to dive back I think it was two or three slides before where you had mentioned that there was some additional consideration being given to further adjacent properties. Can you go into a little more detail about the breadth of those properties, and I'll follow-up to that.

MS. KONDRK: Okay. In June 2018 we performed additional sampling along North Adam Street. We sampled four additional properties to just get a better idea of what we're

looking at in the area and we're still evaluating the results of that sampling and if it's necessary to perform additional sampling, we will be in contact with homeowners at that time.

MS. SPERANZA: Thank you. So my follow-up to that is June, which was a month and a half ago, let's say that, are we waiting for those results, for example, to be also a part of the Record of Decision or is that a separate issue or is there no go forward until all these other pieces are settled?

MS. KONDRK: That's an excellent question. So we're here tonight to make sure that this is happening as quickly as possible. Even though we don't have the results of this additional sampling, we're still moving forward with our plan and we plan to do the remedial design and get the issue taken care of as soon as possible, so we're hoping that we'll perform all the additional sampling and that would be included in this Record of Decision and work as quickly as possible to

get all the properties taken care of.

MS. SPERANZA: Last comment, and I'll gladly share the mic. So we're looking at a $6.7 million solution here. Can you take us through the funding of that because I would just call our political climate and our current government situation a bit tumultuous at times.

We're talking about a pretty big bill. We know there's only X amount of dollars annually in Superfund allocations. How confident are you that that money is going to be secured not only on paper but in reality?

MS. KONDRK: Right. I feel very confident because the Agency is very focused on Superfunds and the Agency gives priority to residential cleanups. I think it's very important. This is protecting human health and the environment. This is what we're here for, to take care of these types of issues, and so I think that -- I feel very confident that the funding will be able to be secured.

We'll be working with our headquarters

throughout the process to line up the funding the best that we can. I can't make any promises about it, but I can tell you I feel confident this is a priority for the Agency.

MR. BASILE: Another question? I'm going to ask if you do have a question just try to keep it to one or two at the same time and then we'd like to give everyone an opportunity.

MS. MULLANI: Anita Mullani, M-U-L-L-A-N-I, 93 Lindhurst Drive, Lockport, New York. Hi, Jackie. Quick question. When I was on the council Alderman O'Shawnassey fought very hard to get that tank that was leaking capped because it was leaking. It was my understanding that that was private property and the gentlemen that owns it lives out of state, so what would be the plan for the land, the dirt, the soil that's all around the tank that was buried under there that you know and we know that was leaking?

How do you go about doing that when it's private property? A gentlemen that's out of

state. I believe it was my understanding that he didn't want anyone on the property to clean it up.

MS. KONDRK: I'm going to ask Pete to chime in on this.

MR. MANNINO: Jackie wasn't working on this portion of the project when that work was being done, so you're talking about what we call the Liberty Asbestos Site and so that parcel is not part of the Eighteen Mile Creek Superfund Site, but it was handled by EPA Superfund Program and the asbestos was removed and the building was demolished and the material was removed.

The oil that was in that tank was handled I believe by New York State DEC, so I would have to defer questions about that tank and any additional work that may or may not have happened at that tank to the State of New York because we weren't involved in that piece of the project.

MS. MULLANI: But they're confident they cleaned that up?

MR. MANNINO: None of us were involved with it, so I can't make any representations to the extent of the work that was done. We can put you in contact with the right folks.

MS. MULLANI: That would be great. Thank you.

MR. BASILE: Another question?

MR. DRAKE: Hello. Kevin Drake from 4410 Purdy Road, K-E-V-I-N D-R-A-K-E. My question is to all you people in the city, I think you got cleaned up and stuff. We live in the Town of Lockport. I reside about 150 feet off this creek, so I'm glad they're doing this part and cleaning you guys up, but now that they are cleaning this creek I'm dammed up on my end of the creek. It's now even with my land.

I've been working with Jackie to try to get this cleaned up. We got NYSEG in there now because the town wanted nothing to do with my property. They won't lower the assessment. They think it's great that I can keep paying these high taxes, but anyway, I'm so upset. I

just want to flip out.

You can't go anywhere with this local government. It seems like every time I talk to somebody it sounds like a good story, but nothing gets done. I have no sampling done on my property. Maybe I can force you guys to do it so we can get something cleaned up on my end of the creek.

We have NYSEG coming through to clean it up I guess in time. Who knows when they are going to come down. You can do all the cleaning you want, but eventually you're just going to flood me out with the way all these trees are down and stuff.

And north of Purdy Road are still a bunch of trees. I don't know what we're going to do, what action to take, to stop us from getting contaminated by the sediment and stuff. It just seems like I've been working with these guys since 2015. I'm going nowhere. I'm spinning my tires with you guys.

I need somebody to help out and say, you know, let's get this done and we can't just

focus just up on the city. You got other people that reside on this Eighteen Mile Creek that are close by.

My garden is about 50 feet from your creek. You've seen the property now. My home is 150 feet from the creek. If this gets up to my home I'm not going to be happy. I'm not happy now with it even with my property and I keep reaching out to you guys and we just keep going from there and keep spinning our tires, but I just want some help.

If we got to sample my ground to get your excavators there or whatever we have to do, maybe that's what I have to, but this is getting ridiculous. It's been years now and if you don't think this has effected my property after buying my home in '06, you guys are nuts.

I don't understand this whole Superfund Site, but it must affect my property value. I guarantee I couldn't sell my home right now if you had little kids or anything like that. So I'm letting you know there's other people on

this creek besides the City of Lockport. We do reside on the creek, but nothing is ever said. Every time I come to the meeting it's always about your OU1 or OU2.

God bless. You want a pat on the back? I'll do it, but you got a lot more work ahead of you and we need to get working on that.

MR. BASILE: You're right and I know Jackie wants to respond. Go right ahead and do it.

MS. KONDRK: So I've been working with you, Kevin, to alleviate the issue that's in the yard with the trees. I know it's taken a little more time than we would have liked, but I think we've now gotten to a place where work is being done and I have spoken with NYSEG, too, and their contractor this morning.

Actually, I was looking forward to seeing you here tonight to talk to you and we will be removing the tree that's in the creek that you were speaking about and I think it's important to --

MR. DRAKE: It's not just one tree.

There's a ton.

MS. KONDRK: I know that and I've been to the property.

MR. DRAKE: Don't paint this fancy picture when it's not a fancy picture. There is a ton of debris, not just one tree.

MS. KONDRK: So like I said, I did go to the property. I saw the trees and I found out who was responsible for that particular area. NYSEG owns that piece of the property, so NYSEG hired a contractor, Advanced Environmental, to remove those trees and they will be working with Kevin to figure out what is the best way to get onto the property and take care of that issue for you, and I will be in consultation with them as they perform that work and that should be happening very shortly in the next couple of weeks that they will be removing that tree.

And I'd like to point out that, yes, we're here to do these residential properties here tonight and we have come here in the past to do the OU2 area and that, yes, there is still

more work to be downstream and I recognize that and as I pointed out this evening, we just went out this summer and performed additional sampling all along the creek.

We did sediment samples. We took water samples. We are aware of what is going on and we're continuing to collect more data so that we can make that our next part of our project to clean up, but first we have to clean up the source area. If we don't clean up the source area first, then everything would just wash out --

MR. DRAKE: You're going to wash me out, though, if you don't maintain the creek. You are not maintaining the Superfund Site.

MS. KONDRK: I'm not sure I understand what you mean.

MR. DRAKE: I know you're not sure.

MR. MANNINO: Kevin, my name is Pete. If I can make clear, we're not going to be the folks handling the tree removal. That's the other company that Jackie mentioned. We have no control over their timing or their

schedule.

MR. DRAKE: What do you do about the water then?

MR. MANNINO: I recognize that, right? There is -- there are areas that are prone to flooding and as Jackie mentioned, as part of our investigation we are going to be -- we have done sampling and we're going to continue to do additional sampling as part of the investigation.

If you'd like to have your property sampled we can talk to you about doing that, but again we have no control over the tree removal, tree removals. There's multiple, I understand that, but we have no control over that and I think you recognize that Jackie has been working to help facilitate that work on your behalf.

And you know, again, if we had any control over that schedule or doing that work, we'd be having a different conversation, but we're not in that position.

MR. DRAKE: So in the meantime if this

property plugs at 4410 Purdy Road who is responsible? I'm reaching out to everybody to stop this so it doesn't happen. If it gets up to my garden, guess what? Now we're digging my yard up.

We could be now. I didn't want them sampling my property and knocking my value down even more for this contamination.

MS. KONDRK: I understand your concern about the flooding. That's why I've been working with you as quickly and as hard as I can to find out who is responsible, which is NYSEG, and get them on board and now they have hired the contractor and they told me that they are hoping to perform the work in the next few weeks, so we'll be coordinating together for that and hopefully we get the work completed before there would be any flooding issue.

MR. DRAKE: My question is who is responsible to maintain this creek while we --

MS. KONDRK: Each property owner along the creek. That's why NYSEG is responsible

for the trees that have accumulated in that area.

MR. DRAKE: So north of me, if it's not NYSEG, you got a lot of debris. I don't know if the contractors reached out to you yet and told you, but north of my property there's a lot of debris, so it may not help to remove the debris behind my residence.

They are going to keep going because the creek is not being taken care of and nobody will touch this creek now that you call it a Superfund Site.

MR. RANOUF: I live on the creek. I'm going to get my saw out and my tractor and get it out of there. I would highly recommend doing that yourself. If you want something done, do it.

MR. BASILE: Kevin, I don't know --

MR. DRAKE: If you were to see the size of the trees, my tractor will not pull them. They are in the water.

MR. BASILE: Kevin, Jackie and I are --

MR. RANOUF: I'm a big truck operator.

I think I know what I'm dealing with.

MR. DRAKE: I don't know anything about what you got going on.

MR. BASILE: Kevin, Jackie and I have been to your house and we know the problems you're having. When EPA came here to this building, before we even did Operable Unit 1 and even looked at Water Street we laid out a plan and we explained to the public in 2012 and 2013 that this is a massive Superfund Site.

It isn't your typical 30 or 40-acre Superfund Site. It rambles 15 miles for this corridor and we told you then and we've stuck by our plans and our convictions and we told you it was going to be a phased approach with operable units and that's what we have presented to you.

We're just asking for patience. Now that we're doing -- let me continue. Now that we're doing the remedial investigation and then a feasibility study on the corridor with our contractors going up the 15 miles to

Olcott, that's what we're in the process of doing now and we just ask for your patience a little bit longer.

MR. DRAKE: I may not have that. I'm begging for you guys --

MR. BASILE: Just try to have a little patience. Next question.

MS. KIENE: Thank you very much. My name is Jean Kiene, J-E-A-N K-I-E-N-E. Shirley Nichols considered me to be the sister that she did not have, so I have been working with Shirley for the past ten years and unfortunately she became ill in December and her last public appearance was January 4th when she came to the library and she was able to say just a very few words and she passed away on the 20th of January.

But prior to her passing, she was able to determine that we needed to form a group, that it was no longer advisable to just have two or three people working on this issue, so she formed CAPON which is Citizens Against Pollution of Niagara and since then we have

been meeting on a regular basis and Shirley's concern was for the fact that she felt that we need to call for a comprehensive, a comprehensive study of the health of all the individuals along Eighteen Mile Creek starting with Lockport.

Now, tonight there are a number of people in this audience that unfortunately have issues with cancer and unfortunately Shirley's lead content at her home was 1800 ppm of lead. Normal is 400. She was told to remove her vegetables, which she did. She was told to wash the paw pads of her animals and she was told to remove her shoes and, consequently, Shirley passed away and we are aware of the fact because one of the members had the opportunity of viewing the x-rays. She died as a result of a large mass in her stomach.

When you did the testing last year, I believe it was July, of soil at her house it was determined that manganese was quite high. Manganese has the same symptoms as Parkinson's. Her husband is now a patient at

a local nursing home with Parkinson's. This was a very, very dear couple.

Shirley had nothing but love in her heart, especially for children, and consequently she became very much involved in the contamination of lower town and her thought was that we actually needed to have, you know, speed with regards to this.

She feared that the money is going to be basically cut back drastically perhaps as soon as January, so I'm here tonight to say that let us go forth and try and get every dime that we can and start to do whatever is needed to be done in this community so that we have the advantage of using the money that was appropriated for our use. Thank you.

MR. BASILE: Thank you, Jean. Thank you. Another question?

MR. RONDINELLI: Hi. My name is Vinny Rondinelli. Vinny with a Y. R-O-N-D-I-N-E-L-L-I. I recently purchased 95 Van Buren. It's also addressed as 35 North Adam, and I read a little bit about what is

going on here. I feel like there's a couple different polluted areas adjacent to mine. While I feel like my property isn't exactly in the middle of any Superfund boundaries or pollution land boundaries, I'm wondering if there's any opportunity for me to get my soils tested and things like that because I feel like it's all around, so it's got to be there too, you know.

MS. KONDRK: I do understand your concern and I can talk with you afterwards about that possibility.

MR. BASILE: Another question?

MS. BUTERA: Hi. Angela Butera, B-U-T-E-R-A, 282 Chapel Street. I was just curious as to when you test these properties, do you contact these people because we've never been contacted for ours to be tested and are you saying our drinking water is okay to drink because you're saying soil. It soaks into the ground so --

MS. KONDRK: So we have contacted each homeowner to do the sampling and if it is

determined that additional properties require sampling, you would be contacted if you were part of that effort.

MS. BUTERA: You're saying North Adam. I'm way before North Adam by the creek and we have never been contacted.

MS. KONDRK: Is it possible to pull up the map again please, Marcia, the OU4 map. So I'm not sure exactly where your property is located.

MS. BUTERA: Right across from the paper mill, that area right next to Olcott Street.

MS. KONDRK: So you're on North Adam like over here?

MS. BUTERA: Chapel Street.

MS. KONDRK: Like right in here, so like I had mentioned earlier, we started our sampling here directly across from Flintkote because that's where we believe the contamination originated. We did a forensic footprint analysis and we matched the different chemical makeup of the soil that was found at Flintkote to some of the soil we were

finding at these residential properties, so we started directly across from the factory and for each result that we looked at we stepped out a little bit further and a little bit further and we were seeing that generally it was going in this direction here, so that's why our we have stepped out in the way we did.

It's all based on the data and the results of that data each time we did the sampling.

MS. BUTERA: Are you saying that our water is fine to drink?

MS. KONDRK: The water -- do you have a private well or are you on the municipal water?

MS. BUTERA: I don't have a private well. It's just regular water. You're testing soil. Are you testing the water?

MS. KONDRK: So the water is tested by the municipality and the soil should not be impacting the drinking water.

MS. BUTERA: Soil touches pipes. How do you know it's not in your water if you're not testing it? How do you know?

MS. KONDRK: The lead in the soil, the way that the chemical makeup is of lead it attaches to the soil. It's like binded to the soil and then you have your pipe for your water and the lead in the soil would not penetrate through a pipe. As long as your pipes are intact, there should be no issue.

There would be no issue to your --

MS. BUTERA: How do you know like on any land if those pipes are intact? Obviously your own pipes you have to check yourself.

MS. KONDRK: If there was an issue of a pipe that were leaking to your home -- the pipes are under pressure to your home. If there was a leak in your pipe you would know about it.

MS. BUTERA: But you've never tested the water?

MS. KONDRK: The water is tested by the municipalities.

MR. MANNINO: The soil contamination we're talking about is relatively shallow. In most cases it's below 24 inches and in some

cases it's around a foot, so any piping you would have coming into your home providing drinking water is well below that and so it is not in the area -- that pipe is not in the area where the soil contamination is.

Add to that that the lead as Jackie mentioned binds to the soil and those pipes are under pressure, so you wouldn't be getting lead in your drinking water from the soil contamination, and as Jackie mentioned the water company tests the water periodically.

I believe that information is either available online or available at the water company.

MS. BUTERA: But EPA doesn't test the water, just the soil?

MR. MANNINO: In this case we wouldn't test the water.

MS. BUTERA: For the creek, but not piping water?

MR. MANNINO: Correct.

MS. KONDRK: If that was a private well that would be different, but this is the

municipal water.

MS. BUTERA: Right, okay. Thank you.

UNIDENTIFIED SPEAKER: What do the colors on the map mean? I can't read the key.

MS. KONDRK: Sure, sorry. So the color coding down here for the legend says that this green area is Upson Park. This dark blue shaded area is the former White Transportation property. This yellow area is the former United Paperboard property. The grey area is the OU1 Water Street property and the purple area is the former Flintkote property and then the orange is the OU4 residence.

UNIDENTIFIED SPEAKER: Thank you.

MR. WOODBRIDGE: Hi. Richard Woodbridge, 248 North Adam Street. First I'd like to say I'm very happy that you're choosing the most comprehensive remediation plan where you're replacing the subsoil as well, but I'm curious about the process of doing that.

You've got trees, fences, driveways. How much of that is removed for this remediation?

MS. KONDRK: It depends where we're finding the contamination. If the contamination is located next to the fence or next to the tree, we would be removing the obstruction and replacing the fence or the plantings. We would try to restore the properties as close to the original condition as possible.

MR. BASILE: Are there any other questions?

MR. GOODMAN: My name is Steven Goodman, G-O-O-D-M-A-N, 3092 Lockport Olcott Road, Lockport and I'm a proud resident of Newfane. EPA and DEC did some sampling not on my request, but they came and asked so we'll talk about that issue.

They came to my home and did some sampling. I'm looking forward to the results of it. I have lived in Newfane most of my life. The Eighteen Mile Creek was a disaster back in the 60's, really a disaster. Anything that's been going on to improve it, I'm all for it.

The Eighteen Mile Creek, I love to kayak. I kayak on a very regular basis. I'm very familiar with float out things. They are tough. I kayak in Old Orchard River. There's a canoe company that comes and cleans that out so they don't have to deal with it. It's not going on at this point.

I see improvement. Keep going forward whatever it takes and I support your efforts. Thank you.

MS. KONDRK: Thank you.

MR. BASILE: Thank you very much for your comments. Yes, ma'am. Please come forward.

MS. CZAPLICKI: Beth Czaplicki, C-Z-A-P-L-I-C-K-I. I live at 165 North Adam Street, corner of Porter. My situation is a little different. I just bought this house from the tax auction from the City of Lockport in November of '15. I didn't move in until March 16th because the house had to be gutted, black mold, everything cleaned out before I could move in.

We were never told of any of this. Nothing from the city from anybody. The only way we found out is you guys were taking soil samples through a park like across the street and my husband asked to go over and say what is going on?

Should I have been informed from the city of all this? We have a young couple that moved in next door less than a year ago. Were they informed of any of the problems? Anything from the city, especially since I bought the house from the tax auction. I didn't find anything out. We put our heart and souls into the garden.

We were told to eat it. Now we're told not to eat it. That's the question. Why weren't we informed? There's another house for sale up the street. Are they going to be informed when someone comes in and buys this home over on Porter Avenue?

Do I go after the city? Do I complain? Comment: What do you think if you were in my situation because this is my last home and we

have been putting everything into it and now all of a sudden it's like do I start over? Do I go after the city? Why wasn't anybody told? Not just me, but anybody else in my situation?

MS. KONDRK: I apologize that's the situation. I really can't imagine.

MS. CZAPLICKI: Where does the city come in?

MS. KONDRK: I'm not sure to be honest with you.

MS. CZAPLICKI: To inform people?

MS. KONDRK: I'd need to get more information about it because that's a legal question. Unfortunately I don't have that information, but I can look into that and get back to you.

MS. CZAPLICKI: I'd really like to know because it's not fair to myself, my family or anybody else. Nothing that -- nothing was ever said. Now the value of my home -- now, can I turn around and sell it? I have only had it a few years and how does the city participate?

MS. KONDRK: I can tell you that we are in constant communication with all elected officials from the state senators, the federal senators, the assemblymen and the city. We brief them routinely, many times quarterly. We brief them over the phone, electronically and we keep them apprised and we've kept the former mayor and the council apprised, but I can tell you that that's the responsibility that we have not only to you the residents, but the elected officials as well.

UNIDENTIFIED SPEAKER: Isn't an Alderman here who is head of the environmental committee for the city?

MR. BASILE: There is an Alderman here, but we're trying to answer the question right now.

MS. SPERANZA: I have an actual answer aside from being -- this is Carla Speranza again. Aside from being a resident of the Town of Lockport, I am also part of CAPONS, Citizens Against Pollution of Niagara, and we drafted a letter to the New York State

Department of Conservation and set that out back in March.

Our third question in that letter was why when the City of Lockport takes over a property and holds an interim auction the City of Lockport does not have to announce the Level 2 contamination? Are there no state regulations for disclosing this information to the potential buying public?

Now, the response from the DEC was under the Environmental Conservation Law, the DEC is required to create and maintain a Registry of Inactive Hazardous Waste Disposal Sites and provide notice of a listing of the site. The May 28th, 2008 letter was noticed that the Site was listed as a Class 2 site.

In addition, the Registry of Inactive Hazardous Waste Disposal Sites, which is a public registry and is updated nightly by the DEC, is available to the public at dec.ny.gov. I have a whole URL here. The DEC is not responsible for monitoring disclosures made in individual property transactions.

I'm sorry, but it's coming down to caveat emptor and we would hope that there would be more of transparency from our elected officials to maybe push for some other type of controls or disclosures or publications of this kind of information, but according to the DEC, and certainly the EPA, you are under no obligation. It's on us.

MS. MULLANI: So my situation is still -- I still feel that I should have been told or somebody in my situation should have been told. I bought it from the tax auction from the City of Lockport and it's not right, especially with the contamination.

Something like that should be informed to someone that's in my situation or anybody buying a home down in that area. Thank you.

MR. BASILE: Thank you.

MR. STILES: Good evening. My name is James Stiles, J-A-M-E-S S-T-I-L-E-S, 4706 Cottage Road, Gasport, New York 14067. I'm here tonight because I went through this. I was at 143 Water Street. Shirley came up to

me or up to my house, knocked on the door and that's when everything started, at least for me.

I guess the nightmare began, you know, but it got me out of the situation overall. Took time. I took my lumps and all that good stuff, but I try to put all this stuff behind me because it was a bad part of my life, my family's life.

My parents owned the house before me. My mother had breast cancer and she battled that. Was diagnosed with MS, you know. And just to see this process still happening years after I'm out and we're still talking about like sampling and testing and the fingerprints of the land and all that stuff.

Like I had a dog at that property who died after four years. Like at two, three, four years of sampling these properties, animals and people are dying. I understand things take time and I get it, but the race is between literally life and death, you know, and what is the value of your loved ones, you

know, because I don't think anybody here could put a price tag on it, on anybody's life, and just seeing this stuff is reliving it.

I was here years ago and reliving this just seems over and over again and just seeing the same faces and the new faces and the same concerns and new concerns. It's the Eighteen Mile Creek. We all know it's contaminated a mile right, a mile left, all the way up to the lake.

There has to be more that we can do, right, other than dig up a year here, dig up a year there. Literally people are dying and I don't think it's right. I mean, there's just so many things that are wrong in this situation from back in the 19th Century until now pushing problems aside, pushing it to the next generation, what have you, but right now in 2018 people are getting sick and people are dying and Mr. Drake is over there trying to stop his family from getting sick and he has to wait. How long are we going to have to wait? Thank you for your time.

MR. BASILE: Thank you. Thank you very much.

MR. MANNINO: You would acknowledge, though, that once we came with the plan at that time you were working Tom and Terry that we moved quickly to address the situation on your property.

MR. STILES: Right, right. At the time it was fairly quick as far as what I've been told, how long things like that take. It's just we got five families out. I mean, we have one road and we left the one house there still to battle with that situation because I was there when the creek flooded and it went on to everybody's property including the house next door, but since there's a 15-foot road they left that single house there to basically fend for themselves which I don't think was right at all just from a moral standpoint, I mean, it's one house, one more house.

MR. MANNINO: So if we're talking about the same home I personally wouldn't characterize it as that homeowner was left to

fend for themselves because we did remediate the contaminated soil on their property.

They went out and removed the contaminated soil that was present on the property and the property was restored, so we stuck with the plan that we presented and we addressed the properties on Water Street as we described and that home was never included -- was not included in the original list of properties and we explained why at that time.

MR. STILES: I was there wearing my boots up to my knees walking through the water of the creek when it flooded the whole street and into their property. I'm just saying it's one house. It's one house.

MR. MANNINO: So I recognize your point. It's one house.

MR. STILES: In my parents' garden across the street caused my mother to have cancer across the street, isn't that a valid concern for the house that's right across the street?

MR. MANNINO: We acquired your property

in addition to the four other residences. One of the reasons was not because that the property flooded, it was because the work that we needed to do on your property, the construction to remove the contaminated soil that had PCBs and lead and I believe also chromium was that significant steps and we had concerns or uncertainty as to whether or not the construction could be done effectively meeting our cleanup goals without impacting your homes with those homes being present.

That's why we acquired your property in addition to the other properties. It wasn't because they flooded. It was because of that uncertainty with respect to being able to meet our cleanup goals.

MR. STILES: I understand that.

MR. MANNINO: I just wanted to --

MR. STILES: Absolutely. Just know we got many more concerns about the timeframe of these things happening, the soil samples and things like that three, four years, I mean we got to do a better job. We have to do a

better job. People are getting sick and literally dying.

MS. KONDRK: I assure you I'm working as hard and as fast I can for you guys and I understand your concern for the timeliness and I am working as fast as I can.

MR. STILES: I'll help. What do you need to me to do?

MR. DRAKE: I have already tried that.

MS. KONDRK: I think I've been working pretty good with you, Kevin, right?

MR. BASILE: We have one more question here.

MS. KIENE: This is the fourth time that I've been down here. The last time I was down here I raised a question with regard to why the letter was sent out to 98 residents ten years ago advising them that they were a Level 2 which is the same as Love Canal. At that point the question couldn't be answered.

Now, this has absolutely nothing at all to do with you or the gentlemen that are here tonight, but I was always after Shirley to

send the letter. She never sent the letter. I sent the letter on March 1st. I received an answer on 5/3/2018 from the New York State Department of Environmental Conservation, and I'm going to read to you the first paragraph and my questions.

The New York State Department of Environmental Conservation is in receipt of your March 1st, 2018 letter concerning the Eighteen Mile Creek Corridor Site in Lockport, Niagara County. Your letter also references and includes a copy of DEC's May 28th, 2008 letter which is a letter notifying parties that thee above-referenced site has been listed on the DEC's Registry of Inactive Hazardous Waste Disposal Sites Registry. (May 28th, 2008 Notice Letter.)

Answers to your questions are as follows: Number one, my question, how are these properties selected? What criteria metrics determine the locations? Please explain why only certain properties on the street such as Olcott Street were selected and not the entire

street's parcels for testing. How were they identified?

Answer: The DEC notifies the site owners, adjacent property owners, local elected officials, local New York State elected officials and the news media when a site is added to the DEC's Registry or when the classification of the site changes.

That's all verbiage. This is the answer. The properties listed on the pages enclosed to the May 28th, 2008 letter were included on the mailing list when the site was listed in the Registry. No testing was contemplated or completed pursuant to this list.

And otherwise, 98 letters went out to the people in lower town advising them of the fact that it was a Level 2 situation and now the answer to the question is no testing was contemplated or completed.

My second question: What type of testing was done for each property? Is there a report or test matrix with results and how may a copy be obtained?

The properties listed on the pages enclosed to the May 28th, 2008 letter were the properties included on the mailing list. No testing was contemplated or completed pursuant to this list.

Pursuant to subsequent investigations, several properties on Water Street which were on the mailing list were tested and later added to the Eighteen Mile Creek Corridor Site, which then becomes your parcel to work with.

But what I'm saying is this all began before you ever entered into it and how could they send out those letters? No testing completed pursuant to the list?

MS. KONDRK: If I understand correctly, I think that that is actually the letter that was referred to earlier this evening that notified people that they were in the vicinity of a Level 2 waste site. They were not included as part of that waste site. That was the letter that went out to notify people that they were in the vicinity of it.

MS. KIENE: I have a copy for you.

MR. BASILE: Jean, you can give it to the stenographer. Another question?

MR. RANOUF: Hello. My name is Raymond Ranouf, R-A-Y-M-O-N-D R-A-N-O-U-F. I live at 40 Frost Street. I just bought the property also, but I have been on Mill Street right across from Shirley's house. That was my family's home. My aunt lived in that home and lived to be 93 years old. I lived on Mill Street, 217 Mill Street, since 1958 to 1986.

I just bought the 40 Frost Street a year ago. I was never told that it's full of lead, too. I'm just hoping you guys hurry up and I'm pleased that you're doing this. But you know, people, we have to wake up. Our whole world is polluted. And who polluted it? Only people that polluted it was our own selves.

I drive dump truck for 30 years. I hauled contaminated soil all over the place and dumped it. It's all about the mighty dollar. It's all over. Thank God these people are trying to do something and I hope you hurry up

and dig my yard up, but you're going to have to dig it all up, not just some of it.

My yard you got in four different units and every unit has to be dug a little, but you're not going to dig one piece. You're going to have to dig the whole yard. If you're going to scrape it you're going to scrape the whole yard and replace the soil. Thank you very much.

MR. BASILE: Thank you for your comments.

MS. BUTERA: My whole question is we got one of those letters stating our residence was in the contaminated area. We were never tested. We were never informed. I mean, my mother had kidney cancer. Luckily we caught it. She's now going to Roswell again for her lungs.

I have had miscarriages. The dogs have died of cancer and we're being cutoff because we are on the wrong side of the road? Something has to give. It's our health, but we're not in a position. We can't sell our

house. We can't afford to and if we have to dispose of it who is going to buy it?

Do you want to buy it? I wouldn't and that's what that letter is telling us. We have to disclose it. So I mean, why are they only focusing on part especially the paper mill right across? They tested that soil, but not ours.

MS. KONDRK: Right. I understand your concern and I have to point out that there is a lot of different factors that go into different health issues that people may -- it's really hard to determine whether or not the site has had an impact on someone's life or not.

MS. BUTERA: I don't know if my soil has an impact on our health because it's never been tested.

MS. KONDRK: I want to point out that in general it's hard to pinpoint what is the cause and effect of each thing because it seems like it came up a lot tonight and I wanted to point that out. We have stepped out

in what we thought was the most methodical way.

MS. BUTERA: But you're going -- you're not going -- here's the creek, here's our house.

MS. KONDRK: This particular investigation and the contamination that we have found doesn't necessarily have to do with the creek as it did the Water Street properties in that low-lying area where there would be continuous flooding and depositing of contamination of the creek.

That is not what the situation is here.

MS. BUTERA: My basement gets wet. That creek has flooded by us. It's there. It goes all along the road.

MS. KONDRK: I think that you and I could have a separate conversation about that about your particular situation and discuss any possibilities there. I just was trying to say that for this particular investigation that's the lead-contaminated soil from the Flintkote property is up on the hill and

doesn't have to do with the contamination that was from the creek like the Water Street properties were, so for this particular investigation we've stepped out in a methodical way across from the Flintkote property because that's where we believe the lead-contaminated soil came from, so we wouldn't be sampling your home as part of this effort because this is part of the lead-contaminated soil from the Flintkote property.

MS. BUTERA: You're saying this is all just because of Flintkote. It wasn't the plastics factory down there? It's not the paper factory down there? It's Flintkote.

MS. KONDRK: We have this forensic evaluation that we did. We looked at the chemical makeup of the soil from the Flintkote waste area and chemical makeup of the soil that we sampled on these particular properties and there's a forensic match of that soil so we believe that yes, it is in fact from that particular old industry and not the other

industries that may have operated in other areas.

MS. BUTERA: Thank you.

MS. KONDRK: We can talk afterwards if you still have questions.

MR. ALLORE: Steven Allore, S-T-E-V-E-N A-L-L-O-R-E, 154 Locust Street, Lockport. I have a simple question, but I know it's not a simple answer. How long before kids can play back in their yards again? How long before he can go canoeing and not worry about falling in and getting cancer?

Are we talking 20, 25, 30, 40? I'm not talking even just here. I'm talking all the way to the lake. What is a guess?

MS. KONDRK: There is two different timelines going on there because there are two different phases of the project, so this particular phase, what we're calling Operable Unit 4, is the residential properties and we're coming out here tonight to discuss our proposed remedy and once we finalize that remedy we'll be in the design phase right away

figuring logistics of how it's going to work.

We're hoping to finish that up by the spring and by the summertime we hope to have a shovel in the ground at these properties. In the meantime, we have discussed with the homeowners proper recommendations, taking precautions for any potential exposure at the homes as far as, like we said, not disturbing the soil, making sure you wash your hands because the main issue would be ingesting the soil, so as far as in the interim that's what we've recommended until we're able to go out there and take care of the soil on these properties.

Now, the downstream areas we're still in the investigation stage so it's going to take us some time to collect all the data that we need to make sure we have a full picture of the area so we can make a sound decision and be confident that we've taken care of the contamination at the whole rest of the creek and that is going to take some time, but if there are issues along the way there that we

see contamination that would be impacting a resident's home, that would be a priority for us and would be taken care of as soon as possible.

MR. ALLORE: So are we talking about two, three years or like 10, 15 for the residential and for everything? Just a good guess.

MR. MANNINO: So with respect to everything, it's difficult for us to put a timeframe because we don't know the extent of the contamination for the OU3 from beyond the creek corridor down to Lake Ontario, so until we know the extent of the contamination and then come up with the Preferred Alternative, we don't know what that plan will look like, so without knowing what that plan looks like, we're not able to give you a timeframe for how long the work is going to take.

We don't know what the work is yet, so it puts us in a little bit of a difficult situation to give you a timeframe when we don't even know whether or not -- what the

work could look like. Does that answer your question?

MR. ALLORE: In a roundabout way it tells me we're a ways off for a final solution.

MS. KONDRK: For the downstream portion, yes, we're still investigating and doing it in phases. As soon as we get the information and get the data back from the sampling we just did this summer, we'll see what the next step is; where we need additional information and then once we find that we have enough information to make any sort of decision, we would do so at that time, so it's kind of a phased approach that we've taken for the downstream area.

MR. ALLORE: So about how long before we have an idea when you're done with the testing when you want to move to the next phase? Is that 18 months down the road? Is that four years down the road?

MS. KONDRK: It's hard to say until we have each set of data information what we

think we need to do next, how much more sampling do we need to do.

MR. MANNINO: If I can just add, generally investigations of sediment sites are complex and can take several years to complete, but in this case New York State has done a significant amount of work. They were the lead on the project.

EPA Region 5 of the Great Lakes program has also done some work within the area of concern and so we are building on that work and we're hoping to be able to shorten that timeframe where we can, but we need to go through that process.

The one thing I would like to add at this point and I want to make sure that folks don't lose site of is this process, and I use the word process a lot, takes time, but when we sample and we find that there is an immediate concern we do mobilize at the site and perform what we call a removal action and so, for example, on Jim's property you may recall that before we came out with the plan to acquire

his property at those residential properties on Water Street we put a temporary cover system down to address an immediate concern we had with respect to contact with the soil and so we don't wait for our investigation to be done to address any immediate health risks that may be present and so I just want folks to be mindful of that.

We are on this -- we have these two legs to the program. The removal program that addresses any immediate concerns and our remedial program that will address any -- the long term investigation and response to the site, so I just wanted folks to be aware that we don't just methodically go down this pipeline with blinders on.

We do address the immediate concern if one is identified and in this case the Water Street property was an example of that.

MR. ALLORE: Okay.

MR. BASILE: Thank you. Are there any other questions? Any other questions?

MR. RUTLAND: Bill Rutland,

R-U-T-L-A-N-D. I live at 5798 Locust Street in Lockport. I grew up on the Eighteen Mile Creek in Olcott, in it, under it, around it and I'm very concerned about all of this.

I've been to several of these hearings and you guys do a fantastic job usually, but it's interesting you handed out all these papers tonight, but you didn't give us a diagram of OU4.

Typically you hand out a diagram of the Operable Unit we're talking about. Tonight you're not going to provide that with us?

MS. KONDRK: I apologize. I don't have copies of that and it was not intentional.

MR. RUTLAND: You've only given us two weeks to give public comments? We have to take the time to research online on our own to get the information of OU4 and then provide written comments? Isn't that really poor?

MR. BASILE: To be quite honest with you, we provided the affected residents with a copy of the proposed remedial action plan. We have it on our website. You can just click on

our website and you'll have the ten-page plan.

We can provide you a copy of it like right after this evening electronically and you'll be able to look at it and then it identifies everything that Jackie has spoken to you this evening about and we went into the newspaper and placed an ad and we're in the 30-day public comment period and you still have until August 27th to review it. There's still plenty of time.

MR. RUTLAND: Okay. So we're only talking about OU4 which is the brand new Operable Unit. The $6 million you mentioned is to clean up the soil from the lead contamination only?

MS. KONDRK: Correct.

MR. RUTLAND: And you're talking about soil excavation on Water Street?

MS. KONDRK: That's OU1.

MR. RUTLAND: We're waiting for that to get started. That's been approved? We have the Record of Decision?

MS. KONDRK: Correct. That work, as

Pete mentioned, we did put a cover system on that area to reduce any contact at this time and the contaminated soil will be removed as part of the OU2 cleanup to prevent a recontamination of the creek onto the property.

MR. RUTLAND: That's the bank-to-bank excavation. When is that going to start?

MS. KONDRK: It's currently in the design phase and that will take another year or so before we have all the construction design and plans for exactly how that will take place, but like I said, we have to excavate the sediment in the creek first and then we'll excavate the soil on those properties to prevent the recontamination of the creek onto those properties, so that work will be done shortly at the same time.

MR. RUTLAND: This OU4, you removed the lead-contaminated soil. I know you guys moved pretty quickly with Jim's property and Water Street property. Shirley's property was tested like 2015. She knew about the lead

content. She was given advice to not let her dog walk in the house before wiping her feet off and all this other stuff, but all these others, when were they notified of all that?

That was 2015 so this OU4 has been sitting here all this time. These people's kids have been going in and out of the house. When my son was out in the yard he ate more dirt than sandwiches.

MR. BASILE: Shirley's property was tested earlier. These properties we're talking about today were tested in the last year. They were tested in three different phases in 2017 and here we are in 2018 with the results and a proposed plan. That's lightning speed it really is.

MR. RUTLAND: But Shirley got that information a long time ago.

MR. BASILE: Shirley did, correct.

MR. RUTLAND: So you knew it was there. It's frustrating that we knew this lead was there, but we didn't know how extensive it

was, so why didn't somebody come along and say you know, just to play it safe and maybe it wasn't your responsibility, but you know it's a real shame is that we have one elected official here and I commend him for being here, Alderman Oates from City of Lockport.

There's not one more elected official here. The elected officials should be ashamed if they're not here. They never come here because they don't want to face these questions. I commend you for your courage. I know sometimes it's tough. Some people are very upset about this and I'm one of them.

Where is our representation? Shirley had been down at City Hall complaining about the lead in the yard for years and the City of Lockport never even told the people who bought their foreclosed property that their property was contaminated.

That's really frustrating to me that this can continue to go on. I thought it was bad what happened on Water Street and now it's happening all over again. This lady on Chapel

Street is right near there and she didn't know it's never been tested.

So I'm not criticizing you. I'm glad you're here. I know it's a monumental challenge cleaning up this creek all the way to Olcott, but we knew lead was in Shirley's yard three years ago and these people just found out this year that there's lead in their yards while their kids have been eating dirt like mine did and what were the effects of that?

The County Health Department is here tonight. The county has a huge responsibility about lead contamination. They found it in kids in school testing and I know they do a lot of work with lead paint. Did this come up on the radar for the County Health Department? This lead contamination is going on down here in the city.

MR. DICKY: Paul Dicky, Niagara County Health Department, D-I-C-K-Y. We do have a grant-funded program. It is the Childhood Lead Poisoning Primary Prevention Program.

The purpose of the program is to identify housing with children under the ages of six that may have living environments that are likely to have lead paint in them.

We do have the ability to test lead paint in the house, windows, porches, exterior and we work with the property owner to eliminate the lead hazards in the house, but I did want to emphasize that any -- not just this neighborhood, but everywhere, all communities should have their child's blood lead levels tested if they are under six years old.

That is promoted very heavily in New York State for all children and we want to screen children to find out if they are being exposed to lead in their environment and we will do follow-up investigations of where that child lives, maybe at grandma's house where he or she spends a lot of time.

We want to try to identify where kids could be exposed to lead. In this neighborhood an additional consideration is the soils in the yard, so I really thank EPA

for incorporating that into their project because that's not done very often.

If anybody does have concern about lead paint in their house, I would invite you to contact the Niagara County Health Department and we can follow-up with that.

MR. BASILE: Thank you, Paul. Thank you.

MR. RUTLAND: Is it my understanding that this lead was airborne and that's how it was spread? Is that the assumption?

MS. KONDRK: It's actually not clear at this time. It's possible that it may have been airborne. It's also possible it could have been used as fill material at the yards.

MR. RUTLAND: I got a call from a resident who lives in Shirley Nichols' home because he knows that I'm part of the CAPON group and the street sweeper went by his house. Huge dust cloud and he's wondering are they spreading the lead around in the air?

Has there been any direction given to the municipality to reduce dust or anything like

that? I know that's going to be part of the project because you are going to be bringing the soil up from the yard where that dust would be contaminated, but could there be surface dust that maybe should be maintained or controlled?

MS. KONDRK: I don't think so, no.

MR. BASILE: Thank you.

MR. RUTLAND: I know you guys do a lot of testing, a lot of testing, a lot of testing, but as the guy at 143 Water Street and you guys did it real quick, wouldn't it be like to complete all your information of testing to test the people to see what effect that these PCBs, lead, copper, chromium, yada, yada, yada what direct effect it has on the population?

Wouldn't that complete your information of what you're trying to -- in your analysis what you're trying to accomplish? Isn't more information better? So why isn't the people getting tested?

MS. KONDRK: I understand and that's a

logical thought process. Unfortunately, EPA does not have the authority to do those kinds of studies. I would have to defer you to the Department of Health as -- and I want to say we look at future exposure, so that is our directive, so we look at the risk that's posed from the yards currently and we design a cleanup with the idea that there will be no risk in the future, so we unfortunately don't look at past risk and we don't look at health effects in that way.

MR. RUTLAND: You test animals in the area like fish and wildlife?

MS. KONDRK: That could be part of additional operable units, but not as part of the residential risk assessment.

MR. BASILE: Thank you. We'll take one or two more questions, if you have one.

MR. KISSEL: My name is Joe Kissel. I'm editor of Niagara News Source, also a member of CAPON. How many residences are being remediated in the OU4?

MS. KONDRK: So at the time EPA has

identified 26 residences.

MR. KISSEL: You said more might be available? How will that be determined? By the soil samples?

MS. KONDRK: Correct.

MR. KISSEL: Is Shirley's house one of the 24 or is that in a different area?

MS. KONDRK: Unfortunately I would rather not disclose that information out of privacy concerns for whose property is contained --

MR. KISSEL: Is her house is OU4?

MS. KONDRK: The house is -- the property is that block, yes.

MS. KIENE: She was told last year in September. She was told by you, Mike, that it was going to be remediated.

MS. KONDRK: I'm not saying it's not. I was trying to protect her privacy by saying I'd rather not say which homes.

MS. KIENE: You also said that the Health Department never heard of CAPON and somebody is lying. I want you to stand here

and hear me. No one from CAPON is lying about a thing.

MR. KISSEL: One final thing. Joe, Mr. Oates, did you want to make any statements as to why the city doesn't inform people at the auction as to the perhaps compromised nature of their properties?

MR. OATES: There may be a legal issue there. I don't know the answer to that.

MR. KISSEL: Might be something that people would be interested in hearing the answer to.

MR. BASILE: Thank you. If there are not any further questions, we are going to be available when the meeting is over. Remember the public comment period runs until August 27th. We thank you for coming out.

You do know how to reach me in Buffalo and I strongly suggest if you do have questions feel free to reach out to me or Jackie at any time and thank you for your time this evening, and have a good remainder of your night. Thank you.

APPENDIX V

ATTACHMENT D

WRITTEN COMMENTS

From: Joseph Wilczewski
To: Kondrk, Jaclyn
Subject: Eighteen mile creek cleanup
Date: Monday, August 20, 2018 10:07:44 AM

Good day Jaclyn
I am a land owner at U.S. FOIA (b)(6) Lockport 14094, and would like to express my concern and opinion that we use Alternative #3 for the clean up. Either of the other choices will not solve the toxic waste problem.
Please call me if you have any questions.
Thank you for your time
Joe
U.S. FOIA (b)(6)

Sent from my iPhone

From: Vincent Rondinelli
To: Kondrk, Jaclyn
Subject: Soil testing in Lockport NY
Date: Monday, August 20, 2018 1:31:03 PM

Jaclyn,

Thank you for your presentation on the progress of clean up along 18 Mile Creek. As we discussed at the end of the meeting, I am in-between/down hill from some contaminated areas and would like to have my soil tested at U.S. FOIA (b)(6) Lockport NY 14094. Please keep me posted as to if and when this could happen.

Kondrk, Jaclyn

From: Tim Chavers <tchavers@ndyfs.org>
Sent: Friday, July 27, 2018 2:29 PM
To: Kondrk, Jaclyn
Subject: Eighteen Mile Creek Site

Good Afternoon Jaclyn,

Thank you for taking the time to call me today. I read the proposal and Alternative 3: Excavation and Off-Site Disposal seem like the logical choice. The risk that could come otherwise hardly seems worth it. Also, I imagine trying to sell a property with contaminated soil down the road would be significantly more difficult. I will be in Oregon for the meetings, but I would appreciate it if you let me know how they go. I hope you have a wonderful weekend.

All the best,
Tim Chavers

Kondrk, Jaclyn

From: william rutland U.S. FOIA (b)(6)
Sent: Sunday, August 26, 2018 12:27 PM
To: Kondrk, Jaclyn
Subject: 18 mile creek OU4 remediation

I am writing this after attending the public hearing in Lockport, NY on August 16, 2018. I am very disappointed that the public was not provided copies of the documents related to OU4. We were only allowed to view this on a powerpoint screen that was impossible to see the layout of the contaminated properties identified for cleanup. How convenient that the lead contamination followed the boundaries of the streets in that area. It is hard to believe that the properties across the street were spared lead contamination. Several residents were concerned that other properties need to be tested. It was noted that additional tested may reveal that further properties may be included in the cleanup, then why not get all the info needed??? Shirley Nicholas of Mill st was notified of Lead contamination of 1800 ppm in 2015. Why has it taken so long to begin this cleanup?? The presenters indicated that EPA officials have already decided to remediate this area with the most costly solution costing nearly 7 million dollars. It seems as though no public input was necessary coming to this decision by the fact of that announcement. I find it hard to believe that 7 million dollars wouldn't be better spent buying the 26 homes, and relocating the neighborhood. The residents in that area live across from the remains of the Flintkote plant that has been left a complete eyesore, waiting for the completion of the work not expected to start for another year. The Lowertown community will now be disrupted for years to come with cleanup projects, desperately needed, that will hinder residents ability to provide a safe nurturing setting to raise their families. Years from now after the cleanup is completed, new homes could be built and a functional community may rise on those creek banks. I personally find this costly plan to cleanup yards with such high levels of lead contamination is not the remedy for the years of exposure this neighborhood has endured.

The complete lack of interest from Local, State,and Federal Elected Officials is also a concern of mine. With the exception of the Alderman representing the residents of that neighborhood, not one other attended. I wonder how much notice was given to these officials of this public hearing? When I objected to the short time period left to provide written comments, Mr Basil noted that an ad was placed in the paper to set the time period for that. While that may be adequate under the rules set, that seemed to validate my concern that The EPA does not really care about public input for this project.

Thank You,
Bill Rutland, CAPON Member
U.S. FOIA (b)(6)
Lockport, NY 14094

Citizens Against Pollution of Niagara
Dominick J. DeFlippo, Chairman
18 South New York Street
Lockport, New York 14094

August 23, 2018

Jaclyn Kondrk
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway 20th Floor
New York, New York 10007-1866

Dear Ms. Kondrk:

We, the members of Citizens Against Pollution of Niagara (CAPON) wish that our written comments be included in the RESPONSIVENESS SUMMARY section of the RECORD OF DECISION.

1. We respond to the Superfund Proposed Plan dated July 2018, Page 3 – **Summary of Previous Investigations**
   - March 2013 – Five years ago. Lead levels at the home of (Shirley N of Mill Street, Lockport, NY) last name and address not noted due to confidentiality) was noted to be 1800 ppm, while normal is 400 ppm.
   - Per page 3 – the results of June 2013 showed the surface soil at one of the properties exceeded 400 ppm, which was risk-based screening level for lead in the surface soil. We presume this was Shirley's property.
   - Last paragraph of page 3 – noted lead concentration from 11ppm to 1,610 ppm

How in good conscience could you not report an accurate number of concentration when Shirley tested 1800 ppm and she was told to tear up her garden? CAPON has a copy of her report.

2. Knowing the soil had that concentration of lead, why was her cellar not tested? Why did you allow that situation to continue with no action and five years have passed?

3. Page 4 – States the risk assessment for lead show that the risks are elevated. The percentage of children with predicted PbB greater than 5 ug/dL ranged from 5.6% to 76.8% on the properties assessed.

The HHRA results show exposure to PCBs and antimony in surface soil for the adult/child resident is within EPA's target cancer risk range for the exposure areas.

4. Page 5 – HHRA indicate that lead present in surface soil at each targeted exposure area could present adverse hazards to current and future residents.

5. Per the Community Involvement Plan Page 2-2 note the statement: (OU4) "Due to the discovery of slightly elevated levels of lead at a residential property on Mill Street" - who are you trying to kid? (Shirley – 1800 ppm) How could this statement be issued? Slightly when normal is 400 ppm. Due to the efforts of Shirley, further testing is necessary.

6. Per page 3-3 Health Hazards: "Many residents in proximity to the creek indicated that there have been high numbers of cancer disease, miscarriages and deaths in recent years. Some residents also mentioned unusually high numbers of household pets with diseases, formation of lumps and premature deaths. Residents inquired about health testing for residents located within blocks of the creek."

Why have you not paid attention to their statements?

7. P.P. 5-4: CAPON, founded by Shirley will be requesting assistance from the TSCA in the very near future!

8. The general public has no idea of the extent of the contamination of 18 Mile Creek. Example: Lack of Signage.

You know the degree of contamination. CAPON seeks answers and early solution, not more meetings and paper expenditure. If we cannot receive a reasonable time line of remediation and not another five years, as you said of further testing – we will promote our efforts with films to educate the residents along the 18 Mile corridor as to the dangers involved.

9. Level Two equates to Love Canal! How many more have to suffer or die as Shirley died with a tumor. The money has been appropriated for the clean up. Do it now for the 26 known homes to have a problem.

10. This delay is inexcusable while children play in their yards, animals run about, and the residents are told to remove their shoes before entering the house, wash the paw pads, keep a clean house, etc.

Respectfully,

Citizens Against Pollution of Niagara

Dominick J. DeFlippo, Chairman

DJD/lag

From: Bob Baker
To: Kondrk, Jaclyn
Cc: Basile, Michael
Subject: 18 mile Creek project
Date: Saturday, September 01, 2018 12:32:33 PM

Hi Jackie, I missed the august 16 meeting in lockport but just as well, as I would have ranted and raved about the blown opportunity to do the project properly instead of blowing all the grant funding on studies, salaries and tearing down a structure and 6 houses. ALL the pollutants are still in the ground where they were. The burt dam is still full of saw blades and backed up sediments and metal drums of trichlorethelyne are still oozing into the groundwater as before. I would have told the group "give me one fifth of the funding - with a variance from badgering lawyers - and I would have the job done in 2 years. What a shame the people of Niagara County STILL have to live and raise kids on polluted groundwater because their cleanup funding was wasted.

The attached photo shows the gated driveway with an unsigned posted sign to one of the (3) main areas on concentrated toxins on old Niagara street 1/2 mile west of Rte 78. This area should have unearthed, probed and any remaining concentrate liquid chemicals in drums pumped into new plastic drums - To Start. Same with the second two sights. The remaining toxic yards on this site should be removed and either cleaned or dumped into the lake with the rest of it. The burt dam should be removed. (Taken down and eliminated from the creek with the other dam) The two remaining chemical plants STILL OPERATING on this road should be shut down - as they are still polluting the sub soil. The supposed " capped" site at Van De Mar chemical plant should be excavated and removed with the other sites of concentrated trichlorethelyne. To me - the whole fiasco of the super fund was simply more of the usual BS the residents have been dealing with all along. What a shame they don't get me or some local group who knows how to consult with engineers and diesel equipment to GET the JOB Done. Here it is 2018 - a potentially beautiful salmon Creek is wasted after funding was provided to clean it! What a shame.

Bob Baker
Lockport
Marketing Consultant
U.S. FOIA (b)(6)

Sent from my BlackBerry - the most secure mobile device