Consent Decree 94-CV-6503T

ATTACHMENT A:
II. Evaluation and Remediation of Sewer System

FINAL COMPLETION REPORT AND CERTIFICATION

Prepared for:
Eastman Kodak Company

Kodak

Prepared by:

March 2008

O'BRIEN & GERE

July 2008

CONSENT DECREE 94-CV-6503T
ATTACHMENT A: SECTION II. EVALUATION AND REMEDIATION OF SEWER SYSTEM
FINAL COMPLETION REPORT AND CERTIFICATION

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INTRODUCTION

The Eastman Kodak Company (Kodak) and the United States Environmental Protection Agency (US EPA) signed a Consent Decree (94-CV-6503T) in 1994. The Consent Decree addresses several issues pertaining to infrastructure at Kodak Park. This Report focuses on the requirements of Section II of Attachment A *Evaluation and Remediation of Sewer System,"* which was comprised of the following tasks:

- Sewer Inspection Manual
- Reference Groundwater Table Report
- Upgrade of Above-Water Table Main Sewer Line
- Sewer Lines Carrying Laboratory Wastes
- Sewer Discharge Inventory Reports
- Sewer Integrity Assessment and Repair Program
- Toxicity Reduction Evaluation
- Initial Sewer Release Prevention Program
- Final Release Prevention Program
- Reporting Requirements
- Sewer Release Prevention Plan Modification
- Modification of the Schedule

Kodak's efforts to complete these tasks are outlined in the subsequent section entitled "Summary of Completed Work." To accomplish the work, Kodak established teams of in-house staff and contracted consultants. The Teams generally had individuals with the following roles and responsibilities:

- √ Project Manager, the interface between the Teams and Kodak management,
- √ Engineering Manager, coordinated all technical issues for the Program,
- √ Compliance Manager, the Team's interface with Kodak's Legal Department and the Government Agencies (e.g., US EPA),

- √ Construction Manager, coordinated construction contractors and execution phase activities,
- √ Project Control Engineer, coordinated cost estimating, scheduling and cost control,
- √ Sewer Diversion Manager, coordinated the sewer and traffic management issues, and
- √ Sewer Inspection Planner, scheduled the group responsible for sewer cleaning and inspections.

Other Kodak personnel who were involved included Heath, Safety and Environment (HSE) field representatives, building representatives, Materials Engineering Laboratory staff, Kodak Park site staff, and Risk Issues staff.

The undersigned professional engineer, author of this Report, has acted in the capacities of contracted design engineer, engineering manager and assistant project manager since the inception of the Initial Release Prevention Program (IRPP) and through the completion of the Final Release Prevention Program (FRPP).

PURPOSE OF THE REPORT

This document addresses the requirement of **Section XI. – Completion of Work** which specifies that a report be prepared by a registered professional engineer to certify compliance with the requirements of Attachment A of the Consent Decree.

It also serves as the final semi-annual submission of Sewer Release Prevention Program Plan (SRPPP), as required by Section A, II., K of Attachment A.

Finally, it provides responses to questions raised by US EPA generated as a result of the Final Inspection performed by US EPA and the New York State Department of Environmental Conservation (NYS DEC), as provided by Section XI., 37.

SUMMARY OF COMPLETED WORK

Sewer Inspection Manual (Attachment A, II., B.)

US EPA approved Kodak's Sewer Inspection Manual. The undersigned has routinely observed Kodak's self-certified sewer inspection personnel consistently utilize the Sewer Inspection Manual as the sole criteria for initial and on-going inspection of the industrial sewer system.

Reference Groundwater Table Report (Attachment A, II., C.)

US EPA approved Kodak's initial Reference Groundwater Table Report. Kodak has installed additional groundwater monitoring wells throughout the timeframe of the Consent Decree. These additional wells have further refined the resolution of the site groundwater contours. A monitoring program has been implemented pursuant to Paragraph II., C., 3 to track the seasonally low water table until completion of the Final Release Prevention Program (FRPP). The monitoring program was designed to annually determine the configuration of the water table beneath Kodak Park, and to compare this surface to the industrial sewer structure elevations. Annual notification reports submitted to the US EPA though December 2007 described the results of the water table monitoring program.

The sewer improvement team, responsible for the implementation of IRPP and FRPP, constantly interfaced with the Kodak staff responsible for the groundwater data. At the start of each annual capital improvement strategic planning effort (i.e., Class S for each "Element"), pipe segments and structures of the industrial sewer system in hazardous waste service were checked against the groundwater data to confirm the need to upgrade the particular infrastructure. Consistent with US EPA's May 17, 2005 letter approving the FRPP Plan, the Sewer Upgrade Team maintained the "12 inch safety factor" and considered any hazardous waste-carrying structure within this

zone to be above groundwater and subject to an upgrade to VNL standards. It should be noted that data collected over the duration of the program consistently demonstrated that minor variations in the groundwater table had no effect on the requirements for upgrading the industrial sewers as a result of this safety protocol. **Having completed the FRPP, Kodak will no longer be submitting Water Table Monitoring Notification Reports to the US EPA.**

Upgrade of Above-Water Table Main Sewer Line (Attachment A, II., D.)

Kodak completed the evaluation and upgrade of the Kodak Park East main sewer in 1997; just prior to the start of IRPP. Portions of the sewer were lined with cured-in-place pipe (CIPP) and any applicable connections had a "top hat" installed to seal the joint. The main sewer is on a re-inspection cycle commensurate with the criteria of the *Sewer Inspection Manual*.

Sewer Lines Carrying Laboratory Wastes (Attachment A, II., E.)

Sewer segments conveying laboratory qualification wastes are identified in the Sewer Initial Integrity Assessment Completion Plan. They are included in the Inspection Program. These sewers are maintained in a fit-for-use condition. Furthermore, the capital improvement team has reviewed applicable sewer segments to ensure that any necessary upgrades were completed.

Sewer Discharge Inventory Reports (Attachment A, II., F.)

Kodak submitted an initial Inventory Report dated June 1995. The undersigned has reviewed this Report and to the best of my knowledge it is complete and contains all of the required data. This data was used in the development of the Sewer Initial Integrity Assessment Completion Plan.

Sewer Integrity Assessment and Repair Program (Attachment A, II., G.)

Integrity Assessment Program (Attachment A, II., G., (1))

Kodak submitted a Sewer Initial Integrity Assessment Completion Plan dated August 1995; having been completed within the timeframe stipulated in Attachment A. The undersigned has reviewed this Report and to the best of my knowledge it is complete and contains all of the required data.

Since the completion of the Initial Integrity Assessment Program in 1996, Kodak has continued to perform inspections of sewer segments and accessible exit laterals conveying hazardous waste or qualifying laboratory wastewater.

All inspections have been performed in accordance with the methodologies and criteria set forth in the Sewer Inspection Manual, and are based on Kodak's best current knowledge of wastewater characteristics, as maintained in the Kodak Waste Information Characterization (KWIC) database, and sewer segment attributes, as maintained in the Sewer and Wastewater Information System (SWIS) database.

Sewer Repair Program (Attachment A, II., G., (2))

All repairs whether to return a sewer to Fit-For-Use (FFU) status, or to upgrade it to VNL condition, have been completed in compliance with the *Sewer Repair and Upgrade Approved Technologies Manual*. The undersigned professional engineer has reviewed the Manual prior to the design of any upgrades and to the best of my knowledge has chosen and used only those technologies approved for their relevant application.

An on-going Technical Assessment has occurred over the duration of the repair program and capital improvements. The undersigned professional engineer, in

addition to other members of the capital upgrade team, have attended industry-recognized technical conferences to review the availability of currently-approved technologies and to research new technologies that may be applicable to the repair and upgrade programs. These include WEFTEC, the Water Environment Federation's (WEF) annual conference and exhibition, WEF Collection System Specialty Conferences, NASTT's No-Dig Conference and Exhibition, Pumper and Cleaner Environmental Exposition, and various webinars.

Reporting Requirements (Attachment A, II., G., (3))

Status reports describing the results of the Sewer Integrity Assessment Program have been submitted to the US EPA on an annual basis up to, and including, the end of 2007; when all of the physical work had been completed for the Initial and Final Sewer Release Prevention Programs. Due to the completion of FRPP, no further Sewer Integrity Assessment Reports will be submitted to the US EPA.

The Integrity Assessment reports included the results of FFU inspections and repairs that Kodak has performed from the inception of the program, for subsequent sewer inspections, and for inspections of segments identified to be put into hazardous waste or qualifying laboratory wastewater service. The reports provided statistics for inspections of pipe segments, summarized inspection and repairs of pipe segments, provided statistics for inspections of other structures, summarized inspection and repairs of other structures, summarized total pipe segments in hazardous waste/qualifying laboratory wastewater service, and summarized total other structures in hazardous waste/qualifying laboratory wastewater service.

Toxicity Reduction Evaluation (Attachment A, II., H.)

Kodak submitted the Initial Toxicity Reduction Evaluation Report to the US EPA in January 1996 and the Final Toxicity Reduction Evaluation Report in January 1998. The data in these reports was used as the primary basis for the capital improvement projects; the Initial Release Prevention Program and the Final Release Prevention Program. A building wastewater collection system proposal, as required by Paragraph 28 of Attachment A, was submitted in January 1998. The undersigned has reviewed these Reports and to the best of my knowledge they are complete and contain all of the required data.

Initial Sewer Release Prevention Program (Attachment A, II., I.)

The "Initial Release Prevention Program Plan" (IRPPP) was submitted for US EPA pursuant to the requirements Paragraph II, I., 30. The US EPA approved it in August 1998. Construction of the upgrades for the capital upgrades associated with the Initial Release Prevention Program (IRPP) commenced in 1999. The five (5) year program included thirteen (13) distinct projects known as numerically-identified Elements. These Elements consisted of work on sewer segments and structures associated with specific buildings and/or geographic location. The Elements in IRPP are shown on Figures 1 and 2 in Appendix E.

As previously stated, the upgrades to all sewers in IRPP were completed per the criteria of the *Sewer Inspection Manual* and the *Sewer Repair and Upgrade Approved Technologies Manual*.

Final Release Prevention Program (Attachment A, II., J.)

The "Final Release Prevention Program Plan" (FRPPP) was submitted for US EPA approval in December 2003; pursuant to the requirements Paragraph II, J., 33. The US EPA approved the FRPPP in May 2005. The capital planning for the Final Release Prevention Program (FRPP) commenced in 2003 with design and construction of the upgrades commencing in 2004. The five (5) year program included nine (9) distinct projects known as alphabetically-identified Elements. These Elements were associated with specific upgrade technologies and/or geographic location. The Elements in FRPP are shown on Figures 3 and 4 in Appendix E.

As with IRPP, the upgrades to all sewers in FRPP were completed per the criteria of the *Sewer Inspection Manual* and the *Sewer Repair and Upgrade Approved Technologies Manual*. Some Elements did not require capital upgrades as the sewer segments and/or structures in the Element were removed from hazardous waste service as a result of TRE efforts or Kodak's Footprint Reduction Program.

Reporting Requirements (Attachment A, II., K.)

Semi-annual status reports, describing the results of the Sewer Release Prevention Program Plan (SRPPP), have been submitted to the US EPA pursuant to the requirements of Paragraph 35.

Since the approval of the Initial Release Prevention Program Plan (IRPPP) on August 15, 1998, Kodak began executing Verifiably Non-Leaking (VNL) upgrades according to the identified Valid Options in the IRPPP.

The SRPPP reports identified an option code for each sewer segment that had been determined to be in scope for the IRPPP/FRPPP Reports and a prioritized schedule for completion.

The semi-annual SRPPP reports have included the results of VNL upgrades and toxicity reduction progress that Kodak has performed according to the IRPPP/FRPPP through the completion of the last capital upgrade Element in 2007.

While final, physical upgrades were completed in 2007 (Year 4 of FRPP), there was some minor data cleaning that had to occur in order to formally complete the requirements of the Consent Decree. The final data for the period of January 1, 2008 through February 15, 2008 included 3 toxicity reductions performed in 2008 to finalize the FRPP[1].

This document serves as the final SRPPP report and transmits the Program status as required by the Consent Decree. As of this final report, signifying the completion of the work under Attachment A: II. Evaluation and Remediation of Sewer System the estimated linear feet of sewer segments that meet the VNL standard, and the estimated linear feet of sewer segments that do not yet meet the VNL standard are a follows:

- a total of approximately 36,551 linear feet of sewer segments meet the Verifiably Non-Leaking standard in accordance with the *Sewer Repair and Upgrade Approved Technologies Manual*.
- of the approximately 36,551 linear feet of VNL sewer, approximately 4,219 linear feet of sewer was identified in the previous (Year 4) Semi-Annual SRPPP as requiring upgrades. These sewer segments did not require a physical upgrade, but have been assigned a Valid Option Code (VOC) to reflect removal from hazardous waste service (VOC "A") or

[1] See Appendix A, Page 4 of this Report

were completed in accordance with FRPP by approved methods[2] other than VNL (i.e., pipe segments conveying groundwater from remediation systems (VOC "W")).

- **there are zero (0) feet of sewer segments that do not meet VNL standards.**

The semi-annual SRPPP reports identified the estimated number of other structures (manholes, trap tanks, sumps, and other miscellaneous structures) that met the Verifiably Non-Leaking standard, and the estimated number of other structures (manholes, trap tanks, sumps, and other miscellaneous structures) that did not yet meet the Verifiably Non-Leaking standard. As of this final report, signifying the completion of the work under Attachment A: II. Evaluation and Remediation of Sewer System:

- 347 other structures (manholes, trap tanks, sumps, and other miscellaneous structures) meet the Verifiably Non-Leaking standard in accordance with the *Sewer Repair and Upgrade Approved Technologies Manual*.
- of the 347 structures, 43 were identified in the previous (Year 4) Semi-Annual SRPPP as requiring upgrades. These structures did not require a physical upgrade, but have been assigned a Valid Option Code (VOC) to reflect removal from hazardous waste service (VOC "A") or were completed in accordance with FRPP by approved methods[3] other than VNL (i.e., structures conveying groundwater from remediation systems (VOC "W")).
- **there are zero (0) structures that do not meet VNL standards.**

[2] US EPA FRPP Approval Letter Dated May 17, 2005

The final lists of sewer segments for FRPPP Year 5 (January 1, 2008 through February 15, 2008) are presented, by Kodak Park section, as follows:

- Appendix A - List of Sewer Segments that Qualify for Toxicity Reduction.
- Appendix B - List of Sewer Segments not in FRPPP that have Subsequently been placed in Hazardous Waste Service.
- Appendix C - List of Sewer Segments with Changes in Upgrade Technology Selection to be Executed.
- Appendix D - List of Sewer Segments not yet Qualifying for Toxicity Reduction or not yet VNL.

In order to provide an overall SRPP status it is necessary to determine the entire number of segments in hazardous waste service at a particular point in time. This has been accomplished by using a program to assign priorities to all sewer segments based on the current wastewater characterization information contained in KWIC. While Kodak has submitted a letter to the US EPA stating that the "completion of work" in accordance with Section XI of the Consent Decree was January 11, 2008, the final "snapshot" for determining the number of pipe segments and structures in hazardous waste service was completed on February 15, 2008.

As of February 15, 2008, a total of approximately 32,470 linear ft. of pipe segments and 285 other sewer structures (manholes, trap tanks, sumps, and other miscellaneous structures) were in hazardous waste service.

The Sewer Release Prevention Program and report requirements included VNL upgrades to sewer segments expected to remain in hazardous waste service and did not include Building Wastewater Collection System (BWCS) accessible exit laterals and sewer segments in laboratory qualified wastewater service. The final total values

[3] US EPA FRPP Approval Letter Dated May 17, 2005

include some sewer structures that are in non-hazardous waste service but are being reported as VNL.

Sewer Release Prevention Plan Modification (Appendix A, II., L.)

The initial engineering evaluation resulted in the selection of a Valid Option Code. These results were included in the IRPPP/FRPPP by way of the "VALID OPTION CODE" column. Any modifications to the Valid Option Code chosen for a particular structure had been identified in the Semi-Annual reports or through a separate agency notification per Compliance Schedule A, Section II, L, Paragraph 36.

Modification of the Schedule (Appendix A, II., M.)

The IRPPP/FRPPP represented Kodak's best estimate of the final completion of each specified structure. Overall, IRPP and FRPP were completed within the stated schedules, with no need for revision due to considerations such as construction season, weather, changes in business conditions, or the ability of contractors to perform the work necessary to meet VNL specifications. In fact, Kodak recognized the value of the momentum gained during the execution of IRPP and commenced activities on FRPP prior to receiving official notification from the US EPA. Any schedule modifications for specific pipe segments and/or structures was reported in the appropriate SRPP Semi-Annual Status Reports.

The FRPPP is currently in execution Year 5. There are no capital upgrades to be completed in Year 5. **It should be noted that all structures planned for VNL upgrades or Toxicity Reduction as part of the IRPPP and FRPPP have been completed as of the final "snapshot" dated February 15, 2008.** This is reflected in Appendix D, with zero (0) structures remaining to be VNL upgraded or toxicity reduced.

REPLY TO AGENCY COMMENTS FROM FINAL INSPECTION (Section XI., 37.)

Representatives from the US EPA and the New York State Department of Environmental Conservation (NYS DEC) made a site visit on April 08-10, 2008 to review the completed components of the Consent Decree. Kodak staff accompanied these representatives to various locations in Kodak Park. In addition, the Sewer Upgrade Capital Team made a presentation to US EPA / NYS DEC which outlined the historical aspects of the sewer evaluations and development of the capital upgrade program. A summary of the industrial sewer upgrades completed during IRPP/FRPP was also provided. Kodak provided a copy of the presentation to both the US EPA and the NYS DEC upon their request.

US EPA provided feedback from the site inspection, specifically related to the Work addressed by this Report, in the form of electronic mail (see Appendix G). The following is a summary of the comments and how each has been addressed.

US EPA indicated that "(T)he most recent progress reported (2/15/08) still indicated that approximately 2,223 feet sewer was not yet upgraded to VNL status. While (the US EPA) understand these sewer segments have been taken care of, we would like to receive documentation that this is indeed the case."

The progress report to which US EPA refers is the *Sewer Release Prevention Program Semi-Annual Report*, dated 15-February-08, which covers the period from 01-January-07 through 31-December-07. As of the end of 2007, there were eighteen (18) pipe segments totaling 2,223 linear feet that would receive a Valid Option Code of "A" (removal from hazardous waste service) or "W" (groundwater well only), or would receive Year 5 revisions. The completion of these pipe segments is included in

the previous section entitled "Reporting Requirements (Attachment A, II., K.)" on page 8 of this Report.

US EPA requested "(D)rawings or diagrams of appropriate scale and detail so that specific sewer segments/structures can be identified with the information listed below:

- ✓ Which sewer segment/structures were subject to integrity assessment per Consent Decree (CD),
- ✓ Which sewer segment/structures were found to be not FFU per CD,
- ✓ Which sewer segment/structures were upgraded per CD,
- ✓ Which sewer segment/structures are currently in hazardous waste service per CD,
- ✓ Which sewer segment/structures are currently in VNL status per CD,
- ✓ Which sewer segment/structures will be removed from hazardous waste service because they are not in VNL status,
- ✓ Which sewer segment/structures have been removed from hazardous waste service."

Kodak has produced maps that provide the information as requested by US EPA. They are contained on a compact disk located in Appendix H. The maps are Geographic Information System (GIS)-based representations of the Work completed per the Consent Decree. Actual Sewer Waste Information System (SWIS) data generated and/or updated as a result of the completed Work was used for the preparation of the maps. The maps are "read only" and can be viewed with ArcReader (version 9.2 or later), a free program from ESRI, Inc. A copy of ArcReader version 9.2 is contained on the attached disk.

It is important to note that surface features (e.g., building footprints and parking lot boundaries) shown on the maps do not necessarily depict current (2008) conditions. The base map used to prepare the attached maps is derived from data originally

produced at the start of the industrial sewer assessment work. In addition, some sewers that are shown on the maps may actually have been abandoned and/or removed as part of Kodak's Footprint Reduction Program.

Map H-1 lists all structures from the Initial Toxicity Reduction Evaluation (ITRE) report, which lists all industrial sewer structures conveying hazardous waste after submission of the Sewer Discharge Inventory Report.

Map H-2 shows the previously non Fit-for-Use (FFU) sewers. All sewers/structures depicted as previously non-FFU have been repaired to FFU condition as of the date indicated on the Attribute Tag. All FFU repairs have been completed in compliance with the Sewer Repair and Upgrade Approved Technologies Manual. Delineation of the entire length of a pipe segment or whole structure is for illustrative purposes only. Previously non-FFU status may have been caused by one or multiple defects.

Map H-3 shows all sewers that are currently in hazardous waste service (red line), that have been upgraded to verifiably non-leaking (VNL) condition (green line), or convey wastewater from groundwater wells (purple lines).

Additionally, US EPA commented, "(US EPA) understand(s) NYSDEC also requested these figures showing the sewer system (including structure IDs) indicating lines/structures that were inspected, upgraded, in VNL status, removed from HW service, exempted from VNL requirement, found not FFU (with dots or other symbol showing locations of compromises). This would show what activities were completed under the decree, where the work occurred, and where there may have been releases."

The maps produced to satisfy the US EPA's inquiry also contain the necessary information to address the NYS DEC's request.

ACKNOWLEDGEMENT / CERTIFICATION

As a result of the evaluation described above, the undersigned certifies that Eastman Kodak Company has completed the requirements of Section II **Evaluation and Remediation of Sewer System** of Attachment A of the Consent Decree in Civil Action: 94-CV-6503T.

Sean P. Murphy, P.E.

NYS PE #66358

29-July-08

Date

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Appendices

SRPPP 2008 Appendices

- Appendix A - list of sewer segments that qualify for toxicity reduction
- Appendix B - list of sewer segments not in FRPPP that have subsequently been placed in hazardous waste service
- Appendix C - list of sewer segments with changes in upgrade technology selection to be executed
- Appendix D - list of sewer segments not yet qualifying for toxicity reduction or not yet VNL

Appendix E - Maps of Elements

Appendix F - Program Schedule

Appendix G - Miscellaneous Documents

- US EPA's IRPPP Approval Letter
- US EPA's FRPPP Approval Letter
- Kodak's "Completion of Work" Letter
- US EPA e-mail Containing Comments from Final Site Inspection
- Engineering Certification for Individual IRPP and FRPP Elements

Appendix H – Compact Disc Containing Maps as requested by US EPA / NYS DEC (per electronic mail in Appendix G)

APPENDIX A

LIST OF SEWER SEGMENTS THAT QUALIFY FOR TOXICITY REDUCTION

Eastman Kodak Company
Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments Qualifying For Toxicity Reduction
For KPE

SEWR STR CODE	SEWR STR ID	TRE OPTION	QUALIFYING DATE
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments Qualifying For Toxicity Reduction
For KPW

SEWR STR CODE	SEWR STR ID	TRE OPTION	QUALIFYING DATE
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments Qualifying For Toxicity Reduction
For KPX

SEWR STR CODE	SEWR STR ID	TRE OPTION	QUALIFYING DATE
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments Qualifying For Toxicity Reduction
For KPM

SEWR STR CODE	SEWR STR ID	TRE OPTION	QUALIFYING DATE
PS	6541	A	08-JAN-08
	6546	A	08-JAN-08
	6547	A	08-JAN-08

APPENDIX B

LIST OF SEWER SEGMENTS NOT IN FRPPP THAT HAVE SUBSEQUENTLY BEEN PLACED IN HAZARDOUS WASTE SERVICE

Eastman Kodak Company
Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
New Sewer Segments in Hazardous Waste Service
For KPE

SEWR STR CODE	SEWR STR ID	INITIAL DATE
NONE		

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
New Sewer Segments in Hazardous Waste Service
For KPW

SEWR STR CODE	SEWR STR ID	INITIAL DATE
NONE		

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
New Sewer Segments in Hazardous Waste Service
For KPX

SEWR STR CODE	SEWR STR ID	INITIAL DATE
NONE		

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
New Sewer Segments in Hazardous Waste Service
For KPM

SEWR STR CODE	SEWR STR ID	INITIAL DATE
NONE		

APPENDIX C

LIST OF SEWER SEGMENTS WITH CHANGES IN UPGRADE TECHNOLOGY SELECTION TO BE EXECUTED

Eastman Kodak Company
Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments / Changes in Technology Selected
For KPE

SEWR STR CODE	SEWR STR ID	ORIGINAL FRPP OPTION	NEW FRPP OPTION
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments / Changes in Technology Selected
For KPW

SEWR STR CODE	SEWR STR ID	ORIGINAL FRPP OPTION	NEW FRPP OPTION
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments / Changes in Technology Selected
For KPX

SEWR STR CODE	SEWR STR ID	ORIGINAL FRPP OPTION	NEW FRPP OPTION
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Sewer Segments / Changes in Technology Selected
For KPM

SEWR STR CODE	SEWR STR ID	ORIGINAL FRPP OPTION	NEW FRPP OPTION
NONE			

APPENDIX D

LIST OF SEWER SEGMENTS NOT YET QUALIFYING FOR TOXICITY REDUCTION OR NOT YET VNL

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Plan Updates for Sewer Segments Requiring Toxicity Reduction Or Not Yet VNL
For KPE

SEWR STR CODE	SEWR STR ID	ORIGINAL EXECUTION YEAR	REVISED EXECUTION YEAR
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Plan Updates for Sewer Segments Requiring Toxicity Reduction Or Not Yet VNL
For KPW

SEWR STR CODE	SEWR STR ID	ORIGINAL EXECUTION YEAR	REVISED EXECUTION YEAR
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Plan Updates for Sewer Segments Requiring Toxicity Reduction Or Not Yet VNL
For KPX

SEWR STR CODE	SEWR STR ID	ORIGINAL EXECUTION YEAR	REVISED EXECUTION YEAR
NONE			

Sewer Release Prevention Program Report
Semi-Annual Status Report
01-Jan-2008 To 15-Feb-2008
Plan Updates for Sewer Segments Requiring Toxicity Reduction Or Not Yet VNL
For KPM

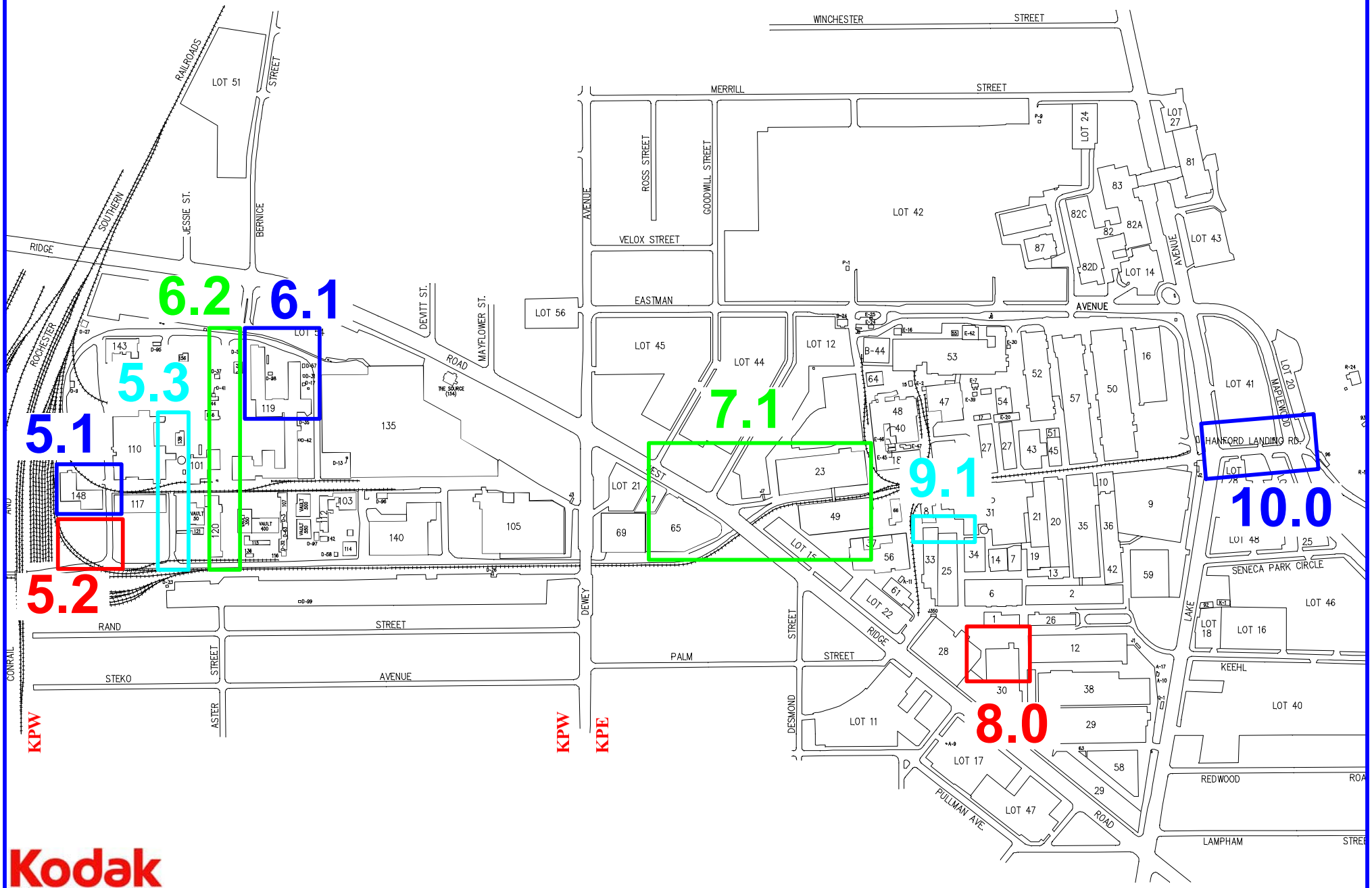
SEWR STR CODE	SEWR STR ID	ORIGINAL EXECUTION YEAR	REVISED EXECUTION YEAR
NONE			

APPENDIX E

MAPS OF ELEMENTS

FIGURE 1
IRPP - Element Locations
Eastern Portion of KP

No Scale



Kodak

FIGURE 2
IRPP - Element Locations
Western Portion of KP

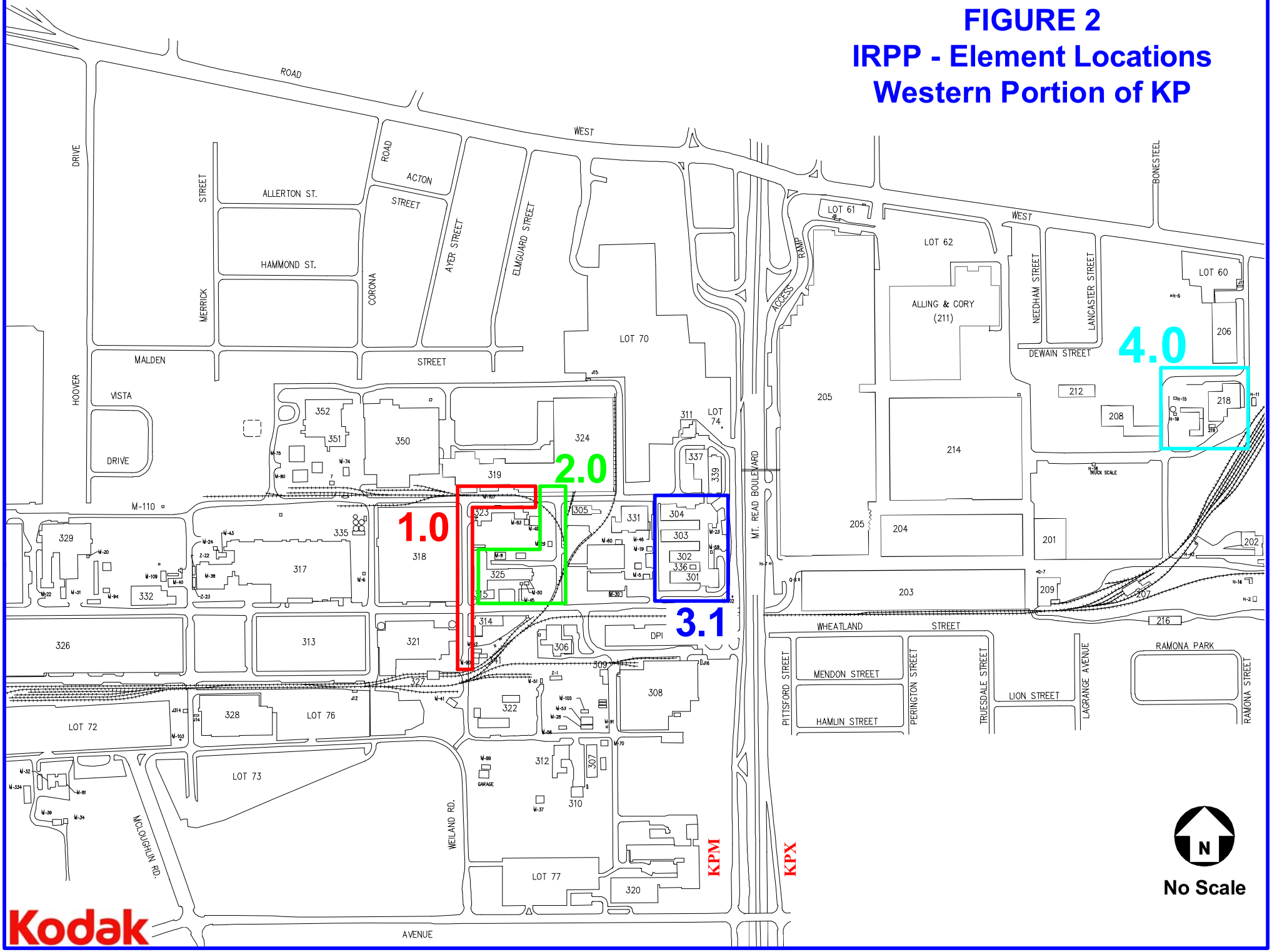
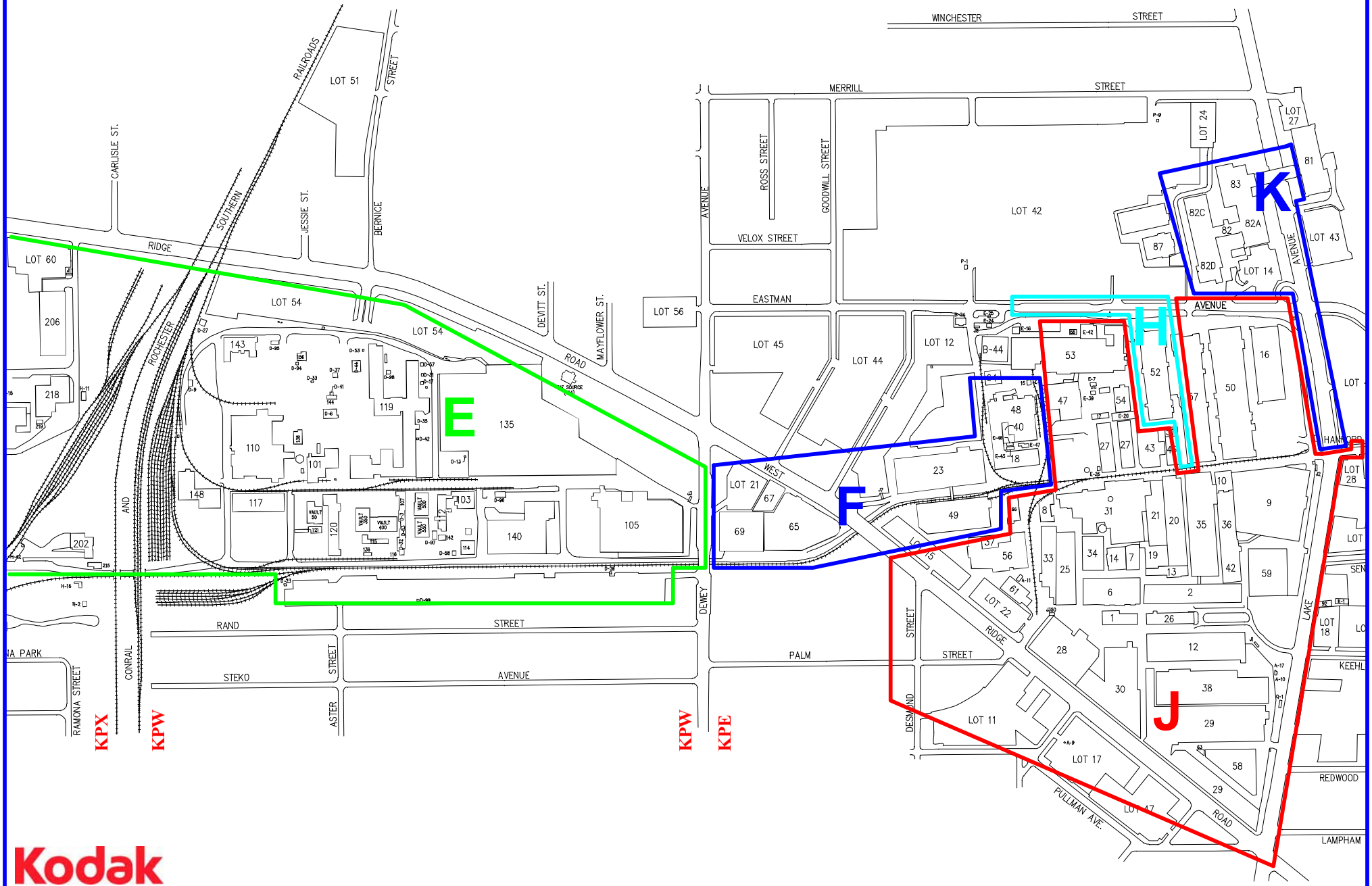


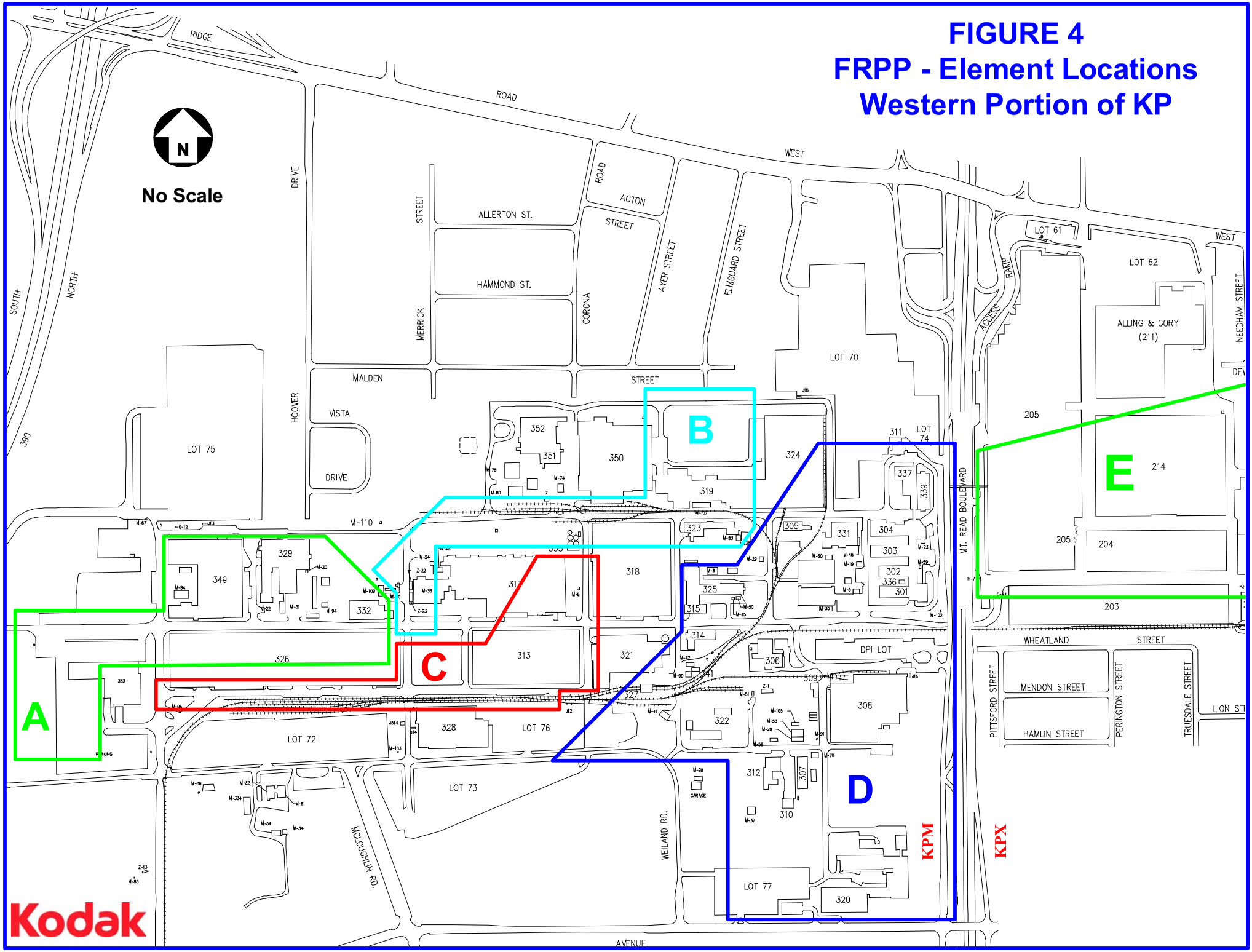
FIGURE 3
FRPP - Element Locations
Eastern Portion of KP

No Scale



Kodak

FIGURE 4
FRPP - Element Locations
Western Portion of KP

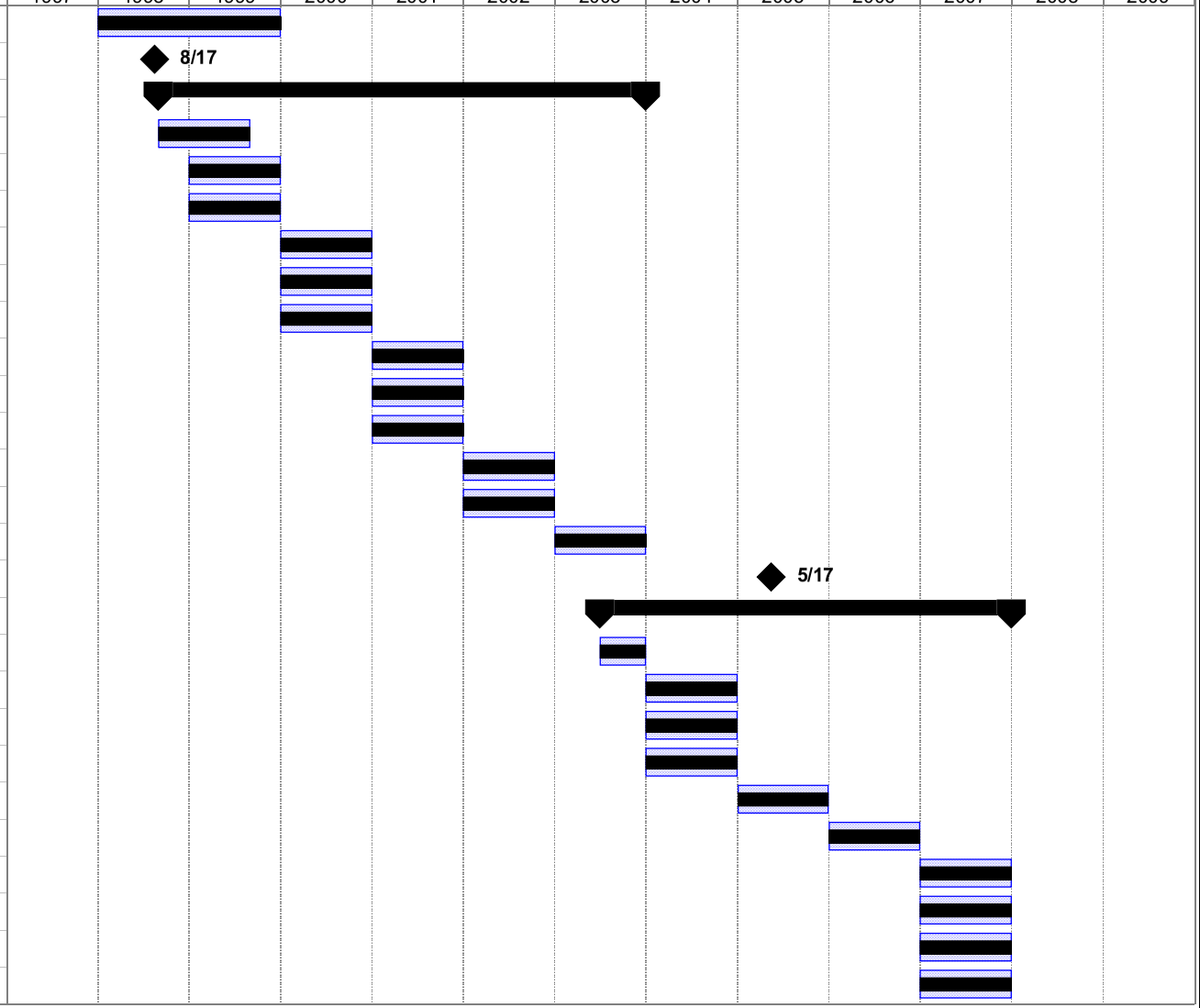


APPENDIX F

PROGRAM SCHEDULE

Attachment A: II. Evaluation and Remediation of Sewer System
IRPPP and FRPPP Program Schedule

ID	Task Name
1	KPE Main Sewer
2	US EPA Approval - IPRRR
3	**Initial Release Prevention Program**
4	Element 5.2 (B-110)
5	Element 6.1 (B-119 North Courtyard)
6	Element 5.1 (B-148)
7	Element 8.0 (B-30)
8	Element 5.3 (B-117)
9	Element 1.0 (B-321)
10	Element 3.0 (B-321)
11	Element 7.0 (Three MHs)
12	Element 9.0 (B-31)
13	Element 6.2 (B-119 West Side)
14	Element 2.0 (B-325)
15	Element 4.0 (B-218)
16	US EPA Approval - FRPPP
17	**Final Release Prevention Program**
18	FRPP Planning
19	Element K KPE Research North
20	Element A KPE B-326 North
21	Element E KPW 48" Main
22	Element F KPE B-48/B-23
23	Element D KPM East
24	Element C KPM B-326 South
25	Element H KPE B-52 East
26	Element B KPM B-317/B-350
27	Element J KPE South



Project: IRPP-FRPP Program Schedule
Date: 15-February-08
Printed Date: Mon 3/24/08

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

APPENDIX G

MISCELLANEOUS DOCUMENTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 4 1998

Mr. James A Mussgnug, P.E.
KPHSE, B205, 1st Floor
Eastman Kodak Company
Rochester, NY 14650-3073

Re: Initial Sewer Release Prevention Program Plan
Civil Action #94-CV-6503T
Compliance Schedule Attachment A

Dear Mr. Mussgnug:

Kodak submitted the Initial Sewer Release Prevention Program (IRPPP) Plan in accordance with paragraph 30 of Attachment A, Section II.I. of the Consent Order referenced above. The U.S Environmental Protection Agency (EPA) has reviewed and hereby approves the IRPPP.

Notwithstanding this approval, and as stressed in telephone discussions between EPA and Kodak, EPA continues to emphasize that all sewers carrying hazardous wastes or hazardous waste constituents must be managed in a manner protective of human health and the environment. Kodak's ITRE Report, upon which the IRPPP is based, lists various sewer structures that are expected to be removed from hazardous waste service via removal of waste characteristics resulting from the aggregation of characteristic wastes.

It is EPA's contention that Sewer structures carrying such "nonhazardous" aggregated characteristic wastes, specifically toxicity characteristic wastes, should be maintained in Fit-For-Use (FFU) condition. Although such aggregated characteristic wastes may no longer exhibit a characteristic, they still carry hazardous constituents which if released may have a detrimental cumulative effect on the environment. Due to the age and condition of the sewer system, it is evident that these sewers, if not properly managed, will be subject to leaks and that adjacent soils and/or groundwater may become contaminated with hazardous waste constituents contained in the aggregated waste streams. In addition, the release of such wastes would constitute a regulatory violation.

This issue remains to be resolved and approval of the Final Toxicity Reduction Evaluation Report (FTRER) and the Final Sewer Release Prevention Program Plan (FRPPP) will be contingent upon satisfactory resolution of the issue discussed above. If this issue is not resolved by the end of 1998, EPA expressly reserves its right to take appropriate action pursuant to the Consent Decree in conjunction with full or partial approval of the FTRER and the FRPPP.

As stated in Attachment A(II)(I)(32) of the Consent Decree, Kodak will implement the IRPPP and will complete the program within five years of this approval. Kodak is required to submit to EPA semiannual Program Status Reports detailing progress during implementation of the IRPPP (Attachment A(II)(K)(35)). The schedule for implementation may be modified, if necessary, in accordance with Attachment A(II)(M) of the Consent Decree.

If you have any questions regarding this approval please call me at (212) 637-4135.

Sincerely,

Leonard Voo
Team Leader

cc: JoAnn E. Gould, Kodak
Larry Thomas, NYSDEC-Albany
Thomas Marriot, NYSDEC - Region 8

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

File: Reg 8
Kodak - Industrial Sewer

MAY 17 2005

Mr. David Simons
Eastman Kodak Company
343 State Street
Rochester, New York 14650-0217

Re: Approval of Final Release Prevention Program Plan Kodak Park Civil Action 94 CV 6503T Attachment A.II.J.

Dear Mr. Simons:

The United States Environmental Protection Agency (EPA) is in receipt of Eastman Kodak Company's December 2003 Final Release Prevention Program Plan (FRPPP) submitted pursuant to the Consent Decree for EPA approval. After reviewing the FRPPP and consulting with the New York State Department of Environmental Conservation (NYSDEC), EPA is approving the FRPPP with the following understanding regarding Option Codes G and W.

Option Code G - Once Above GW Reference Structure

Paragraph 33 of Attachment A. II. of the Consent Decree states that the FRPPP is to identify "the option selected from the Sewer Repair and Upgrade Approved Technologies Manual to upgrade to verifiably non-leaking standards each sewer segment identified in the Final Toxicity Reduction Evaluation Report of thereafter as continuing to carry hazardous waste." The definition of verifiably non-leaking (VNL) sewers in the Industrial Sewer Repair and Upgrade Approved Technologies Manual includes "Sewer segments located below the groundwater table..." The Industrial Sewer Program Water Table Monitoring objective is to "determine if any sewer segments which were originally classified as being located below the water table are at any time located above the water table, and should therefore be reclassified and therefore addressed in the Initial or Final Release Prevention Program."

EPA and NYSDEC understand Kodak's request for sewer structures with the Option Code G applies to those sewer structures which in the past have had a one time occurrence of being reported as being above groundwater table. In keeping with the Sewer Program, such a one time occurrence causes the sewer structures to be considered above groundwater and must be upgraded to VNL even though they have otherwise been operating below groundwater. Given that only a single above groundwater occurrence has occurred for the sewer structures since 1993, and mostly from a single year, the occurrence may be viewed as an anomaly. The monitoring results suggest that improvements in well coverage since 1993 have better defined the reference water table surface in some areas, increasing representativeness where surfacing algorithm projections were initially poorly constrained.

At this time, EPA is approving the Option Code G in the FRPPP. That is, the Option Code G sewers may continue to be operated in FFU condition without needing to be upgraded to VNL standards using one of the methods listed in Repair and Upgrade Approved Technologies Manual. However, Kodak must continue to monitor groundwater levels and should these sewer structures again become above groundwater structures they must be upgraded to VNL standards during the FRPPP period, or if found in the last year of the FRPPP, within one year of such determination.

Also, during the meeting between Kodak, NYSDEC and EPA, Kodak raised the issue of sewer structures that consistently operate within the 12 inch safety factor, and therefore are considered to be above groundwater sewer structures, and whether EPA would consider allowing such sewer structures to continue operating as FFU rather than have to be upgraded to VNL standards. At this time EPA is denying this request due to concerns that such an approach may not be sufficiently protective of the environment.

Option Code W - Pump Well Study Structure
Option Code W, as stated in the FRPPP, represents sewer "structures that are located downstream of Kodak Park Groundwater Collection Systems and will be maintained in FFU condition.... Structures downstream of Groundwater Collection Systems that remain in HW service from other sources will be required to be upgraded to VNL standards or removed from hazardous waste service prior to the end of the FRPP."

EPA is approving this Option Code with the understanding that such sewer structures will continue to be operated in FFU condition and that downstream sewer structures that carry hazardous waste from any other sources will be upgraded to VNL standards.

Post FRPP
After the FRPP has been completed pursuant to Section II.J. Paragraphs 33 and 34 of the Consent Decree, Kodak should continue to inspect the sewer system and monitor the groundwater levels pursuant to the Sewer Inspection Manual and any applicable permit conditions. Such activities should be undertaken to minimize releases pursuant to 40 C.F.R. § 264.31. Kodak should also continue to maintain documentation demonstrating such activities in the event EPA requests documentation regarding compliance with 40 C.F.R. § 264.31.

If you have any questions regarding this approval, please call me at (212) 637-4135.

Sincerely,

Leonard L. Voo

cc: Larry Thomas, NYSDEC (Albany)
Thomas Marriott, NYSDEC (Region 8)

Kodak

Jo Ann E. Gould, Esq.
Chief Environmental and
Regulatory Counsel

CERTIFIED MAIL

January 11, 2008

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044

Regional Counsel
Attention: Robert G. Hazen, Esq.
Office of Regional Counsel
U.S. Environmental Protection Agency – Region II
290 Broadway, Room 1647
New York, NY 10007-1866

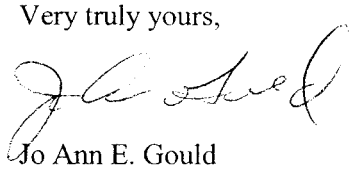
Re: United States of America v. Eastman Kodak Company
Civil Action No. 94-CV-6503T

Ladies and Gentlemen:

This letter is written to advise you, in accordance with paragraph XI 37, that as of this week, Eastman Kodak Company ("Kodak") has completed all phases of the work required under Attachment A of the Consent Decree. Kodak has engaged professional engineers to verify and prepare the required reports certifying that the Attachment A work has been completed.

Please advise if you would like Kodak to schedule an inspection in accordance with paragraph XI 37.

Very truly yours,



Jo Ann E. Gould

JEG:mag
(EPA complete)

cc: P. Countermann (NYSDEC)
T. Marriott (NYSDEC)

Eastman Kodak Company • 343 State Street • Rochester, NY 14650-0208
Phone: 585-781-5534 • Fax: 585-724-5515 • Email: joann.gould@kodak.com

D. Reyher, Esq. (USDOJ)
L. Voo (USEPA, Region 2)

Voo.Leonard@epamail.epa.gov
06/12/2008 12:36 PM

To david.a.rice@kodak.com
cc Jabar.Abdool@epamail.epa.gov, joann.gould@kodak.com
Subject Re: Inspection Report

Hi David,

I got your voicemail today. For some reason I keep getting a busy signal when I call your number (585-477-1300).

The most recent progress reported (2/15/08) still indicated that approximately 2,223 feet sewer was not yet upgraded to VNL status. While I understand these sewer segments have been taken care of, we would like to receive documentation that this is indeed the case. Also, in my e-mail to you on 4/4/08, one of the things I requested was:

3. Drawings or diagrams of appropriate scale and detail so that specific sewer segments/structures can be identified with the information listed below:
a. Which sewer segment/structures were subject to integrity assessment per Consent Decree (CD).
b. Which sewer segment/structures were found to be not FFU per CD.
c. Which sewer segment/structures were upgraded per CD.
d. Which sewer segment/structures are currently in hazardous waste service per CD.
e. Which sewer segment/structures are currently in VNL status per CD.
f. Which sewer segment/structures will be removed from hazardous waste service because they are not in VNL status.
g. Which sewer segment/structures have been removed from hazardous waste service.

I understand NYSDEC also requested these figures showing the sewer system (including structure IDs) indicating lines/structures that were inspected, upgraded, in VNL status, removed from HW service, exempted from VNL requirement, found not FFU (with dots or other symbol showing locations of compromises). This would show what activities were completed under the decree, where the work occurred, and where there may have been releases.

As we discussed, you can provide this documentation with your certification submitted pursuant to the consent decree (paragraph XI. 37.).

Lenny Voo
Hazardous Waste Compliance Section Chief
RCRA Compliance Branch
212-637-1473 (office)
212-637-4478 (fax)

INITIAL RELEASE PREVENTION PROGRAM
Element 1.0 (B-321)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 1.0 (B-321) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 2.0 (B-325)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 2.0 (B-325) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 3.0 (B-301, B-302, B-303, B-304)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 3.0 (B-301, B-302, B-303, B-304) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 4.0 (B-218)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 4.0 (B-218) of the INITIAL RELEASE PREVENTION PROGRAM was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 5.1 (B-148)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 5.1 (B-148) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
ELEMENT 5.2

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 5.2 of the Initial Release Prevention Program was designed and installed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Sean P. Murphy, P.E.

23-FEB-2000
Date

INITIAL RELEASE PREVENTION PROGRAM
Element 5.3 (B-117)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 5.3 (B-117) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 6.1 (B-119)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 6.1 (B-119 North Courtyard) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 6.2 (B-119)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 6.2 (B-119 West Side) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 8.0 (B-30)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 8.0 (B-30 North and West) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22 · SEPT · 04

Date

INITIAL RELEASE PREVENTION PROGRAM
Element 9.0 (B-31)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 9.0 (B-31) of the **INITIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

INITIAL RELEASE PREVENTION PROGRAM
ELEMENT 10 - KPE MAIN

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 10 - KPE Main of the Initial Release Prevention Program was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Clyde E. Kidd

Bechtel Corporation

Design Complete 12/99

Date

I certify under penalty of law that Element 10 - KPE Main of the Initial Release Prevention Program was installed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Sean P. Murphy

Bergmann Associates

7-MARCH-2000

Date

SEWER RELEASE PREVENTION PROGRAM
Element 11.0 (B-319)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element 11.0 (B-319) of the SEWER RELEASE PREVENTION PROGRAM was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

SEWER RELEASE PREVENTION PROGRAM
Decontamination and Disposal Station (DDS)

ENGINEERING CERTIFICATION

I certify under penalty of law that Decontamination and Disposal Station (DDS) was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

22-SEPT-04

Date

FINAL RELEASE PREVENTION PROGRAM
Element A (B-326 North)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element A (B-326 North) of the FINAL RELEASE PREVENTION PROGRAM was completed utilizing a non-capital solution and no engineering design was completed.

Bergmann Associates

15 · FEB · 08

Date

FINAL RELEASE PREVENTION PROGRAM
Element B (B-317/B-350)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element B (B-317/B-350) of the FINAL RELEASE PREVENTION PROGRAM was completed utilizing a non-capital solution and no engineering design was completed.

Bergmann Associates

15. FEB. 08

Date

FINAL RELEASE PREVENTION PROGRAM
Element C (B-313)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element C (B-313) of the FINAL RELEASE PREVENTION PROGRAM was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Bergmann Associates

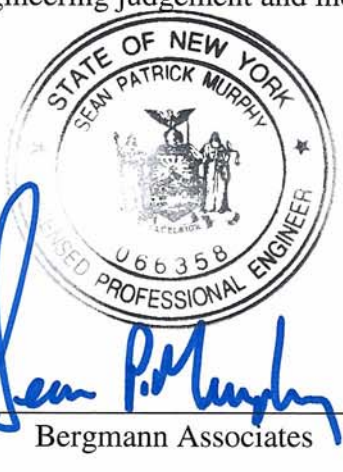
15-FEB-08

Date

FINAL RELEASE PREVENTION PROGRAM
Element D (KPM East)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element D (KPM East) of the FINAL RELEASE PREVENTION PROGRAM was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.



Bergmann Associates

15. FEB. 08

Date

FINAL RELEASE PREVENTION PROGRAM
Element E (KPW Main)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element E (KPW Main) of the **FINIAL RELEASE PREVENTION PROGRAM** was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.

Sean P. Murphy

Bergmann Associates

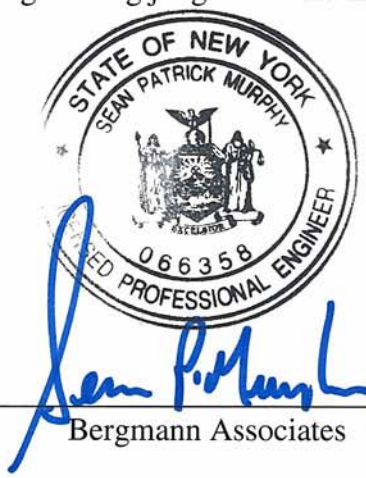
25-APRIL-05

Date

FINAL RELEASE PREVENTION PROGRAM
Element F (KPE 48" Main)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element F (KPE 48" Main) of the FINAL RELEASE PREVENTION PROGRAM was designed in accordance with the requirements of the Consent Decree and utilizing proper engineering judgement and industry standards.



Bergmann Associates

15-FEB-08

Date

FINAL RELEASE PREVENTION PROGRAM
Element H (B-52 East)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element H (B-52 East) of the FINAL RELEASE PREVENTION PROGRAM was completed utilizing a non-capital solution and no engineering design was completed.

Bergmann Associates

15. FEB. 08

Date

FINAL RELEASE PREVENTION PROGRAM
Element J (KPE South)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element J (KPE South) of the FINAL RELEASE PREVENTION PROGRAM was completed utilizing a non-capital solution and no engineering design was completed.

Bergmann Associates

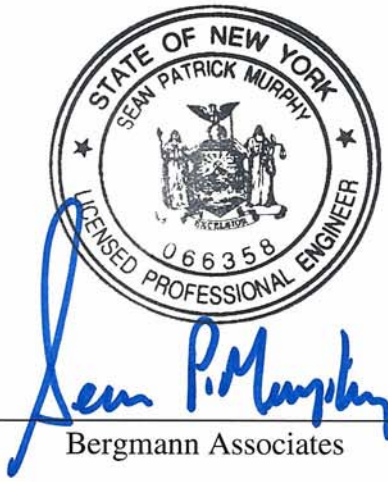
15. FEB. 08

Date

FINAL RELEASE PREVENTION PROGRAM
Element K (Research North)

ENGINEERING CERTIFICATION

I certify under penalty of law that Element K (Research North) of the FINAL RELEASE PREVENTION PROGRAM was completed utilizing a non-capital solution and no engineering design was completed.



Bergmann Associates

15 · FEB · 08

Date

APPENDIX H

COMPACT DISC CONTAINING MAPS AS REQUESTED BY US EPA

Last Page

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