

Department of Environmental Conservation

# FINAL STATEMENT OF BASIS CORRECTIVE MEASURES SELECTION

Eastman Business Park – East (EBP-E) Former Spector Tire Site SWMU E-156 Site No. 828177 EPA ID No. NYD980592497 Rochester, Monroe County

March 2015

PREPARED BY DIVISION OF ENVIRONMENTAL REMEDIATION

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### DECLARATION STATEMENT – STATEMENT OF BASIS FINAL CORRECTIVE MEASURES SELECTION

Eastman Business Park – East (EBP-E) Former Spector Tire Site – SWMU E-156 DEC Site No. 828177 Rochester, Monroe County March 2015

### **Statement of Purpose and Basis**

This document presents the selected final corrective measures for the former Spector Tire Site which is owned by Eastman Kodak Company. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 373.

The proposed remedy selection was made available for public comment between January 20, 2015 and March 16, 2015. There were no comments received from the public on the corrective measures proposed in the proposed Statement of Basis (SB). Although no comments were received, a Responsiveness Summary, that includes additional information about public participation activities, is included in Appendix A of this final Statement of Basis.

This decision is based on the Administrative Record for the New York State Department of Environmental Conservation (the Department) for the former Spector Tire Site (also known as SWMU E-156) of Eastman Kodak Company's Eastman Business Park, included in Appendix B of the Statement of Basis.

### **Description of Selected Remedy**

The proposed remedy addresses historic releases of petroleum products into soils and groundwater. The releases are associated with historic operations that occurred prior to Kodak's acquisition of the property. Kodak has not used the property for any manufacturing operations. Although the remedy does not include any additional active remediation, the remedy includes continued monitoring to assess the effectiveness of the prior actions, and controls on future use of the site.

The elements of the selected remedy are as follows:

For groundwater, interim measures were taken to remove contaminated source material and to treat residual contamination. The remedy involves continued monitoring and assessment of contaminated groundwater. Monitoring will be performed to assess groundwater conditions and

track the expected continued degradation of the contaminants, and reduced concentrations in the groundwater. The testing will be used to assess the effectiveness of these actions and to ensure that the remedy remains protective during future use of the site.

For soils, interim measures involving excavation and off-site of contaminated soil have removed source material that was identified during site investigations.

The remedy includes institutional controls on future use, including excavation controls regarding management of excavated soils, use of groundwater and soil vapor intrusion assessment requirements in relation to future site development. These elements of the remedy will be embodied in a site management plan, along with reporting and certification requirements to ensure that the remedy remains protective during future use of the site.

### New York State Department of Health Acceptance

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

### **Declaration**

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 26, 2015

Date

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Robert W. Schick, P.E., Director Division of Environmental Remediation

## FINAL STATEMENT OF BASIS CORRECTIVE MEASURES SELECTION

Eastman Business Park – East (EBP-E) Former Spector Tire Site – SWMU E-156 Site No. 828177 Rochester, Monroe County March 2015

### SECTION 1: INTRODUCTION

The New York State Department of Environmental Conservation (Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal or release of hazardous wastes at this site, as more fully described in this document, has contaminated various environmental media. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Statement of Basis (SB) identifies the selected remedy and discusses the reasons for selecting the remedy.

The New York State Hazardous Waste Management Program (also known as the RCRA Program) requires corrective action for releases of hazardous waste and hazardous constituents to the environment. This facility is subject to this regulatory program. The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Parts 373 (RCRA). This document is a summary of the information that can be found in the site-related reports and documents.

### SECTION 2: CITIZEN PARTICIPATION

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

NYSDEC Region 8 Office 6274 E. Avon-Lima Road Avon, NY 14414 Call 585-226-2466 for Appointment NYSDEC Central Office 625 Broadway – 12<sup>th</sup> Floor Albany, NY 12233-7017 Call 518-402-9813 for Appointment Information about the comment period and citizen participation actions for this site is summarized in the responsiveness summary section of the Statement of Basis (see **Appendix A**).

### **Receive Site Citizen Participation Information by Email**

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

### SECTION 3: SITE DESCRIPTION AND HISTORY

Location - The Spector Tire site abuts the east side of Lake Avenue, on the south side of the intersection with Keehl Street, within the City of Rochester. The Spector Tire site (also identified as Solid Waste Management Unit E-156 in the context Kodak's RCRA corrective action records) is currently part of Kodak's paved Parking Lot 40, and is located near the eastern end of Eastman Business Park.

Site Features – The former Spector Tire site consists of approximately 0.4 acres. There are no structures on the flat, level site. The site is entirely paved and improved for parking (fenced/restricted access and streetlights). The site is surrounded by other paved parking lots along the east side of Lake Avenue. Residential properties are located several hundred feet southeast of the site. Kodak's manufacturing operations are located on the west side of Lake Avenue.

Current Zoning/Use(s) - The site is currently included in the City of Rochester's Eastman Business Park Planned Development District #12, within Sub-area #2, as designated in the associated ordinance (adopted May 13, 2010). Permitted uses for Sub-area #2 include limited industrial and commercial use. The site and surrounding area are currently developed as a parking lots and owned by Kodak.

Historical Use(s) – An automotive service center ("Spector Tire") was historically located at the site. Services included fueling operations. After acquiring the site, Kodak determined that several underground storage tanks were still present. In 1993, as part of a storage tank improvement program, Kodak removed eight tanks and conducted a preliminary environmental assessment of the site. The assessment showed that a petroleum release had occurred, and that there was a need for additional work at the site. A restaurant known as Jack Ryan's was formerly located along the southern edge of the Spector Tire Site. Buildings associated with Spector Tire and the restaurant have all been demolished.

Site Geology and Hydrogeology – The site geology consists of a relatively thin layer of glacially derived overburden soils, overlying sedimentary bedrock. The overburden soils in this area are typically well drained, moderately conductive sand and silts, which range in thickness between 18

and 23 feet. The underlying bedrock is the Grimsby Sandstone. The uppermost bedrock exhibited moderate horizontal fracturing, associated with thin, horizontally bedded, shaley intervals. The rock below this interval tends to be dense and competent, exhibiting a lower degree of fracturing. Groundwater was encountered in the overburden, at depths ranging from 10 to 12 feet below ground surface. Groundwater flows towards the north-northeast.

A site location map is attached as Figure 1 and a facility map is attached as Figure 2.

### SECTION 4: LAND USE

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

A comparison of the site investigation soil results against restricted use (commercial) standards, criteria and guidance values (SCGs) for the site contaminants is included in Exhibit A.

### SECTION 5: ENFORCEMENT STATUS

Eastman Business Park (EBP) is permitted as a hazardous waste treatment, storage, and disposal facility (TSDF) under New York State hazardous waste management regulations (6 NYCRR Part 373). The permit is currently held by co-permittees Eastman Kodak Company (Kodak) and RED-Rochester LLC. Kodak has historically implemented the Corrective Action Program (CAP) for the Eastman Business Park in Rochester, New York. Under this regulatory program, Kodak performed Corrective Action for individual solid waste management units (SWMUs), and groups of SWMUs, within EBP.

As a consequence of a judicially ordered settlement of Kodak's bankruptcy, issued in 2014, Kodak established the Eastman Business Park Environmental Response Trust. This trust was developed to handle environmental response actions related to contamination associated with Kodak's past operations at Eastman Business Park ("pre-existing contamination"). As primary beneficiary, the Department is responsible for administering the trust and ensuring that the obligations of the trust are being addressed properly. Conditions at the former Spector Tire site (SWMU E-156) are viewed as pre-existing contamination under the terms of the settlement so subsequent environmental response actions will be addressed through the trust.

### SECTION 6: SITE CONTAMINATION

### 6.1: <u>Summary of the Site Investigation</u>

The corrective action process began with evaluations and investigations to identify potential areas of the site that may have been impacted by hazardous wastes and/or hazardous constituents. Based on the results of investigations, the Department has determined that hazardous constituents have been released at the former Spector Tire site. The impact of releases of hazardous constituents at the site were characterized and evaluated.

Kodak has performed environmental assessments and investigations that have characterized soil, soil vapor and groundwater for the Spector Tire site. A brief summary of these assessments and investigations is included in Exhibit A.

The analytical data collected for the site includes data for:

- Soil
- Groundwater
- Soil Vapor
- Ambient Air

### 6.1.1: Standards, Criteria, and Guidance (SCGs)

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

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

### **6.1.2:** Site Investigation Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Based on the results, the Department determined that corrective measures were required to address some of the areas investigated. The nature and extent of contamination and impacted environmental media are summarized in **Exhibit A**.

The contaminants of concern identified at this site are related to petroleum products and include:

- Xylene
- Ethylbenzene
- Toluene
- Benzene

As illustrated in **Exhibit A**, the contaminant(s) of concern exceed the cleanup objectives/guidance criteria for:

- Groundwater
- Soil

### 6.1.3: Interim Corrective Measures

Kodak implemented a series of interim measures to respond to conditions at the former Spector Tire site. These actions included:

- 1979 Kodak determined locations of Underground Storage Tanks (USTs), pumped out USTs/disposed remaining product, and closed the USTs in place. An installed recovery well facilitated removal of approximately 3,500 gallons of contaminated groundwater.
- 1993 Kodak removed 8 USTs that were associated with Spector Tire's historic use of the site. The tanks ranged in size from 550 to 1,100 gallons. Some visually contaminated soil was also removed. Seven soil samples were collected from the base of the excavations after the tanks were removed. Results exceeded trigger levels (NYSDEC STARS Memo#1) indicating that further investigation/remediation was needed.
- 2000-2002 Kodak conducted soil and groundwater investigations.
- 2003-2008 In 2003 Kodak implemented in-situ groundwater treatment involving injection of ozone into the groundwater through an array of 33 injection points. A trailer mounted injection control system and ozone generator were located on the site.
- 2006 Kodak implemented source removal action that involved excavation of approximately 3,400 tons of contaminated soil for off-site disposal (102 truckloads). Actions also included collection and treatment of contaminated groundwater and free product (light non-aqueous phase liquid – LNAPL) from dewatering activities during the soil removal action.
- 2006 In-situ Soil and Groundwater Treatment Kodak applied chemical oxidant to soils in the excavated areas prior to backfilling. Oxidant was also injected through a series of direct push points to treat groundwater beyond the limits of the excavated area.
- 2011-2012 In-situ Groundwater Treatment Kodak installed a new treatment injection well and performed additional chemical oxidant injection to further treat groundwater, to address residual contamination.

### 6.2: <u>Summary of Environmental Assessment</u>

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The reports listed in Appendix B present a more detailed discussion of existing and potential impacts from the site.

### Nature and Extent of Contamination

Based upon investigations conducted, the primary contaminants of concern for the Former Spector Tire Site are petroleum/fuel related volatile organic compounds (VOCs) benzene, ethylbenzene, toluene and xylene.

Soil: The soil excavation interim measure successfully removed most of the contaminated soil at the site. However, the confirmatory side-wall sample from the north wall of the excavation showed remaining contamination by ethylbenzene and xylene. Further removal would have undermined

the adjacent roadway and utilities. In this sidewall, concentrations of ethylbenzene (18 ppm) and xylene (46 ppm) exceeded the soil cleanup objectives (SCOs) for unrestricted use for these compounds (1 ppm and 0.26 ppm, respectively). Benzene was also detected at 0.150 ppm in an excavation bottom sample, slightly exceeding the SCO for unrestricted use (0.060 ppm). None of the remaining contamination exceeded the SCOs for commercial use.

Groundwater: Interim measures have lowered contaminant concentrations at the site, but concentrations in the area where the underground storage tanks were historically located still substantially exceed the groundwater standards for the contaminants of concern (typically about 5 ppb), with a maximum concentration of 3,700 ppb (xylene). Contamination is limited to the overburden zone, in the immediate vicinity of the site. The top of rock zone was investigated but did not show significant impacts. Due to the availability of municipal water, and municipal code requiring connection to such service, groundwater is not used as a source for potable water in the area.

Soil Vapor: Kodak conducted a soil vapor intrusion investigation (SVI) that evaluated conditions within Eastman Business Park and also in adjacent off-site areas. The off-site SVI effort included sampling on the east side of Lake Avenue, in an area to the north of the Spector Tire site. Testing in that area did not indicate a SVI concern. Due to the lack of any structures, SVI sampling was not conducted at the Former Spector Tire Site. There presently is no SVI exposure pathway at the site. However, since there is VOC contamination present, there is potential for soil vapor intrusion in the event that the current use of the site changes.

### 6.3: <u>Summary of Human Exposure Pathways</u>

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

People are not drinking contaminated groundwater associated with the site because the area is served by a public water supply that obtains its water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying building and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site building development and occupancy. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

### 6.4: <u>Summary of the Remedial Action Objectives</u>

The goal of the corrective measures is to protect public health and the environment and achieve unrestricted use of the site to the extent feasible. The remedial action objectives for this site are:

### Groundwater

### **RAOs for Public Health Protection**

Prevent ingestion of groundwater with contaminant levels exceeding drinking

water standards.

• Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

### **RAOs for Environmental Protection**

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

### <u>Soil</u>

### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

### **RAOs for Environmental Protection**

Prevent migration of contaminants that would result in groundwater or surface water contamination.

### <u>Soil Vapor</u>

### **RAOs for Public Health Protection**

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

### SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected, the remedy must be protective of human health and the environment, be costeffective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies, or resource recovery technologies to the maximum extent practicable. The remedy must address potential routes of exposure to humans and the environment and attain the cleanup objectives identified above.

Criteria that will be used to determine if the remedial action objectives are being achieved are presented in **Exhibit B**. The basis for the Department's selected remedy is set forth in **Exhibit C**.

The elements of the selected remedy are:

- 1. <u>Institutional Control</u> Imposition of an institutional control in the form of an environmental easement for the controlled property that:
  - requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls;
  - restricts the use and development of the controlled property for commercial and industrial uses, although land use is subject to local zoning laws;
  - prohibits the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and,
  - requires compliance with the Department approved Site Management Plan.

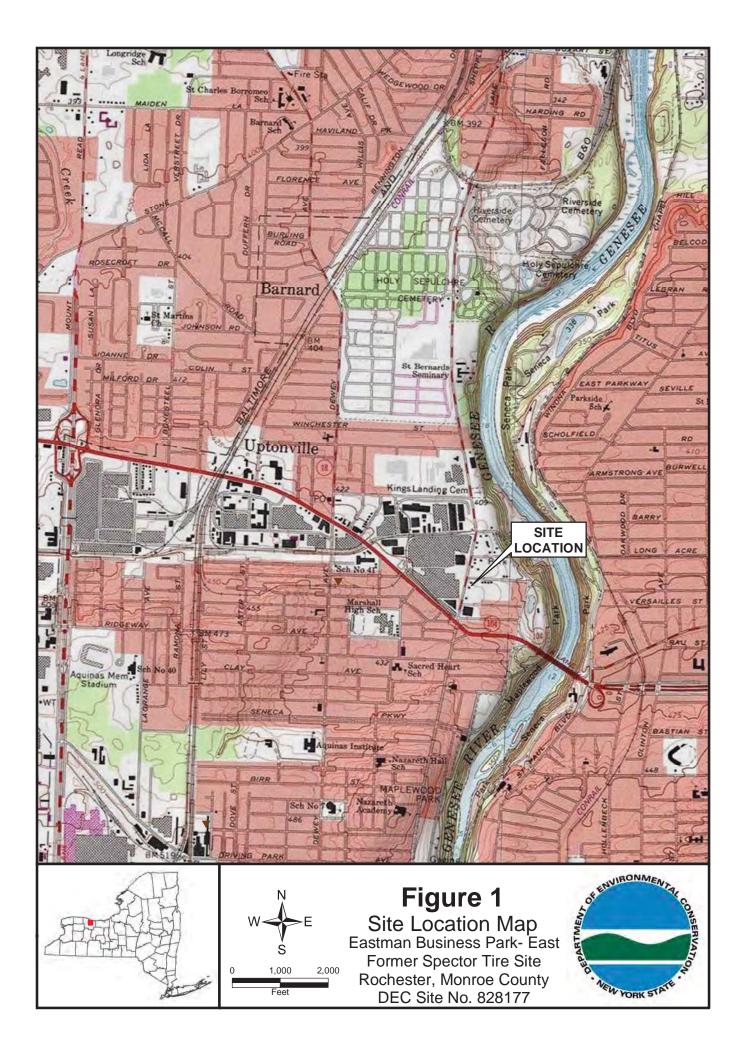
### 2. <u>Site Management</u>

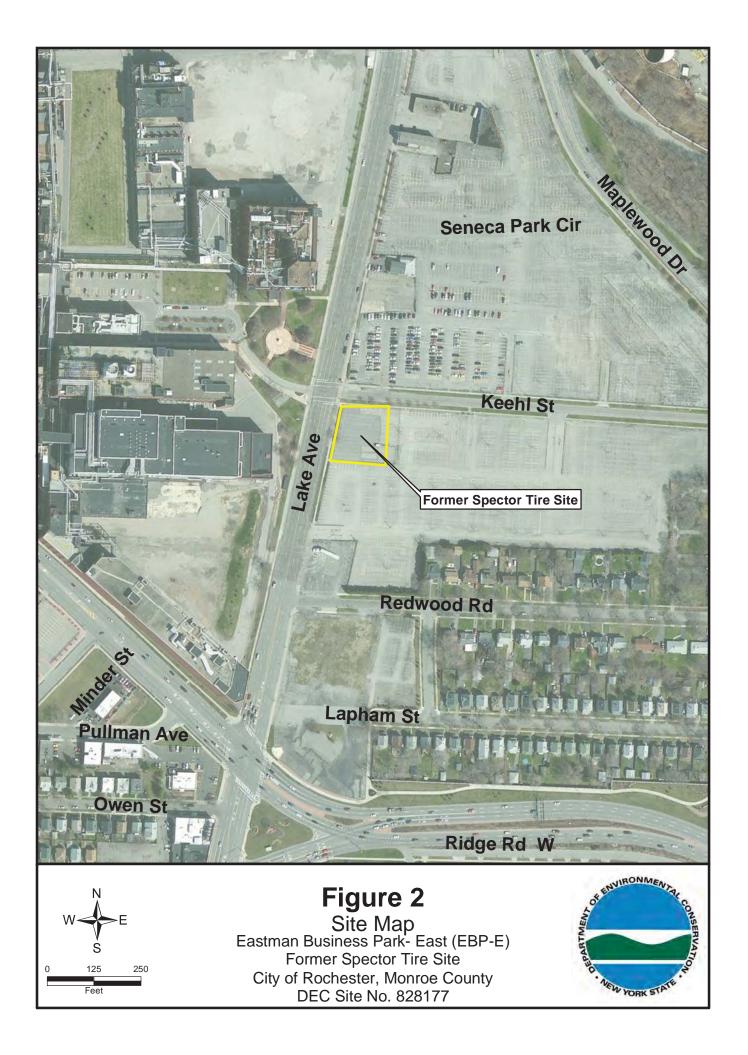
a. A Site Management Plan shall be developed that identifies all use restrictions/controls for the site and details the steps and media-specific requirements necessary to ensure that controls remain in place and effective. The plan includes, but may not be limited to:

- the environmental easement discussed in Paragraph 1 above;
- soils and groundwater management requirements for future excavation activities in areas of remaining contamination;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions to not interfere with or damage engineering controls (e.g., monitoring wells); and
- provisions for Department notification in event that a change in use is planned; and, provisions for periodic certification that site use is compliant with the site management plan.

b. The long-term actions will include assessment of the performance and effectiveness of the remedy via implementation of a monitoring program that includes, but may not be limited to:

- monitoring of groundwater and reporting to assess the performance and effectiveness of the remedy with respect to the RAOs;
- monitoring for vapor intrusion for any new buildings developed on the site, as may be warranted; and
- a schedule of monitoring and frequency of reporting to the Department.
- 3. <u>Green Remediation</u> Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:
  - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
  - Reducing direct and indirect greenhouse gas and other emissions;
  - Increasing energy efficiency and minimizing use of non-renewable energy;
  - Conserving and efficiently managing resources and materials;
  - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.





### **STATEMENT OF BASIS**

### **Exhibits A through C**

Eastman Business Park – East (EBP-E) Former Spector Tire Site – SWMU E-156 DEC Site No. 828177 Rochester, Monroe County

March 2015

### Exhibit A

### **Nature and Extent of Contamination**

This section describes the findings of the site investigations for all environmental media that were evaluated. As described in Section 6, samples were collected from various environmental media to characterize the nature and extent of contamination.

For groundwater and soil, tables present the range of contamination found and compares the data with the applicable Standard, Criteria, or Guidance (SCGs) for the contaminants of concern at this site which are volatile organic compounds (VOCs). For groundwater, exceedances of SCGs are primarily contained on-site (one off-site well historically showed a slight SCG exceedance – benzene at 5 ug/l versus SCG of 1 ug/l). For soils, exceedances of SCGs for contaminants of concern are contained on-site. For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, the Restricted Use SCGs are also presented.

For the discussions in the following sections, please note that analytical testing of the various media at this site initially included a broad suite of chemical parameters. Based on that data, subsequent testing was usually limited to VOCs which are the key indicators of contamination at this site.

### Waste/Source Areas

Contaminant source areas were identified at the former Spector Tire site. The source areas were associated with historic petroleum/fuel storage and handling operations and associated underground storage tanks. As detailed below, these sources included abandoned underground tanks containing petroleum, as well as visually contaminated soil and groundwater in the area where the tanks were located. This included a smear zone in the soil created by a floating layer of free product (petroleum). This smear zone was located at the top of the water table, generally between 10 and 12 feet below ground surface.

Kodak implemented a series of interim measures to eliminate the waste/source areas. These actions included:

- 1979 Kodak determined locations of Underground Storage Tanks (USTs), pumped out USTs/disposed remaining product, and closed the USTs in place. Installed recovery well and removed pumped out approximately 3,500 gallons of contaminated groundwater.
- 1993 Kodak subsequently removed 8 USTs that were associated with Spector Tire's historic use of the site. The tanks ranged in size from 550 to 1,100 gallons. Some visually contaminated soil was also removed. Seven soil samples were collected from the base of the excavations after the tanks were removed. Results indicated that further investigation/remediation was needed.
- 2003-2008 Kodak implemented in-situ groundwater treatment involving injection of ozone into the groundwater through an array of 33 injection points. A trailer mounted injection control system and ozone generator were located on the site.

- 2006 Kodak implemented source removal action that involved excavation of approximately 3,400 tons (102 truckloads) of contaminated soil for off-site disposal. Actions also included collection and treatment of contaminated groundwater and free product (light non-aqueous phase liquid LNAPL) from dewatering activities during the soil removal action. The removal targeted soils in the interval between approximately 8 and 14 feet below grade. Overlying, non-impacted soils were set aside and later used to backfill the excavated area.
- 2006 In-situ Soil and Groundwater Treatment Kodak applied chemical oxidant to soils in the excavated areas prior to backfilling. Oxidant was also injected through a series of direct push points to treat groundwater beyond the limits of the excavated area.
- 2011-2012 In-situ Groundwater Treatment Kodak installed a new treatment injection well and performed additional chemical oxidant injection to further treat groundwater, to address residual contamination.

### Groundwater

Between 2000 and 2001, ten overburden groundwater monitoring wells and one bedrock well were installed to investigate site conditions. The monitoring well network is shown on Figure 1. Groundwater samples were collected and analyzed for Target Compound List (TCL) VOCs, TCL SVOCs and TCL metals. For VOCs, the results showed groundwater standard exceedances for the compounds shown in Table 1 below. For SVOCs, there were exceedances for 2,4-dimethylphenol, naphthalene, and 2-methyl naphthalene. Total iron was the only metal that exceeded standards and was observed in a number of wells, including upgradient well SL40NW5. Iron is a naturally occurring compound and its presence does not appear to be related to the site. Groundwater at the site exhibits impacts from petroleum/fuel related organic compounds. Petroleum contamination is limited to the overburden zone, and exceedances are generally noted in wells near the center of the site, where the former underground storage tanks were located (see Figure 2). The top of rock zone was investigated but did not show significant petroleum impacts.

The trends observed in the overburden show decreasing contaminant concentrations at the site (see Figure 3). These trends indicate that the source removal actions and the in-situ treatments that have been implemented have been effective in reducing contaminant concentrations at the site.

| able 1 - Groundwater  |   |                           |  |  |
|-----------------------|---|---------------------------|--|--|
| Detected Constituents | Maximum Concentration<br>Detected in 2012<br>(ppb) <sup>1</sup> | SCG <sup>2</sup><br>(ppb) |  |  |
| VOCs                  |   |                           |  |  |
| Benzene               | 0.5 J   | 1                         |  |  |
| Ethylbenzene          | 740   | 5                         |  |  |
| Toluene               | 1.1 J   | 5                         |  |  |
| Xylene                | 3,700   | 5                         |  |  |

Table 1 - Groundwater

<sup>1</sup> ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

<sup>2</sup> SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGS 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

#### Soil

An extensive number of soil samples have been collected for the Spector Tire site. Initial testing was performed in conjunction with the removal of the underground tanks in 1993. Additional sampling occurred between 2000 and 2002 during the RCRA facility investigation for this site. Further characterization was completed between 2002 and 2005 during design, implementation and performance testing of the ozone injection activities. In 2005 and 2006 additional soil testing was performed (25 borings with testing of 175 samples) to design a removal action that was subsequently performed in the fall of 2006. The removal was initially estimated to involve about 500 cubic yards (about 700 tons) from two areas, however, about 3,400 tons of impacted soils were ultimately excavated from the site based on visual indications of contamination (staining/sheens) observed during the removal action. The approximate limits of the soil excavation area are shown on Figure 4.

Soil samples were collected and analyzed for TCL VOCs, TCL SVOCs, TCL metals, and PCBs. The results indicated that metals and PCBs did not exceed unrestricted use SCOs. Contaminants of concern at this site are VOCs related to petroleum products. For SVOCs, naphthalene was the only compound that exceeded the unrestricted use SCO (13 mg/kg).

Based on post-excavation sampling, soils with concentrations that exceed the unrestricted SCGs remain at the site, but there are no exceedances of the commercial or industrial SCGs. The commercial SCGs are the applicable criteria for this site. The unrestricted SCGs are presented here for comparison purposes only. The Department has determined that the soil cleanup objectives for the protection of groundwater (per Part 375-6.5) and soil cleanup objectives for the protection of ecological resources (per Part 375-6.6) that the Unrestricted SCGs are derived from are not applicable due to the site setting and the nature of the remedial program.

Note that some constituents detected in the confirmatory soil samples do not currently have listed SCGs.

| Detected<br>Constituents of<br>Concern | Post-Excavation<br>Maximum<br>Concentration <sup>1</sup><br>Detected<br>(ppm) <sup>2</sup> | Unrestricted<br>SCG <sup>3</sup><br>(ppm) | Restricted Use<br>SCG <sup>4</sup><br>(ppm)<br>[Commercial] | Restricted Use<br>SCG <sup>4</sup><br>(ppm)<br>[Industrial] |
|--|--|---|---|---|
| VOCs                                   |  |   |   |   |
| Benzene                                | 0.150  | 0.06                                      | 44  | 89  |
| Cyclohexane                            | 16   | NV <sup>5</sup>                           | NV <sup>5</sup>   | NV <sup>5</sup>   |
| Ethylbenzene                           | 18   | 1   | 390   | 780   |
| Isopropylbenzene                       | 7.2  | NV <sup>5</sup>                           | NV <sup>5</sup>   | NV <sup>5</sup>   |

Table 2 - Soil

| Detected<br>Constituents of<br>Concern | Post-Excavation<br>Maximum<br>Concentration <sup>1</sup><br>Detected<br>(ppm) <sup>2</sup> | Unrestricted<br>SCG <sup>3</sup><br>(ppm) | Restricted Use<br>SCG <sup>4</sup><br>(ppm)<br>[Commercial] | Restricted Use<br>SCG <sup>4</sup><br>(ppm)<br>[Industrial] |
|--|--|---|---|---|
| Methylcyclohexane                      | 67   | NV <sup>5</sup>                           | NV <sup>5</sup>   | NV <sup>5</sup>   |
| Toluene                                | 0.043  | 0.7                                       | 500   | 1000  |
| Xylene                                 | 46   | 0.26                                      | 500   | 1000  |

Table Notes:

<sup>1</sup> Note that these concentrations shown are from soils in the source area, <u>after</u> the excavation/removal action completed in 2006. Data based on 29 post-excavation end point samples.

<sup>2</sup> ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil.

<sup>3</sup> SCG: 6NYCRR Part 375-6.8(a), Unrestricted Soil Cleanup Objectives. The Department has determined that the soil cleanup objectives for the protection of groundwater (per Part 375-6.5) and soil cleanup objectives for the protection of ecological resources (per Part 375-6.6) that the Unrestricted SCGs are derived from are not applicable due to the site setting and the nature of the remedial program.

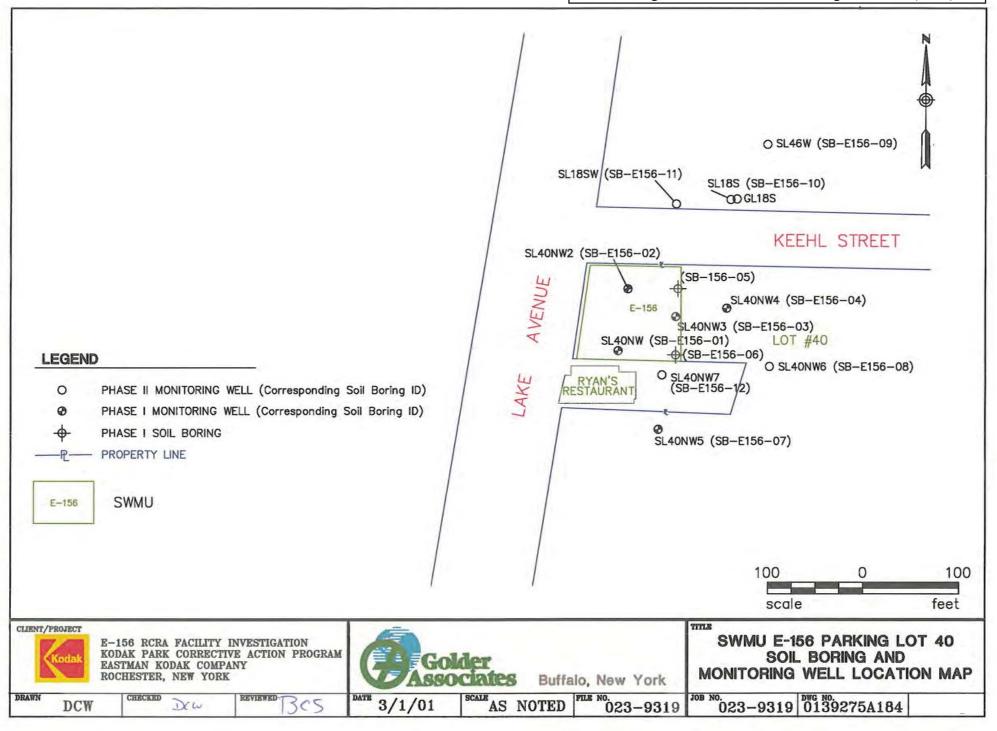
<sup>4</sup> SCG: 6NYCRR Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health. Values for both Commercial and Industrial Use are presented.

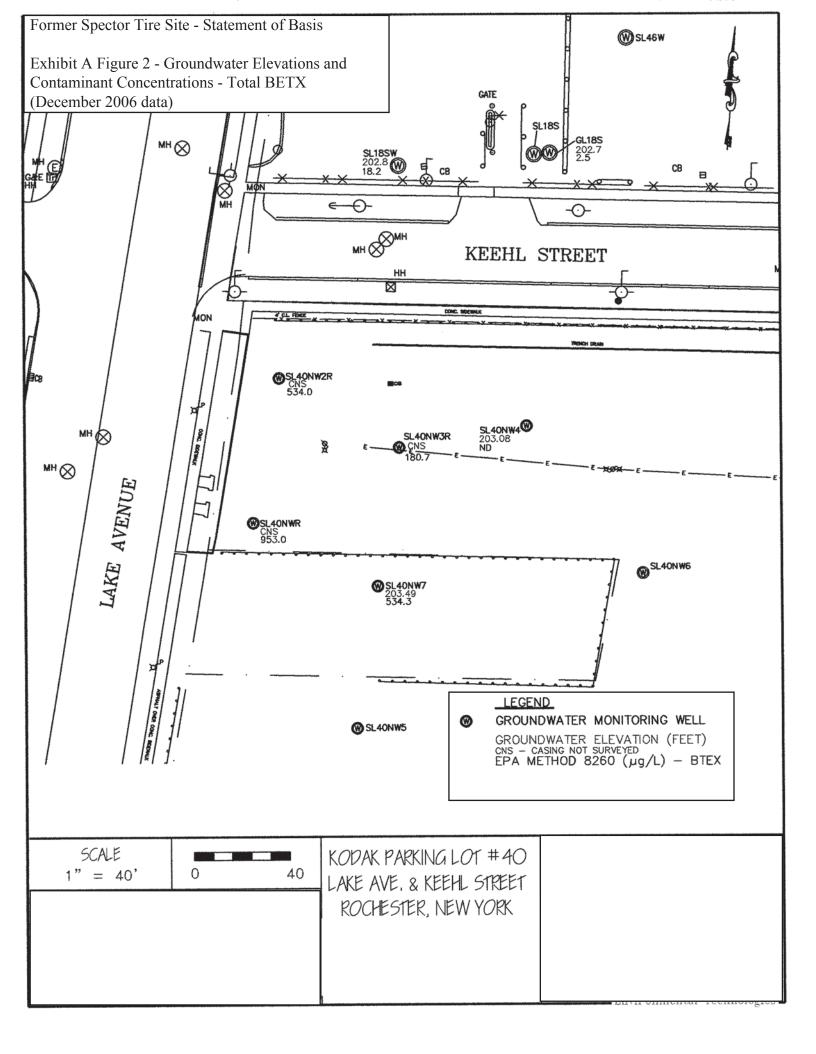
 $^{5}$  NV = No value listed in 6NYCRR Part 375.

#### Soil Vapor

SVI sampling was not conducted at the Former Spector Tire Site. Due to the current use of the former Spector Tire site and the lack of any structures, there presently is no SVI exposure pathway at the site. However, since there is residual VOC contamination present, there is potential for soil vapor intrusion in the event that the current use of the site changes.

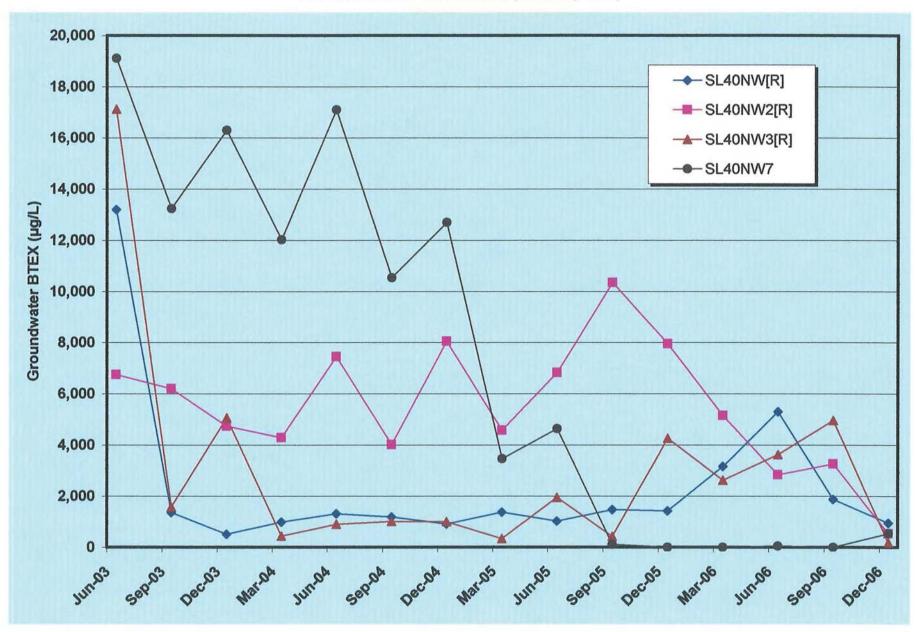
Note that a soil vapor intrusion (SVI) evaluation was performed for at the adjacent Eastman Business Park facility, and in neighboring areas abutting Eastman Business Park. This included testing along Lake Avenue, to the north of the former Spector Tire site. The Lake Avenue testing included soil vapor and ambient air sampling. Based on the results of the testing, additional sampling was not recommended at that time.

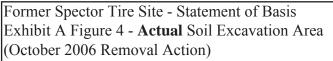


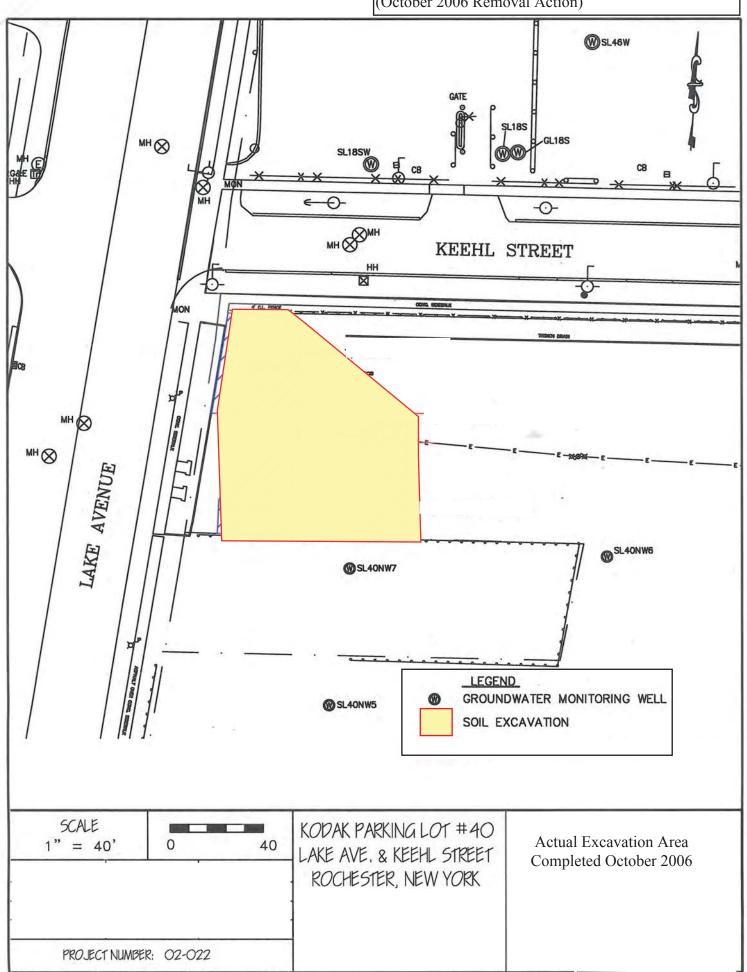


Former Spector Tire Facility Lake Avenue and Keehl Street, Rochester, NY Former Spector Tire Site - Statement of Basis Exhibit A Figure 3 - Groundwater Trend Plot

Groundwater BTEX Concentrations (Monitoring Wells)







### Exhibit B

### SUMMARY OF THE CLEANUP OBJECTIVES

The goal for the corrective measure program is to achieve unrestricted use of the site to the extent feasible. At a minimum, the corrective measure(s) shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the facility through the proper application of scientific and engineering principles.

The established cleanup objectives for this site are identified in the table below.

| Compound          | Unrestricted Use<br>Soil<br>Cleanup Objective <sup>1</sup><br>(ppm or mg/kg) | Restricted Use<br>[Commercial]<br>Soil Cleanup Objective <sup>2</sup><br>(ppm or mg/kg) | Groundwater<br>Cleanup Objective <sup>3</sup><br>(ppb or ug/l) |
|-------------------|--|---|--|
| VOCs              |  |   |  |
| Benzene           | 0.06   | 44  | 1  |
| Cyclohexane       | NV <sup>4</sup>  | NV <sup>4</sup>   | NV <sup>5</sup>  |
| Ethylbenzene      | 1  | 390   | 5  |
| Isopropylbenzene  | NV <sup>4</sup>  | NV <sup>4</sup>   | 5  |
| Methylcyclohexane | NV <sup>4</sup>  | NV <sup>4</sup>   | NV <sup>5</sup>  |
| Toluene           | 0.7  | 500   | 5  |
| Xylene            | 0.26   | 500   | 5  |

Table Notes:

<sup>1</sup> 6NYCRR Part 375-6.8(a), Unrestricted Soil Cleanup Objectives. The Department has determined that the soil cleanup objectives for the protection of groundwater (per Part 375-6.5) and soil cleanup objectives for the protection of ecological resources (per Part 375-6.6) that the Unrestricted SCGs are derived from are not applicable due to the site setting and the nature of the remedial program.

<sup>2</sup> 6NYCRR Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health. Values for Commercial Use are presented.

<sup>3</sup> Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (NYSDEC TOGS 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

 $^{4}$  NV = No value listed in 6NYCRR Part 375.

<sup>5</sup> NV = No value listed in Ambient Water Quality Standards and Guidance Values (TOGS 1.1.1).

### Exhibit C

### BASIS FOR FINAL CORRECTIVE MEASURES SELECTION

The Department's basis for selection of the remedy is summarized below.

### Groundwater Monitoring and Assessment with Institutional Controls

This alternative involves the continued monitoring and assessment of the former Spector Tire Site groundwater using a network of existing monitoring wells. Those wells representative of locations with the highest residual groundwater impacts (as of the June 2012 monitoring event) are included in the sampling program. An annual sampling frequency will be used initially. The assessment involves completing a trend analysis periodically to delineate the concentration trends for contaminant and prepare an assessment report on the overall groundwater quality at the site including a comparison with groundwater SCGs. If concentrations show increasing concentration trends, additional actions would be taken to assess and address the situation.

The remedy employs institutional controls to limit potential exposures that could arise during future use of the site. These include excavation control provisions related to soil and groundwater management, groundwater use restriction and provisions for evaluating soil vapor intrusion and provisions for actions to address exposure, if needed.

The remedy is readily implementable from a technical standpoint and utilizes existing sampling, analytical, data assessment, and reporting and institutional control methodologies.

### **Remedy Selection Criteria**

### **Threshold Criteria**

### Protection of Human Health and the Environment

The remedy is protective of human health, because it includes institutional controls to minimize future exposures related to soil, groundwater and soil vapor contamination. Groundwater use within the impacted area is also not a contributing factor as the impacted area falls within the City of Rochester's municipal water service area and future use of groundwater is not permitted. In addition, potential exposure via soil vapor intrusion will be evaluated at any new buildings developed on the site, including provisions for actions to address exposure, if needed.

The remedy is protective of the environment as the pathway for direct contact and potential metabolic uptake from ground water exposure to ecologic receptors is currently incomplete. In addition, the potential for adverse future exposures will continue to diminish as VOC concentrations continue to decline due to contaminant degradation and related natural attenuation processes.

Achieve Cleanup Objectives for the Contaminated Media. – Based on results obtained from site groundwater monitoring, substantial reductions in VOC concentrations have been achieved, and

further reductions are anticipated since source areas have been removed and in-situ treatment of the remaining contamination has been performed.

<u>Remediate the Sources of Releases.</u> – Source removal actions were implemented as interim measures to address source areas that were identified at the site.

<u>Comply with Standards for Management of Wastes.</u> – The remedy does not call for further soil excavation or groundwater extraction, so there will be no significant waste generation associated with implementation of the remedy. Any wastes generated through groundwater monitoring activities are minimal, and can readily be conducted in a protective manner.

### **Other Selection Criteria**

Long-term Effectiveness and Permanence. The remedy includes actions that resulted in permanent removal of highly contaminated material (source removal actions). The remedy also includes actions that resulted in permanent destruction of residual contaminants (in-situ treatment through enhanced biodegradation). Groundwater concentrations are still expected to exceed the SCGs for some time so the remedy includes periodic monitoring to track conditions and institutional controls to limit potential exposures associated with residual contamination. The institutional controls are expected to be placed in a form that runs with the land, to help ensure effectiveness and permanence.

<u>Reduction of Toxicity, Mobility, Volume.</u> The remedy included source removal actions and insitu treatment to reduce the toxicity, volume and potential mobility of contaminants. Additional biodegradation is expected to continue and will result in further reductions. Achievement of groundwater SCGs is anticipated in a timeframe that will not endanger on or off-site receptors and is consistent with long term corrective action goals.

<u>Short-term Impacts and Effectiveness.</u> The remedy does not involve any construction or implementation activities so there are no short-term adverse impacts upon the community, the workers, and the environment associated implementation of the remedy

<u>Implementability</u>. The remedy is readily implementable, since it involves continuing monitoring and reporting utilizing an existing network of groundwater wells.

<u>Cost-Effectiveness.</u> The remedy is expected to be cost effective because source removal and insitu treatment actions have avoided the need for an active extraction and treatment system (such as groundwater pump and treat) that are costly to operate, monitor and maintain.

### Summary

The remedy satisfies the threshold selection criteria, and has the potential to meet the remedial objectives for this site. The remedy is also viewed favorably when the other selection criteria outlined above are considered. The remedy provides an effective approach for reducing groundwater concentrations, protecting the environment and minimizing exposure potential, in a readily implementable, cost effective manner.

# **APPENDIX A**

## **RESPONSIVENESS SUMMARY**

STATEMENT OF BASIS – Appendix A Former Spector Tire Site – Eastman Business Park Site No. 828177

### **RESPONSIVENESS SUMMARY**

### Eastman Business Park – East (EBP-E) Former Spector Tire Site – SWMU E-156 DEC Site No. 828177 Rochester, Monroe County

The Proposed Statement of Basis for the referenced site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on January 30, 2015. The proposed Statement of Basis outlined the remedial measures proposed for the referenced site.

The release of the proposed Statement of Basis was announced by releasing a fact sheet via the Monroe County listserv on January 30, 2015. An announcement was also posted on DEC's Eastman Business Park website. The website posting included a link enabling the public to directly download the draft Statement of Basis. A similar posting also appeared on DEC's Region 8 Environmental Remediation Project Information page.

The public comment period for the proposed remedy was held from January 30, 2015 through March 16, 2015. The Department did not receive any comments on the proposed action during the comment period.

# **APPENDIX B**

## **ADMINISTRATIVE RECORD**

### **ADMINISTRATIVE RECORD**

### Eastman Business Park – East (EBP-E) Former Spector Tire Site – SWMU E-156 DEC Site No. 828177 Rochester, Monroe County

### March 2015

#### Documents

- Eastman Kodak Company, 1994. Tank System Closure Report CR-077; Eastman Kodak Company, Rochester, New York.
- Eastman Kodak Company, 1998a. Part E Corrective Action Requirements, 6 NYCRR Part 373 Permit Application (Revised) for Eastman Kodak Company, Rochester, New York.
- Eastman Kodak Company, 1998b. RCRA Facility Investigation Quality Assurance Program Plan for the Kodak Park Corrective Action Program, Eastman Kodak Company, Rochester New York.
- Eastman Kodak Company, 2000. SWMU E-156, Parking Lot 40 Investigation Work Plan.
- Eastman Kodak Company, 2004. Kodak Park SWMU E-156, Former Spector Tire Facility Site Status Report (March).
- Eastman Kodak Company, 2004. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (May).
- Eastman Kodak Company, 2004. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (August).
- Eastman Kodak Company, 2004. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (November).
- Eastman Kodak Company, 2005. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (March).

Eastman Kodak Company, 2005. Kodak Park SWMU E-156, Former Spector Tire Facility Site

Monitoring Report (May).

- Eastman Kodak Company, 2005. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (August).
- Eastman Kodak Company, 2005. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (November).
- Eastman Kodak Company, 2006. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (March).
- Eastman Kodak Company, 2009. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (July).
- Eastman Kodak Company, 2006. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (October).
- Eastman Kodak Company, 2007. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (February).
- Eastman Kodak Company, 2009. Kodak Park SWMU E-156, Former Spector Tire Facility Site Monitoring Report (August).
- EnviroGroup Limited, 2007. Phase II Off-Site Vapor Intrusion Evaluation Report, Kodak Park Corrective Action Program, Eastman Kodak Company, Rochester, New York.
- Golder Associates Inc., 2000, SWMU E-156, Parking Lot 40 Supplemental RFI Investigation Work Plan, Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.
- Golder Associates Inc., 2002, SWMU E-156, Parking Lot 40 Supplemental RFI Report, Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.
- Matrix Environmental Technologies, 2003a. SWMU E-156, Parking Lot 40 (Former Spector Tire Facility) Remedial Action Plan [ozone injection]; Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.
- Matrix Environmental Technologies, 2003b. SWMU E-156, Parking Lot 40 (Former Spector Tire Facility) Remedial System As-Built Documentation Report [ozone injection]; Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.
- Matrix Environmental Technologies, 2006a. Soil Characterization Report SWMU E-156, Parking Lot 40 (Former Spector Tire Facility); Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.

- Matrix Environmental Technologies, 2006b. Soil Excavation Work Plan, SWMU E-156, Parking Lot 40 (Former Spector Tire Facility); Kodak Park Corrective Action Program; Eastman Kodak Company, Rochester, New York.
- New York State Department of Environmental Conservation, 2011. Soil Vapor Intrusion Evaluation Determination: Investigation Complete - Actions Recommended, Legacy Site: Eastman Kodak Company – Kodak Park "M", Site No. 828082, Monroe County, Town of Greece.