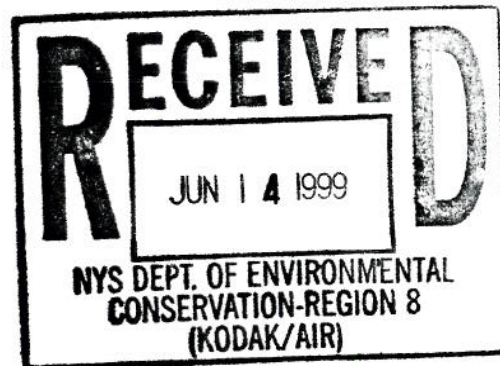




June 11, 1999

Mr. Edward Miles
Supervisor Western Engineering Geology Section
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, NY 12233-7251



Dear Mr. Miles:

Subject: Revisions to Excavation Master Plan II, June 1999

Please find enclosed, for your approval, the Kodak Park Excavation Master Plan II document, revised June 1999, which reflects changes to several sections. As a result of the closures of both the Weiland Road Landfill and the Building 605 Storage Lot these references have been eliminated in Sections 4.7 and 5.2 respectively. Section 6.4 reflects the approved change from semi-annual to annual reporting and Section 2.0 addresses the relationship to the Kodak Park Corrective Action Program. References to the Storage Tank Improvement Program or it's Soils Management Protocol been deleted since these programs no longer apply.

Minor changes have been made throughout the document to further clarify respective sections. All changes are in underlined bold font in order to assist the Department with locating them. Changes were discussed with the Department in September 1998. No changes have been made to any section of this EMP II that alters the original intent or procedures as approved in February 1996.

Please contact Sara Seeman at (716) 722-4725 with any comments.

Sincerely,

Bryan P. Gallagher
Kodak Park Corrective Action Program Manager

C: Mr. Thomas Marriott (NYSDEC Avon)✓

EXCAVATION MASTER PLAN II

**KODAK PARK FACILITY
EASTMAN KODAK COMPANY
ROCHESTER, NEW YORK**

REVISED, JUNE 1999

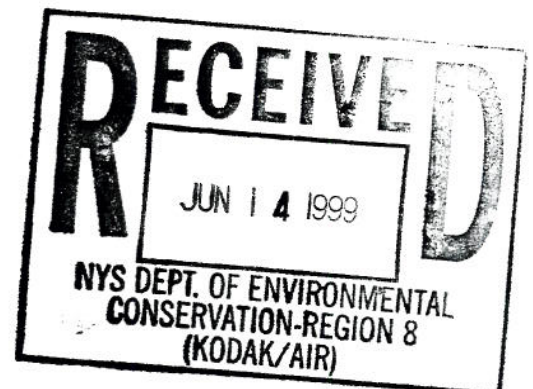


TABLE OF CONTENTS

1.0	INTRODUCTION.....	1-1
1.1	OVERALL OBJECTIVE OF THE EXCAVATION MASTER PLAN	1-2
1.2	REGULATORY FRAMEWORK	1-2
1.2.1	SUBSTANTIAL CHANGE OF USE NOTIFICATION.....	1-3
2.0	RELATIONSHIPS TO OTHER PROGRAMS.....	2-1
2.1	KODAK PARK CORRECTIVE ACTION PROGRAM	2-1
2.1.1	NEW SWMU ASSESSMENT CRITERIA	2-2
2.1.2	SOIL CORRECTIVE MEASURES STUDY	2-2
2.2	KODAK PARK RELEASE PREVENTION PROGRAM.....	2-3
2.2.1	INDUSTRIAL SEWER COMPLIANCE PROGRAM	2-3
2.2.2	STORAGE TANK IMPROVEMENT PROGRAM.....	2-4
2.2.3	OTHER PROGRAMS	2-5
2.3	SPILL NOTIFICATION AND RESPONSE.....	2-6
3.0	EXCAVATION MANAGEMENT SYSTEM	3-1
3.1	OVERVIEW OF THE EXCAVATION MANAGEMENT SYSTEM.....	3-1
3.2	SOIL EXCAVATION PERMIT PROCESS	3-2
3.3	OVA MONITORING AND SCREENING	3-3
3.3.1	HEALTH AND SAFETY MONITORING	3-3
3.3.2	ENVIRONMENTAL SCREENING	3-5
3.4	EXCEPTIONS TO THE SOIL PERMIT PROCESS	3-6
4.0	ON-SITE SOIL MANAGEMENT	4-1
4.1	OVERVIEW OF THE KODAK PARK SOIL MANAGEMENT AREA	4-1
4.2	ESTABLISHMENT OF SOIL MANAGEMENT ZONES.....	4-1
4.2.1	GREEN SOIL CLASSIFICATION.....	4-4
4.2.2	YELLOW SOIL CLASSIFICATION	4-5
4.2.3	RED SOIL CLASSIFICATION.....	4-5
4.2.4	UNCHARACTERIZED ZONE	4-6
4.3	SOIL EXCAVATION PHASE	4-6
4.3.1	PROJECT SITE BACKFILL	4-6
4.3.2	SOIL STAGING AREA.....	4-7
4.4	SOIL REDISTRIBUTION PHASE	4-8
4.4.1	REDISTRIBUTION FROM GREEN SSA PILE	4-9
4.4.2	REDISTRIBUTION FROM YELLOW SSA PILE	4-10
4.4.3	REDISTRIBUTION FROM RED SSA PILE.....	4-10
4.5	MANAGEMENT OF MAJOR EXCAVATIONS	4-10
4.6	ON-SITE TREATMENT	4-11
4.7	ON-SITE DISPOSAL FACILITIES	4-12
4.7.1	WEILAND ROAD LANDFILL.....	4-12

5.0	OFF-SITE MANAGEMENT	5-1
5.1	EXCAVATED MATERIAL CLASSIFICATION FOR OFF-SITE DISPOSAL.....	5-1
5.1.1	CLASSIFICATION AS HAZARDOUS WASTE	5-2
5.1.2	CLASSIFICATION AS NON-HAZARDOUS WASTE.....	5-2
5.2	STORAGE	5-2
5.2.1	OVERVIEW OF KODAK PARK FACILITIES	5-2
5.2.2	EXISTING FACILITIES	5-3
5.2.2.1	BUILDING 218 CHEMICAL WASTE INCINERATOR	5-3
5.2.2.2	201 STORAGE LOT.....	5-4
5.3	TREATMENT.....	5-4
5.4	DISPOSAL.....	5-5
6.0	PROJECT CONTROLS AND DATA MANAGEMENT	6-1
6.1	PURPOSE	6-1
6.2	QUALITY ASSURANCE	6-1
6.3	RECORD KEEPING	6-2
6.4	REPORTING.....	6-2
6.5	CHANGES TO THE EMP II	6-3
7.0	DEFINITIONS AND ABBREVIATIONS	7-1
7.1	DEFINITIONS	7-1
7.2	ABBREVIATIONS	7-1
8.0	REFERENCES	8-1

ATTACHMENT 1

TABLE 1

APPENDICES	SOIL MANAGEMENT ZONE MAPS
Figure 1	HEALTH AND SAFETY PROCESS FLOW
Figure 2	EXCAVATION PHASE FLOW CHART
Figure 3	REDISTRIBUTION PHASE FLOW CHART

1.0 INTRODUCTION

This document (revised September 1998) is the Excavation Master Plan (EMP II) for Eastman Kodak Company's (Kodak) Kodak Park (KP) facility in Rochester, New York. It is being submitted to the New York State Department of Environmental Conservation (NYSDEC) for their approval and replaces the KP Excavation Master Plan of April, 1991.

Kodak will use the plan described in this document to manage soil from routine excavations within Kodak Park (KPE including Kings Landing, KPW, KPX, KPM, and KPS) and, more specifically, to:

- Set criteria for the stockpiling, backfilling, and redistribution of excavated soil within KP.
- Provide the mechanism to assign the general health and safety (H&S) requirements for soil monitoring during excavation activities.
- Identify and manage excavated material which cannot be backfilled and requires off-site disposal.

This document will provide guidelines on areas impacted by Kodak's soil management activities. Section 2 of this document examines the EMP I's impact on other programs. Section 3 gives an overview of this new soil management system. Section 4 discusses zone management as the vehicle for on-site soil management and Section 5 discusses off-site soil management. Section 6 examines the record keeping procedures involved in Kodak's soil management system and Sections 7 and 8 give a list of abbreviations, key terms, and references used throughout the document.

The EMP II is an evolving document which may be updated periodically to reflect changes in regulations and any applicable requirements. This flexibility is necessary to accommodate future changes in Kodak operations as well as advances in treatment technologies, environmental data generation, and potential revisions to analytical protocols. Revisions to the EMP II will be submitted to the NYSDEC for review and approval prior to implementation.

1.1 OVERALL OBJECTIVE OF THE EXCAVATION MASTER PLAN II

The EMP II provides guidance for addressing health, safety, and environmental concerns for routine soil excavation activities within KP. The soil excavation activities covered in the EMP II include routine excavations and corrective action projects. Routine excavations are defined here as maintenance, repairs, facility upgrades, and construction projects where soil is excavated. The EMP II sets forth the approach and decision making criteria Kodak will use to backfill, transport, redistribute, characterize, treat, and store excavated material resulting from those activities. The EMP II will not identify corrective measures, be utilized for management of soil excavated in response to release events, nor will it replace soil management plans covered by other consent orders.

1.2 REGULATORY FRAMEWORK

Soil excavation, backfilling, transporting, redistribution, characterization, treatment, or storage at KP will be done in accordance with applicable Federal and State regulations.

6NYCRR Part 360 relates to the management of non-hazardous solid waste including contaminated soil. Soil contaminated with hazardous waste is regulated under 6NYCRR Part 373. In addition, five areas of KP are currently listed on the registry of inactive hazardous waste disposal sites pursuant to regulations under 6NYCRR Part 375. As previously agreed between the NYSDEC and Kodak, the intention is to manage remedial requirements necessary for KP within the Kodak Park Corrective Action Program (KPCAP), as a provision of KP's upcoming Part 373 Permit.

1.2.1 SUBSTANTIAL CHANGE OF USE NOTIFICATION

6NYCRR Parts 375-1.2(f) and 375-1.6 require the owner/operator of an inactive hazardous waste disposal site to submit a 60-day notification prior to the start of a planned physical alteration, construction, or other substantial change in use. Excavation projects which occur in a designated

6NYCRR Part 375 site and are considered to be normal operating and maintenance activities of KP's manufacturing facility do not require notifications as per Kodak's letter of September 15, 1992 (Lee to Marriott). It will be the responsibility of the Soil Management Group to review excavation permit requests and determine which excavations require notification and coordinate the submittal of the notification. Notifications will be sent to the NYSDEC Commissioner, other required public officials, and will be published in "Update", a Kodak newsletter which is sent to KP neighbors.

2.0 RELATIONSHIP TO OTHER PROGRAMS

In addition to the activities addressed by this EMP II, there are other ongoing environmental activities at KP. The relationship of the EMP II to these other activities is described below:

2.1 KODAK PARK CORRECTIVE ACTION PROGRAM

The objective of the Kodak Park Corrective Action Program (KPCAP) is to identify releases from Solid Waste Management Units (SWMUs) that may pose a threat to human health and the environment. If a release from a SWMU is identified, Kodak will, pursuant to the KPCAP, evaluate the nature and extent of the release and where necessary develop and implement appropriate corrective measures. Although the EMP II may generate data that will aid in the assessment of conditions at/near SWMUs, it is not intended to serve as a means of identifying potential corrective measures. The EMP II will focus on the characterization and management of excess soil which results from any KPCAP excavation.

As part of Kodak's Part 373 permit application, SWMUs which were subject to corrective action under RCRA were formally identified. Kodak has currently identified approximately 660 SWMUs and grouped many of these SWMUs into 25 investigation areas. These investigation areas have been prioritized based on their potential health and environmental

significance and a schedule of corrective actions has been proposed. A similar approach has been developed for SWMUs that are not located within one of these 25 investigation areas.

2.1.1 NEW SWMU ASSESSMENT CRITERIA

If evidence of contamination is found or suspected during any excavation at KP that is not currently identified as a SWMU, that area of excavation will be identified as a potential new SWMU and may become subject to requirements under the KPCAP. Evidence of contamination may include visually contaminated soil, elevated organic vapor analyzer (OVA) readings, etc.

2.1.2 SOIL STUDIES

Kodak expects to develop a series of sampling visits or RFI (RCRA Facility Investigation) workplans to evaluate soil management zones classified as "yellow" or "red", as described in Section 4.2. The RFI study would determine the nature and extent of soil contamination and assess whether a CMS to evaluate remedial measures is warranted.

As agreed between Kodak and the NYSDEC soil evaluations will be conducted as follows:

- as part of the regular RFI for each Investigation Area (IA) that has managed red and/or yellow soils,
- upon reaching the capacity (closure) of any Soil Staging Area (SSA) pits or basements and,
- a KP-wide soil RFI for all red and yellow zones not otherwise addressed during the RFIs or CMS phase for the individual IAs.

In areas where KPCAP corrective measures have been selected, soil redistribution will be consistent with established requirements as a result of the corrective measures study.

2.2 SPILL NOTIFICATION AND RESPONSE

The EMP II is not intended to be used as a protocol in the event of spills or releases. Kodak has a process in place to assess the severity of spills and releases that occur in Kodak Park. These processes outline the measures that Kodak uses to respond to spills or releases and the type and extent of remediation that Kodak may have to perform.

3.0 EXCAVATION MANAGEMENT SYSTEM

3.1 OVERVIEW OF THE EXCAVATION MANAGEMENT SYSTEM

The objective of establishing an excavation management system is to ensure that management of soil generated during routine excavation activities is conducted in a way that is protective of human health and the environment. This will be accomplished through an excavation management system that allows soil excavation, classification, and disposition in a controlled manner. The excavation management system consists of the submittal of an internal excavation permit request, issuance of an internal permit with specified soil management conditions, followed by tracking of the excavated soil and management of any soil redistributed on the site or disposed of off-site. The system compares constituents in excavated soils with constituents in specified receiving zones to determine compatibility. Excavated soils are redistributed to zones of appropriate compatibility or, if incompatible with any zone, disposed off-site.

Soil management within KP will be achieved through the use of zone management as discussed in Section 4. Zone management consists of two phases: 1) the excavation phase (Section 4.3) and 2) the redistribution phase (Section 4.4). Soils which cannot utilize the protocols of zone management will be handled at an off-site facility as discussed in Section 5. All of the components of the excavation management system endeavor to obtain the objective of quality control.

3.2 SOIL EXCAVATION PERMIT PROCESS

An internal soil permit process will be used to track routine excavated soils managed within KP. The soil permit is obtained through an internal process designed to ensure appropriate utility clearance, environmental review, health and safety review, and guidance for the management of excavated soil.

Prior to initiating any excavation project, KP personnel must submit an internal excavation permit request which includes specific information regarding site location and a description of the project. Environmental and operational data in the immediate vicinity of the area to be excavated will be reviewed to determine the soil handling and health and safety requirements. Once a review of the permit request has been completed, an internal excavation permit will be issued outlining the following applicable elements: health and safety requirements, environmental monitoring, and instructions for material handling and disposition. Each permit will set forth the conditions that will be used to manage soils backfilled at the site and/or excess soils intended for redistribution.

For excavations occurring within or near a Solid Waste Management Unit (SWMU), excavation permit conditions may direct the field team to gather additional data (i.e., field screening and/or in-situ or ex-situ soil samples) to aid in the assessment of the SWMU.

3.3 OVA MONITORING AND SCREENING

As stated in Section 3.2 the excavation permit review process includes the specification for both the environmental and health and safety monitoring requirements. OVAs will be used in the field to monitor the worker breathing zone. Worker breathing zone monitoring which exceeds 3 PPM above background will trigger actions as stated in the Kodak Park Master Health and Safety Plan, Section 5.0 - Health and Safety Monitoring.

3.3.1 HEALTH AND SAFETY MONITORING

Health and Safety (H&S) areas have been identified within Kodak Park based on process knowledge, soil and breathing zone analytical data and field logs maintained during previous excavations conducted within these areas. These criteria have been used to determine appropriate personal protective equipment (PPE) levels, decontamination procedures and monitoring requirements for excavations at KP. Health and safety monitoring requirements have been established based on the area the excavation occurs in and the type of excavation activity. These requirements will be included with the excavation permits. In addition, if site specific health and safety concerns have been identified, they will be addressed on a project specific basis through conditions in the excavation permits.

Health and safety monitoring requirements are dependent both upon the location and the type of excavation activity. For jobs occurring in areas in which no health and safety concerns are expected, personal protective equipment will commence at Level D. Breathing zones will be routinely monitored. PPE will be upgraded if necessary in accordance with the Kodak Park Environmental Improvement Project Master Health and Safety Plan.

For excavations occurring within H&S areas that have been determined to have a potential health and safety concern, continuous monitoring of the worker breathing zone will be required. Table 1 provides a list of these H&S areas. OVA monitoring of the worker breathing zone during excavations will provide real time data which will be used to alter the worker protection as per the Kodak Park Environmental Improvement Projects Master Health and Safety Plan (Table 5.2).

For jobs where no health and safety concerns are anticipated (i.e., a minor job), no monitoring of the breathing zone will be required (see Section 3.4).

In summary the following criteria will be applied for H&S monitoring:

- In all areas listed in Table 1
 - for excavations from 0-3 feet deep, no monitoring is required

- for excavations greater than 3 feet deep, constant H&S monitoring is required unless downgraded by a KP Health and Safety professional.
- In all other areas
 - for excavations from 0-3 feet deep, no monitoring is required
 - for excavations between 3 feet and 8 feet deep, H&S monitoring is required every 1-2 hours
 - for excavations greater than 8 feet deep, constant H&S monitoring is required unless downgraded by a KP Health and Safety professional.

If the excavation is necessary due to a sewer line compromise in any area, constant H&S monitoring is required regardless of depth.

Figure 1 presents the EMP II health and safety process flow diagram.

3.3.2 ENVIRONMENTAL SCREENING

The objective of performing environmental screening is to identify soils that are suitable for backfill or redistribution. Soils that are visually contaminated will be managed at an appropriate facility. Soils that have high OVA readings (greater than 1000 PPM) will be separated pending analysis to determine their suitability for backfill

or redistribution. Positive readings will be considered valid when levels are sustained for ≥ 15 seconds after meter stabilization.

OVA readings will be collected at and within the soil surface. For screening during an excavation, readings will be taken every 15 cubic yards. When screening is performed after the excavation activity, such as for a soil pile, readings will be taken at various locations around the pile. Any single reading greater than 1000 PPM will be noted and cause that portion of the pile to be segregated (i.e discrete area of contamination has been identified and will be separately managed). This portion of contaminated soil will be unfit for backfill/redistribution at KP unless volatile organic analytical results obtained from the soil associated with the elevated OVA reading show the soil to be suitable for redistribution/backfill. Soil piles with OVA readings <1000 PPM will be suitable for backfill/redistribution.

3.4 EXCEPTIONS TO THE SOIL EXCAVATION PERMIT PROCESS

While all routine excavation jobs will go through the permit request process, in certain instances, the anticipated health and safety and environmental impact of a job may be deemed too insignificant to issue a permit. Examples of such jobs may include landscaping, road repair, fence pole installation, and other minor projects involving minimal depth (<3 feet) and volume of soil (<5 cubic yards) provided all soil will be

backfilled and remain at the excavation site when the job is completed. In these instances, the activity will commence without an excavation permit.

4.0 ON-SITE SOIL MANAGEMENT

4.1 OVERVIEW OF THE KP SOIL MANAGEMENT AREA (SMA)

KP Sections KPE, KPW, KPX, KPM, and KPS have been designated as a single Soil Management Area (SMA) for purposes of on-site soil management. Within the SMA, a series of Soil Management Zones (SMZ) have been established. Each SMZ sets forth specific conditions for excavation including OVA monitoring/screening, health and safety, temporary storage, and redistribution.

The EMP II establishes the soil handling procedures for routine excavations within KP, including criteria for backfilling of soils at the original site, analytical requirements, and redistribution to applicable receiving areas. Soil management situations which are outside of the parameters established in this plan will be subject to appropriate state and federal regulations.

4.2 ESTABLISHMENT OF SOIL MANAGEMENT ZONES (SMZ)

Zone management is based upon the premise that within KP, there exists various levels and types of subsurface contamination. Long term investigation of the extent and potential impact of this soil contamination will be addressed in the Kodak Park Corrective Action Program as described in Section 2.1. However, in order to manage soil on a daily basis within the SMA, a series of soil management zones have been established

which will result in practical, yet environmentally protective soil management. (Refer to Appendix A for the 1998 soil management zone maps.)

The intent of the SMZ concept is to allow redistribution of soil on-site while ensuring that potentially contaminated soil is not incorporated into an area of lesser contamination. Historical and current data and field observations have allowed Kodak to compare contamination levels within different areas of KP in order to identify these SMZs. Zone management will not be used to characterize soil being sent to an off-site facility.

Kodak has established the SMZs based on soil samples collected throughout KP. Within the SMA, each park section was subdivided into 5 acre grids. The analytical data within each grid was evaluated and an average value was calculated for each constituent. The majority of soil samples collected within KP both historically and currently are analyzed for volatile, semivolatile, and inorganics listed on the Target Compound List. The analytical results of these compounds by Methods 8240/8260, 8270, 8015, 9010, and the 6010/7000 series, are utilized in the execution of the zone management model.

Analytical values above USEPA SW-846 3rd. Edition, Practical Quantitation Limits (PQL) for organics and above site baseline levels for inorganics and Polynuclear Aromatic Hydrocarbons (PAH) were compared against the soil ingestion levels (SIL) and the groundwater action levels