PROPOSED DECISION DOCUMENT

Macedon Films
Brownfield Cleanup Program
Macedon, Wayne County
Site No. C859025
February 2012

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

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the remedy proposed by this Proposed Decision Document (PDD). A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site. This PDD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repositories identified below.

SECTION 2: CITIZEN PARTICIPATION

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

Macedon Public Library
Attn: Ms. Darlene Virkler
30 Main Street
Macedon, NY 14502
Phone: (315) 986-5932

NYSDEC Region 8 Office
Attn: Ms. Linda Vera
6274 E Avon-Lima Road
Avon, NY 14414
Phone: (585) 226-5324

A public comment period has been set from:

2/15/2012 to 3/30/2012

Written comments may be sent through 3/30/2012 to:

Jason Pelton
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
jmpelton@gw.dec.state.ny.us

The proposed remedy may be modified based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein.

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Macedon Films site is located on the northeast corner of the intersection of New York State Routes 31 and 350 in the Village of Macedon in Wayne County.

Site Features: The site property includes a single, large manufacturing building along with three

separate and smaller buildings that are all located on a 6.95 acre parcel. The 6.95 acre parcel was once part of a larger 23.6 acre facility. With the exception of two small paved parking areas adjacent to the north and south-sides of the property, the remainder of the site is developed with the manufacturing buildings. A spillway for the New York State Barge Canal borders the site to the north.

Current Zoning: The site is zoned for industrial use and is located within a mixed commercial and industrial area. Residential land use occurs within approximately 400 feet of the site on the opposite sides of State Routes 31 and 350.

Historic Uses: The original 23.6 acre facility was developed in the early 1900's for vegetable canning operations, use as a lumberyard, and use as a creamery. The manufacture of polyethylene packaging at the site began in the 1950's. During the 1990's, the 23.6 acre complex was divided into three parcels with some shared buildings operated by different entities. Pactiv Advanced Packaging Solutions (Pactiv) purchased the 6.95 acre Macedon Films site from Exxon-Mobil in 1995. Manufacturing operations on the 6.95 acre BCP portion of the site were discontinued by Pactiv in July 2004.

Prior uses related to manufacturing at the Macedon Films site, including the use of petroleum, solvent, and waste ink storage tanks had led to contamination of soil and groundwater at the site. Remedial activities, prior to entering the Brownfield Cleanup Program (BCP), were conducted by Pactiv that included tank removals, contaminated soil excavation and off-site disposal, and operation of groundwater recovery systems to address the site contaminants.

Site Geology and Hydrogeology: The overburden at the site consists of brown and gray fine to medium grained sand with trace amounts of silt and gravel that overlies an approximate two foot thick layer of brown and gray clay. Bedrock occurs at most locations beneath the site at depths ranging from 8 to 16.5 feet below ground surface (bgs). Groundwater occurs at a depth of approximately 5 to 15 feet beneath the ground surface and flows from the southwest to the northeast toward the NYS Barge Canal. The operation of the Barge Canal during the navigation and non-navigation seasons does influence the depth to water beneath the northern portion of the Macedon Films site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to industrial use as described in Part 375-1.8(g) is/are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the remedial investigation (RI) Report.

SECTION 5: ENFORCEMENT STATUS

Pactiv Corporation submitted an application to enter into the New York State Brownfield Cleanup Program on May 3, 2004. A Brownfield Cleanup Program agreement (Agreement Number B8-0669-04-06) between Pactiv Corporation and the New York State Department of Environmental Conservation was signed in July 2004. Since the agreement in 2004, Pactive Corporation has been completing the remedial program at the former Macedon Films Site in accordance with the Brownfield Cleanup Program agreement.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

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

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

6.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

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. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

CADMIUM	MERCURY
BENZENE	ETHYLBENZENE
LEAD	TOLUENE

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

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

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Courtyard Soil Excavation (Cadmium Exceedance)

This IRM involved the excavation and off-site disposal of shallow soil from the Courtyard area. Soil sampling completed during the remedial investigation identified cadmium in surface soil at a concentration exceeding the industrial use soil cleanup objective (60 ppm). Based on the presence of cadmium in site soil at concentrations exceeding the industrial use SCO, a total of 3.2 cubic yards of soil was excavated from an approximate five foot by ten foot area in the site Courtyard as part of the IRM. The soil was excavated to a depth of approximately six inches beneath the ground surface. The soil removed from the excavation was sampled and analyzed for waste characterization purposes and disposed of off-site at a permitted disposal facility. A total of four confirmation soil samples were collected to document the quality of soil left in-place and to confirm the removal of cadmium at concentrations exceeding the industrial use soil cleanup objective. Based on the confirmation soil sampling, cadmium was not detected in soil left in-place at concentrations exceeding the industrial use soil cleanup objective.

6.3: Summary of Human Exposure Pathways

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

People are not using groundwater from beneath the site as a drinking water source because the area is served by a public water supply. The municipal water supply is provided by the Monroe County Water Authority, and this supply, derived from Lake Ontario is not affected by residual contamination remaining at the Macedon Films Site. People are not likely to come into contact with contaminated soils on-site because buildings and pavement cover the site. In addition, measures are in place to prevent contact with residual contamination that remains in sub-surface soil. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings 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. Sampling indicates soil vapor intrusion is not a concern at the site.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:
Investigation activities completed at the Macedon Films site between 1988 and 2009 document that past manufacturing operations, including the use of petroleum, solvent, and waste ink storage tanks resulted in contamination of site soil and groundwater. Following identification, and prior to the site's entry into the Brownfield Cleanup Program and the start of the Remedial Investigation, remedial actions were taken to address these site contaminants. These remedial actions included the closure and removal of underground and above ground storage tanks, excavation and off-site disposal of soil contamination, operation of groundwater recovery wells, and the operation of a multiphase extraction system. Subsequent investigation activities completed during a Remedial Investigation in November 2005 along with a Supplemental Remedial Investigation in June 2009 confirm that only low concentrations of contamination remain in groundwater at the Macedon Films site and that contaminants are no longer present in site groundwater at concentrations exceeding the groundwater standards. Specifically, 1,2,4-trimethylbenzene was detected above the groundwater standard (5 ppb) in samples collected from a monitoring well located in the area of the former gasoline and fuel oil storage tanks at concentrations ranging from 46 to 25 ppb in 1999 and 2000 respectively. During the most recent groundwater sampling completed during the Remedial Investigation, 1,2,4-trimethylbenzene was not detected in groundwater at this location. Similarly, chloroform was detected at concentrations (21, 24, and 30 ppb) marginally above the groundwater standard (7 ppb) in samples collected from the cooling tower area between 2005 and 2008. Chloroform was

detected at a concentration (1.2 ppb) well below the groundwater standard during the most recent sampling event in 2009. Bis(2-ethylhexyl)phthalate, MTBE, and xylene were also historically detected in groundwater samples at concentrations slightly exceeding groundwater standards, but are no longer detected in groundwater samples exceeding standards.

Cadmium was the only metal detected in soil samples at a concentration (127 ppm) slightly above the industrial use SCO (60 ppm for cadmium). Based on the soil excavation IRM completed in the Courtyard area, cadmium is no longer present in site soil at concentrations exceeding the industrial use SCO. Volatile organic compounds, including benzene; toluene; ethylbenzene; xylenes; 1,2,4-trimethylbenzene; 1,3,5-trimethylbenze; and acetone were detected in site subsurface soil samples at concentrations exceeding the unrestricted SCOs, but well below the industrial use SCOs. Toluene, detected at a concentration of 110 ppm in a soil sample collected in 1999 was the VOC detected at the highest concentration, but below the industrial use SCO of 1,000 ppm. Three metals, lead, silver, and mercury, were each detected in soil samples from different locations of the site at concentrations exceeding the unrestricted use SCO, but not the industrial restricted use SCO. Specifically, lead, silver, and mercury were detected at concentrations of 81, 2.26, and 0.266 ppm respectively and well below the industrial use SCOs of 3,900, 6,800, and 5.7 ppm respectively.

Remediation at the site is complete. Prior to remediation activities at the Macedon Films site, the primary contaminants of concern were volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals.

Significant Threat:
The site does not present a significant threat to public health and the environment. Data collected at the site confirms that remedial activities have eliminated source areas. Investigation data also documents that site contaminants are no longer present in groundwater at concentrations exceeding standards and that contaminants are not migrating off-site.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives for this site are summarized below. Table 1, included at the end of the Proposed Decision Document summarizes how each of the remedial action objectives will be achieved with the selected remedy.

Groundwater

RAOs for Public Health Protection

- 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.

Soil

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.

Soil Vapor

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: ELEMENTS OF THE PROPOSED REMEDY

1) 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.

2) Imposition of an institutional control in the form of an environmental easement along with an existing deed restriction for the controlled property that:

a) requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
b) allows the use and development of the controlled property for industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
c) prohibits agriculture or vegetable gardens on the controlled property; and
d) requires compliance with the Department approved Site Management Plan.

3) A Site Management Plan is required, which includes the following:
a) an Institutional Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

(i.) an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
(ii.) descriptions of the provisions of the environmental easement including any land use restrictions;
(iii.) maintaining site access controls and Department notification; and
(iv.) the steps necessary for the periodic reviews and certification of the institutional controls.

Figure 1 - Site Location Map
Macedon Films Site
Site No. C859025

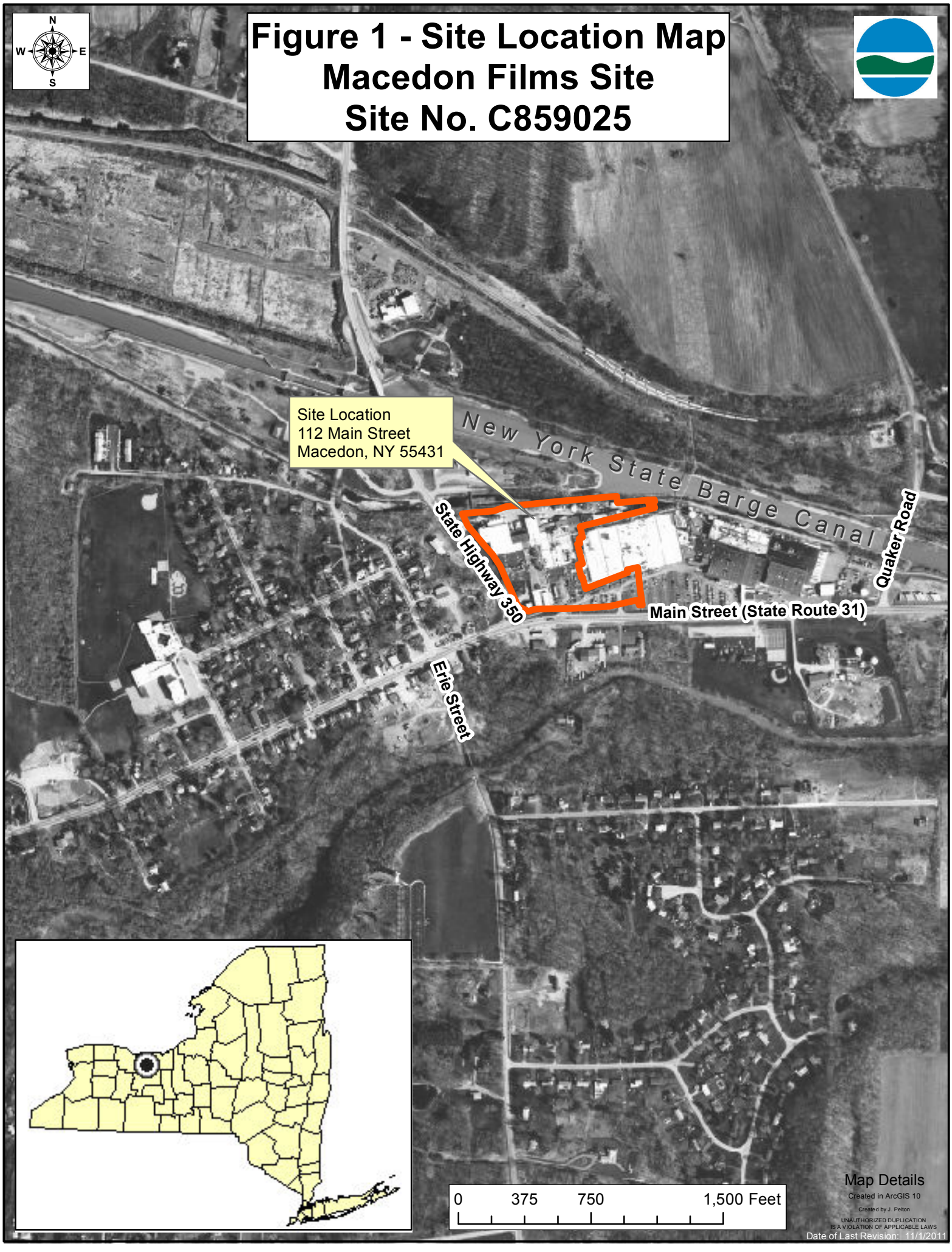

TABLE 1

SUMMARY OF SELECTED REMEDIAL ACTIONS TO MEET REMEDIAL OBJECTIVES

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PROPOSED DECISION DOCUMENT
MACEDON FILMS SITE

Remedial Action Objectives (RAOs) for Protection of Public Health and the Environment	Selected Remedial Actions for Protection of Public Health and the Environment
Groundwater RAOs for Protection of Public Health	
Prevent contact with, or inhalation of volatiles, from contaminated groundwater	- Development and adherence to a Site Management Plan to safely handle soil and prevent future exposure potential. - Achieved by existing deed restriction and new environmental easement restricting the use of groundwater at the site.
Groundwater RAOs for Environmental Protection	
Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable	- There are currently no groundwater contaminants exceeding groundwater SCGs. Pre-disposal conditions will be achieved through the continued natural attenuation of site contaminants that are present in groundwater at concentrations below the SCGs.
Remove the source of ground or surface water contamination	- Achieved by Interim Remedial Measures and earlier remedial actions that have been completed at the site. Based on these remedial actions, there are no remaining sources of ongoing groundwater contamination.
Soil RAOs for Protection of Public Health	
Prevent ingestion/direct contact with contaminated soil	- Development and adherence to a Site Management Plan to safely handle soil and prevent future exposure potential. - Achieved by existing deed restriction and new environmental easement restricting the use of the site to industrial.
Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.	- Development and adherence to a Site Management Plan to safely handle soil and prevent future exposure potential. - Achieved by existing deed restriction and new environmental easement restricting the use of the site to industrial.
Soil RAOs for Environmental Protection	
Prevent migration of contaminants that would result in groundwater or surface water contamination	- Achieved by Interim Remedial Measures and earlier remedial actions that have been completed at the site. Based on these remedial actions, there are no remaining sources of ongoing groundwater contamination.
Soil Vapor RAOs for Protection of Public Health	
Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site	- No further action. Testing completing during the remedial investigation indicates that soil vapor intrusion is not a pathway of concern for this site.