

**OPERABLE UNIT 2
FEASIBILITY STUDY**

Sunnyside Yard
Queens, New York

August 28, 1997

Prepared for:

National Railroad Passenger Corporation
30th Street Station
4th Floor South
Philadelphia, Pennsylvania 19104

Prepared by:

ROUX ASSOCIATES, INC.
1377 Motor Parkway
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CONTENTS

1.0 INTRODUCTION	1
1.1 Operable Unit 2 Description	3
1.2 Operable Unit 2 History	3
1.3 Objective of the Feasibility Study	4
2.0 OPERABLE UNIT 2 INVESTIGATION	5
3.0 IDENTIFICATION AND SCREENING OF TECHNOLOGIES	6
3.1 Applicable or Relevant and Appropriate Requirements	6
3.1.1 Chemical-Specific ARARs/SCGs and TBCs	8
3.1.2 Action-Specific ARARs/SCGs and TBCs	8
3.1.3 Location-Specific ARARs/SCGs and TBCs	8
3.2 Development of Remedial Action Objectives	8
3.3 General Response Actions	9
4.0 DEVELOPMENT AND EVALUATION OF ALTERNATIVES	10
4.1 Evaluation Criteria	11
4.2 Development of Alternatives	12
4.2.1 Development of No Action Alternative	12
4.3 Evaluation of Alternatives	13
4.3.1 Evaluation of No Action Alternative	13
4.3.1.1 Compliance with ARARs/SCGs	14
4.3.1.2 Overall Protection of Human Health and the Environment	14
4.3.1.3 Short-Term Effectiveness	14
4.3.1.4 Long-Term Effectiveness and Permanence	14
4.3.1.5 Reduction of Toxicity, Mobility, or Volume through Treatment..	14
4.3.1.6 Implementability	15
4.3.1.7 Cost	15
4.3.1.8 Community Acceptance	15
5.0 CONCLUSIONS	16
6.0 REFERENCES	18

FIGURES

1. Yard Location Map
2. Location of Operable Units
3. Site Map - Operable Unit 2

APPENDIX

- A. NYSDEC and NYSDOH Letter to Roux Associates, February 25, 1997

1.0 INTRODUCTION

The National Railroad Passenger Corporation (Amtrak) owns a property known as Sunnyside Yard (Yard), located at 39-29 Honeywell Street in Queens County, a borough of New York City, New York (Figure 1). Portions of the Yard have been designated by Amtrak for construction of a new High Speed Trainset Facility (HSTF) Service and Inspection (S&I) Building and its ancillary structures (i.e., the access road and utilities route, the parking area, the construction easement area which surrounds the building, and the construction lay down area). The Sunnyside Yard is listed as a Class II Site in the New York State Department of Environmental Conservation's (NYSDEC) Registry of Inactive Hazardous Waste Disposal Sites. **As** a result of the listing, Amtrak, New Jersey Transit Corporation (NJTC), and the NYSDEC entered into an Order on Consent (OOC) Index #W2-008I-87-06 effective October 1989.

In accordance with the OOC, several investigations have been performed throughout the Yard, including, but not limited to, remedial investigations and a risk assessment. Each of these investigations was performed by Roux Associates, Inc. (Roux Associates). **As** a result of these investigations, areas of the Yard were identified where levels of contamination require remedial efforts. With the NYSDEC's concurrence, to accommodate the HSTF S&I Building construction schedule and still address remedial efforts sitewide in a timely and orderly manner, the Yard has been subdivided into six operable units (Figure 2). The operable units are described as follows:

- Operable Unit 1 (OU-1) designated as the soil above the water table within the footprint of the proposed HSTF S&I
- Operable Unit 2 (OU-2) designated as the soil above the water table within the footprint of the HSTF S&I Building ancillary structures (i.e., the access road and utilities route, the parking area, the construction easement area which surrounds the building, and the construction lay down area);
- Operable Unit 3 (OU-3) designated as the soil and separate-phase petroleum accumulation above the water table in Area 1 of the Yard, as defined in the Phase I Remedial Investigation (RI) report;
- Operable Unit 4 (OU-4) designated as the soil above the water table in the remainder of the Yard;
- Operable Unit 5 (OU-5) designated as the sewer system beneath the Yard; and

- Operable Unit 6 (OU-6) designated as the ground water including the saturated soil beneath the Yard.

Following the Operable Unit approach, a Feasibility Study (FS) was submitted for OU-I (April 18, 1997) which involved the development and evaluation of alternatives to remediate carcinogenic polycyclic aromatic hydrocarbon (CPAH) impacted soil within OU-I.

A Proposed Remedial Action Plan (pRAP) was issued on June 9, 1997 to identify the preferred remedy for OU-I as stated in the OU-I Feasibility Study, summarize other alternatives, and discuss the rationale for this preference. The PRAP was issued as a component of citizen participation activities. A public meeting was held on June 24, 1997.

Following a public comment period, the OU-I Record of Decision (ROD) was issued on August 13, 1997, identifying Alternative III - Soil Excavation and Off-Site Disposal as the selected remedy for OU-I.

This document presents the FS for OU-2 and follows the June 13, 1997 Focused Remedial Investigation for Operable Unit 2 prepared by Roux Associates and accepted by the NYSDEC on August 1, 1997. The Operable Unit 2 Site Map is shown in Figure 3. A summary of investigation results are included in Section 2.

It is the intention of Amtrak and NJTC to identify Remedial Action Objectives (RAOs) in this FS and implement a remedy for OU-2 which is protective of human health and the environment, and accommodates the HSTF S&I Building construction.

This FS is being submitted in accordance with the OOC, and was performed in a manner consistent with the procedures for the detailed evaluation of remedial alternatives described by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), and the United States

Environmental Protection Agency (USEPA) guidance document entitled "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", dated October 1988.

1.1 Operable Unit 2 Description

The topography of OU-2 is primarily level and gently slopes down from east to west along its length. The area currently operates as a portion of an active rail yard. The most readily apparent features of OU-2 are a portion of the Metroliner Shed, the concrete ruins of the former locomotive washer, overhead electric catenary lines, operational and abandoned tracks, and the ubiquitous presence of ballast. The Metroliner Shed, formerly used to clean and maintain sanitary facilities on train cars, was taken out of service and abandoned in February 1996 due to structural damage sustained during a wind storm.

With the exception of the eastern portions of the HSTF S&I Building access road, OU-2 is bounded by the Yard. The eastern portion of the access road is within the Yard boundary but is bounded to the north by the Long Island Rail Road right-of-way which houses an active freight railroad track, to the east by 42nd Place, and by light industrial/commercial property to the south.

1.2 Operable Unit 2 History

OU-2 and the surrounding Yard were originally owned and developed in the early 1900s by the Pennsylvania Tunnel and Terminal Company, a subsidiary of the Pennsylvania Railroad (later known as Penn Central Transportation Company). On April 1, 1976 the Consolidated Rail Corporation acquired the Yard and the same day conveyed it to Amtrak. The Yard originally operated as a storage and maintenance facility for railroad rolling stock and currently functions primarily as a train maintenance and train makeup facility for electric locomotives and railroad cars for Amtrak and NITC.

1.3 Objective of the Feasibility Study

The primary objective of this FS for OU-2 is to determine the most appropriate remedial alternative, if necessary, to address soil above the water table. Identification and analyses of remedial alternatives will be performed consistent with the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) for the selection of Remedial Actions at Inactive Hazardous Water Sites; September 13, 1989, as revised May 15, 1990. This guidance allows for a focused identification and evaluation of remedial alternatives at a site, or operable unit, if alternatives are readily apparent and well proven. This FS will be conducted using a focused approach agreed to by the NYSDEC since soil above the water table did not contain contaminants in excess of the NYSDEC-recommended soil cleanup levels. This FS, along with the subsequent PRAP for OU-2 and public meeting, will allow the NYSDEC to issue the ROD for OU-2 consistent with the regulatory requirements.

2.0 OPERABLE UNIT 2 INVESTIGATION

Based on an evaluation of the Yard conditions, in a February 25, 1997 letter to Roux Associates (Appendix A), the NYSDEC and New York State Department of Health (NYSDOH) issued the following NYSDEC-recommended soil cleanup levels for the contaminants of concern at the Yard, including OU-2:

- Semivolatile organic compounds (SVOCs) - 10 parts per million (ppm) for both surface and subsurface soil for total CPAHs;
- Lead - 1,000 ppm for both surface and subsurface soil; and
- Polychlorinated biphenyls (PCBs) - 25 ppm for both surface and subsurface soil.

The letter further acknowledged that, while certain metals were found in soil throughout the Yard above the NYSDEC's Recommended Soil Cleanup Objectives (RSCOs), none (with the exception of lead) were present at levels high enough to require any remediation. Additionally, the letter did not specify NYSDEC-recommended soil cleanup levels for volatile organic compounds (VOCs), since none were detected at the Yard above the RSCOs.

The analytical results presented in the OU-2 RI indicate the following:

- CPAHs were not detected in soil above the NYSDEC-recommended soil cleanup level;
- lead was not detected above the NYSDEC-recommended soil cleanup level;
- PCBs were not detected above the NYSDEC-recommended soil cleanup level;
- Resource Conservation and Recovery Act (RCRA) characteristics were not detected above regulatory levels; and
- VOCs were not detected in soil above the RSCOs.

The analytical results from the OU-2 RI indicate that no NYSDEC-recommended soil cleanup levels for the contaminants of concern were exceeded in any sample from OU-2 and, therefore, it is Amtrak's and NITC's position that no remedial efforts are required for this operable unit.

3.0 IDENTIFICATION AND SCREENING OF TECHNOLOGIES

Applicable or relevant and appropriate requirements (ARARs) must be considered in developing RAOs. OU-2-specific ARARs are presented in Section 3.1. RAGs for OU-2 are discussed in Section 3.2, based on the results of OU-2 investigations and ARARs (Section 3.1).

3.1 Applicable or Relevant and Appropriate Requirements

Applicable requirements are defined as:

"those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations, promulgated under federal or state environmental facility listing laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstances found at a CERCLA site."

40 CFR Section 300.5 at 55 Fed. Reg. 8814, USEPA 1990.

Relevant and appropriate requirements are defined as:

"those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal, or state environmental or facility listing laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate."

40 CFR Section 300.5 at 55 Fed. Reg. 8817, USEPA 1990.

Under the Superfund Amendments and Reauthorization Act (SARA), remedial actions must comply with ARARs unless one or more of six conditions are met (CERCLA section 121 [d] [4] [A] - [FD).

1. Interim Measures - The remedial action selected is only part of a total remedial action that will attain such level of standard or control when completed.

2. Greater Risk to Health and the Environment - Compliance with such requirement at the facility will result in greater risk to human health and the environment than alternative options.
3. Technical Impracticability - Compliance with such requirement is technically impractical.
4. Equivalent Standard of Performance - The remedial action selected will attain a standard of performance that is equivalent to that required under the otherwise applicable standard, requirement, criteria, or limitation, through use of another method of approach.
5. Inconsistent Application of State Requirements - With respect to a state standard, requirement, criteria, or limitation, the State has not consistently applied the standard, requirement, criteria, or limitation in similar circumstances at other remedial actions.
6. Fund Balancing - Applies to remedial actions to be undertaken solely under Section 104 using the Fund.

The NYSDEC Division of Hazardous Waste Remediation uses New York State Standards, Criteria and Guidelines (SCGs) as ARARs in its evaluation and selection of remedial actions (TAGM: Selection of Remedial Actions at Inactive Hazardous Waste Sites - May 15, 1990).

In addition to ARARs, to-be-considered material (TBCs) are to be evaluated as part of the FS process. TBCs are non-promulgated advisories or guidance issued by federal or state government that are not legally binding and do not have the status of ARARs.

The three different types of ARARs are defined below.

1. Ambient- or chemical-specific ARARs are health- or risk-based numerical values or methodologies. Chemical-specific ARARs establish the amount or concentration of a chemical that may be found in, or discharged to, the environment.
2. Action-specific ARARs are usually technology- or activity-based requirements or limitations on actions taken with respect to hazardous wastes.
3. Location-specific ARARs set restrictions on activities based on the characteristics of special locations.

Each of these three types of ARARs and any associated TBCs relevant to OU-2 are discussed in the following sections.

3.1.1 Chemical-Specific ARARs/SCGs and TBCs

As stated in Section 2.0, the soil quality results from the OU-2 RI indicate that no NYSDEC-recommended soil cleanup levels were exceeded. Based on these findings, no chemical-specific ARARs/ISCGs and TBCs, other than the NYSDEC-recommended soil cleanup levels (TBCs) listed in Section 2.0, have been identified for the soil in OU-2.

3.1.2 Action-Specific ARARs/SCGs and TBCs

No action-specific *ARARs/ISCGs* and TBCs have been identified.

3.1.3 Location-Specific ARARs/SCGs and TBCs

One location-specific *ARAR/ISCG* has been identified based on the Yard's location, its physical characteristics and proximity to wildlife habitats. This potential ARAR/SCG is provided below.

Location	Requirement	Prerequisite for Applicability	Citation
Within 100-year floodplain	Minimize potential hann. restore and preserve beneficial value of the floodplain.	Remedial action alternative will occur in a floodplain	Executive Order 1198, 40 CFR Part 6, A

3.2 Development of Remedial Action Objectives

RAGs are medium-specific goals for protecting human health and the environment. RAOs were developed for soil based on OU-2 investigation results used in combination with the ARARs/ISCGs and TBCs, which show no exceedances; therefore, the only general response action reviewed was No Action.

3.3 General Response Actions

No Action - The no action response measure provides a baseline assessment for comparison with other response measures which may consist of greater levels of response. When any response measures may cause a greater environmental or health danger than a no action response, the no action response measure may be considered as an appropriate remedial measure for a site. Furthermore, the no action response must be evaluated and carried through the FS as required by 40 CFR Part 300.430[e][iii]. The no action response may consist of no action whatsoever on the site, or some limited measure, such as periodic monitoring or access restrictions to OU-2 or specific area of OU-2.

4.0 DEVELOPMENT AND EVALUATION OF ALTERNATIVES

During the development and evaluation of alternatives, each alternative is assessed against the eight criteria described in Section 4.1 in order to select a remedy for OU-2, and demonstrate satisfaction of the CERCLA remedy selection requirements in the ROD.

The specific statutory requirements for remedial actions that must be addressed in the ROD and supported by the FS report are listed below.

Remedial actions must:

- be protective of human health and the environment;
- attain ARARs (or provide grounds for invoking a waiver);
- be cost-effective;
- utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and
- satisfy the preference for treatment that reduces toxicity, mobility, or volume as a principal element or provide an explanation in the ROD as to why it does not.

In addition, CERCLA places an emphasis on evaluating long-term effectiveness and related considerations for each of the alternative remedial actions. These statutory considerations include:

- the long-term uncertainties associated with land disposal;
- the goals, objectives, and requirements of the Solid Waste Disposal Act;
- the persistence, toxicity, and mobility of hazardous substances and their constituents, and their propensity to bioaccumulate;
- short- and long-term potential for adverse health effects from human exposure;
- long-term maintenance costs;
- the potential for future remedial actions costs if the alternative remedial action in question were to fail; and
- the potential threat to human health and the environment associated with excavation, transportation, and redisposal, or containment.

4.1 Evaluation Criteria

In accordance with the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, and the Inactive Hazardous Waste Disposal Site Remedial Program, the alternatives are evaluated for the following eight criteria.

1. Compliance with ARARs/ISCGs - describes how the alternative complies with identified chemical-specific, action-specific and location-specific ARARs. The assessment includes information from advisories, criteria, and guidance that agencies have agreed is necessary and appropriate.
2. Overall Protection of Human Health and the Environment describes how the alternative, as a whole, protects and maintains protection of human health and the environment.
3. Short-Term Effectiveness - examines the effectiveness of the alternative in protecting the community, workers and the environment during the specified construction and implementation period until response objectives have been met.
4. Long-Term Effectiveness and Permanence - evaluates the effectiveness of the alternative in protecting human health and the environment after response objectives have been met and are measured in terms of the magnitude of residual risk and the adequacy and reliability of any controls that are used.
5. Reduction of Toxicity, Mobility, or Volume Through Treatment - evaluates the anticipated performance of the specific alternative in terms of treatment process used and materials treated; amount of hazardous materials destroyed or treated; degree of expected reductions in toxicity, mobility and volume; degree to which treatment is irreversible; and the type and quantity of residuals remaining after treatment.
6. Implementability - evaluates the feasibility of the alternative in terms of the ability to construct and operate the technology; reliability of the technology; ease of undertaking additional remedial actions, if necessary; ability to monitor effectiveness of remedy; availability of off-site disposal services and availability of prospective technologies.
7. Cost - evaluates the capital, operation and maintenance, and present worth costs of the alternative.
8. Community Acceptance - preliminarily assesses the community's apparent preferences or concerns about the alternative. This criterion will be fully assessed in the ROD for OU-2.

Assessments of the first two criteria (Compliance with ARARs/ISCGs and Overall Protection of Human Health and the Environment) relate directly to statutory findings that must be made in the ROD for OU-2. The evaluation of the two criteria involves describing whether the alternative does or does not meet these criteria.

The next five criteria (Short-Term Effectiveness; Long-Term Effectiveness and Permanence; Reduction of Toxicity, Mobility or Volume Through Treatment; Implementability; and Cost) represent the primary criteria upon which selection of an alternative is based. The analysis for these five criteria must be conducted in sufficient detail such that the significant aspects of the alternative and any associated uncertainties are understood.

The last criteria (Community Acceptance) is evaluated to the extent possible in the FS on the basis of information available at the time of the detailed analysis. Due to the fact that available information is usually limited at this time, since the public comment period has not yet occurred, this criteria is not evaluated thoroughly until a proposed remedial alternative has been identified and the ROD is being prepared.

4.2 Development of Alternatives

The following sections present the development of alternatives for OU-2.

4.2.1 Development of No Action Alternative

As mentioned in Section 3.3, the No Action alternative is evaluated to provide a baseline for comparison of active alternatives. Since no active alternatives are proposed for OU-2, evaluation of the No Action alternative will be performed to identify the potential risks posed, if any, if no remedial actions are implemented.

Current practices in OU-2 consist of the use and maintenance of operational tracks within OU-2, with Amtrak employees entering the area occasionally. Within the next year, operations will commence within OU-2 as part of the HSTF S&I Building construction project, specifically, with respect to construction of the HSTF S&I Building access road and installation of utilities, the

construction of a parking area, various excavation activities within the construction easement which surrounds OU-I, and the construction of a temporary laydown area for HSTF S&I Building contractors.

Based upon the analytical data obtained from workers involved in excavation activities associated with future HSTF S&I Building construction are not expected to be exposed to concentrations of the contaminants of concern which exceed NYSDEC-recommended soil cleanup levels. However, it is possible that the workers may be exposed to trace levels of contamination during HSTF S&I Building construction activities and as a result, air monitoring will be performed during excavation work. If air monitoring is performed properly and action levels are enforced, workers will be protected from airborne contaminants.

The No Action alternative currently consists of Yard access control, limited to only authorized personnel by use of perimeter fencing and patrol by a police force employed by Amtrak. These access limitations currently minimize and will continue to minimize the amount of potential exposure and injuries to unauthorized personnel from entering the Yard. Authorized personnel include employees of Amtrak and those involved in the future HSTF S&I Building work. Access restrictions specifically relating to OU-2 will not be needed for those authorized personnel since soil in that area is not in exceedance of the NYSDEC-recommended soil cleanup levels. It is anticipated that during HSTF S&I Building construction, the work areas will be segregated so that access is limited to HSTF S&I Building construction workers and Amtrak personnel.

4.3 Evaluation of Alternatives

The following sections present the evaluation of alternatives for implementation in OU-2.

4.3.1 Evaluation of No Action Alternative

In this section, the No Action alternative is evaluated with respect to the eight criteria identified in Section 4.1.

4.3.1.1 Compliance with *ARARs/ISCGs*

The No Action alternative will comply with chemical-specific TBCs. There are no action-specific or location-specific *ARARs/ISCGs* for the No Action alternative because no remediation will be performed.

4.3.1.2 Overall Protection of Human Health and the Environment

The No Action alternative will provide overall protection of human health and the environment since OU-2 soil does not exceed the NYSDEC-recommended soil cleanup levels. Proper performance of air monitoring during HSTF S&I Building excavation activities will result in protection of personnel in the vicinity of the excavation area.

4.3.1.3 Short-Term Effectiveness

Since there are no actions proposed for this alternative, there is no remediation and implementation period, and therefore no associated short-term effects to human health and the environment.

4.3.1.4 Long-Term Effectiveness and Permanence

Long-term effectiveness and permanence is based on the amount of residual risk of contamination left at OU-2 after the alternative is implemented. If the No Action alternative is implemented, the current level of risk associated with contamination will remain. Since the soil is below the NYSDEC-recommended soil cleanup levels, the current level of risk is protective of human health and the environment, and will remain protective, even throughout HSTF S&I Building construction activities.

4.3.1.5 Reduction of Toxicity, Mobility, or Volume through Treatment

This alternative would not have an effect on the toxicity, mobility or volume of the level of soil contamination in OU-2. However, this is due to the fact that the current toxicity, mobility and volume of contaminants in OU-2 are not a concern since the soil is below the NYSDEC-recommended soil cleanup levels.

4.3.1.6 Implementability

Implementability concerns posed by this alternative do not exist since there would not be any action taken. Since current practice at OU-2 consists of access control, including Yard perimeter fencing and police patrol, it has been shown that the required resources are available. In addition, the No Action alternative allows future construction of the HSTF S&I Building.

4.3.1.7 Cost

The cost associated with this alternative is equal to the current cost of property access control. This is assumed to be a no cost item since the services are currently being implemented in all areas of the Yard, not only for controlling access to OU-2.

4.3.1.8 Community Acceptance

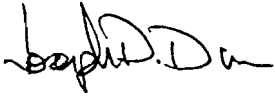
It is anticipated that the community will accept this alternative since all soil at OU-2 will be below the NYSDEC-recommended soil cleanup levels chosen to protect human health and the environment.

5.0 CONCLUSIONS

The No Action alternative complies with the eight evaluation criteria in Section 4.3, and accommodates the HSTF S&I Building Construction. In addition, this remedy is consistent with the findings from the RI that no further action is necessary since OU-2 soil above the water table does not contain contaminants in excess of the NYSDEC-recommended soil cleanup levels. Therefore, the No Action alternative is the selected remedial alternative for OU-2.

Respectfully submitted,

ROUX ASSOCIATES, INC.



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Principal Hydrogeologist



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Principal Engineer

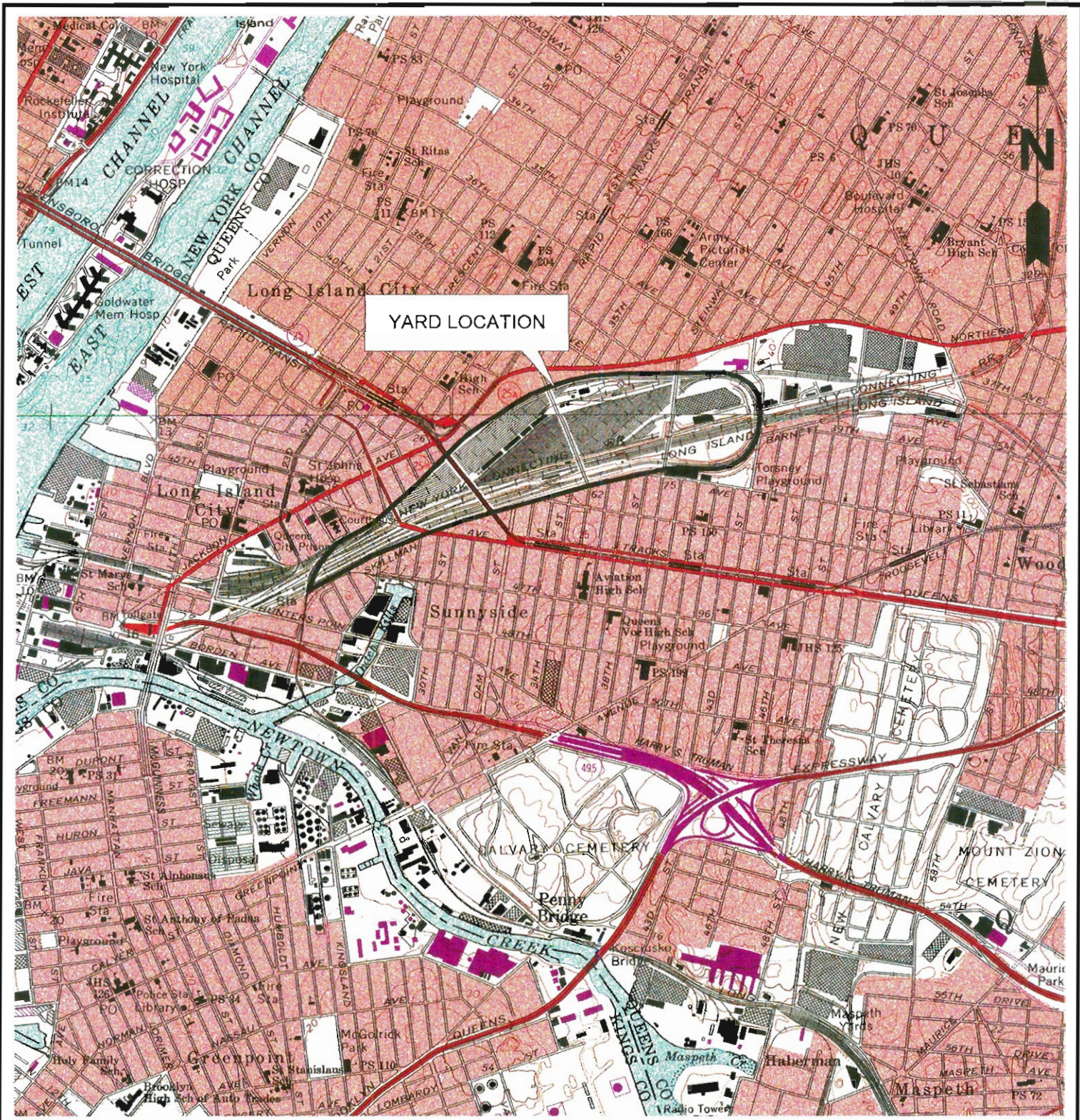


6.0 REFERENCES

New York State Department of Environmental Conservation, Division of Environmental Remediation, 1997. Memorandum on Amtrak Sunnyside Yard, Site Code 241006, Site Cleanup Levels, February 1997.

Roux Associates, Inc., 1997. Focused Remedial Investigation for Operable Unit 2, Sunnyside Yard, Queens, New York, June 1997.

United States Environmental Protection Agency, 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, October 1988.



SOURCE:
CENTRAL PARK AND BROOKLYN, NEW YORK
QUADRANGLE 7.5 MINUTE SERIES (TOPOGRAPHIC)



Title:

YARD LOCATION MAP

SUNNYSIDE YARD
39-29 HONEYWELL STREET
QUEENS, NEW YORK

Prepared For:

AMTRAK

ROUX
ROUX ASSOCIATES INC
Environmental Consulting
& Management

Compiled by:	J.D.	Date:	8/97	FIGURE:
Prepared by:	G.M.	Scale:	1"=2,000'	1
Project Mgr:	J.D.	Status:	Final	
File No.:	A 5213601	Project:	05552YD6	



EXPLANATION

	LOCATION OF RAILROAD TRACK		OU-1
	DIRECTION OF SEWER FLOW		OU-2
	APPROXIMATE LOCATION OF SEWER		OU-3
	GRATE COVER CATCH BASIN LOCATION		OU-4
	SOLID COVER MANHOLE LOCATION		OU-5
	GRATE COVER MANHOLE LOCATION		
	A-2 LOCATION AND DESIGNATION OF PREVIOUSLY DETERMINED AREA OF CONCERN		
	APPROXIMATE PROPERTY BOUNDARY		

Title: LOCATION OF OPERABLE UNITS

SUNNYSIDE YARD, QUEENS, NEW YORK

Prepared For: AMTRAK

Compiled by: H.G.	Date: 8/97	FIGURE
Prepared by: R.K.	Scale: AS SHOWN	2
Project Mgr: H.G.	Status: FINAL	
File No: A5213602	Project: 05552Y06	

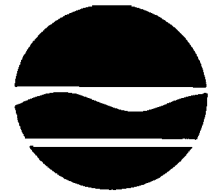
ROUX
ROUX ASSOCIATES INC
Environmental Consulting & Management

- NOTES:
1. LOCATIONS AND DIAMETERS OF SEWER COMPONENTS BASED UPON A REVIEW OF AMTRAK-SUPPLIED ENGINEERING DIAGRAMS AND LIMITED FIELD SURVEY.
 2. OU-6, GROUND WATER BENEATH THE YARD, IS NOT SHOWN.

APPENDIX A

NYSDEC and NYSDOH Letter to Roux Associates
February 25, 1997

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
(718) 482-4995, Fax (718) 482-4954



John P. Cahill
Acting Commissioner

February 25, 1997

Joseph Duminuco
Roux Associates
1377 Motor Parkway
Islandia, New York 11788

Dear Mr. Duminuco:

Re: Amtrak Sunnyside Yard, Site Code 241006, Site Cleanup Levels

The Department has carefully reviewed your letter of January 22 evaluating Alternative Cleanup Levels for metals and semi-volatiles, and your September 1995 submittal on proposed cleanup levels for PCBs. To accomplish the goal of protection of human health and the environment, the Department is in agreement with the New York State Department of Health (NYSDOH) and recommends the following soil clean up levels for the main contaminants of concern:

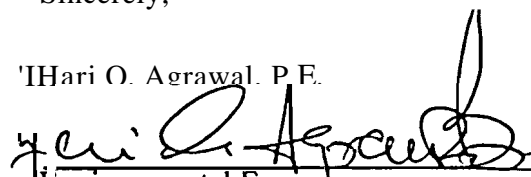
PCBs	25 ppm for surface and subsurface soils, consistent with the direction given in the attached letter dated February 25, 1997 from the NYSDOH
Semi-volatiles	10 ppm for both surface and subsurface soils for total carcinogenic PAHs
Lead	1,000 ppm both surface and subsurface soils.

The surface is defined as the top 1 foot of ground. The above recommended cleanup levels are based on review of the contamination data and the site's present and future use as a rail yard; they are consistent with numbers used elsewhere in the State for similar sites. Cleanup numbers are not specified for Volatile Organic Compounds (VOCs), as none were detected in soils above the Department's Recommended Soil Cleanup Objectives (RSCOs). Certain metals were found in soils above the RSCOs. However, none, except lead, appear to be present at levels high enough to require any cleanup. This recommendation is not an endorsement or acceptance of EPA Region 3's Risk Based Cleanup levels or any of the other referenced criteria except TAGM 4046. The TAGM 4046 approach continues to be the accepted approach for hazardous waste sites in New York.

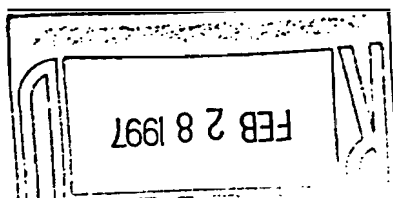
In closing, the Department will propose these numbers for the entire Sunnyside yard, which will be finalized through the Record of Decision process for the individual operable units. You may proceed on this basis to complete your feasibility study for Operable units 1 and 2 which are of immediate concern. If you have any questions or concerns, please call me at 718 - 482-4909.

Sincerely,

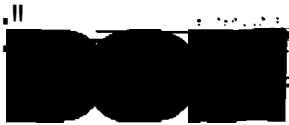
Hari O. Agrawal, P.E.



Environmental Engineer



CC: NYSDOH (w/attach)



STATE OF NEW YORK DEPARTMENT OF HEALTH

Office of Public Health

11 University Place

Albany, New York 12203-3399

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

Commissioner

February 25, 1997

Mr. Richard Gardineef, P.E.
Regional Hazardous Waste Engineer
DEC - Region II
1 Hunters Point Plaza
Long Island City, New York 11101

AE: Sunnyside Yard
Site 10# 241006
Queens County

Dear Mr. Gardineer:

The Department of Health has reviewed Amtrak's request to use a soil cleanup level of 25 ppm for both surface and subsurface soils at the Sunnyside Yard. The Department's primary concern in establishing a cleanup level is the potential for employees to be exposed to PCBs in materials on the surface, and to a lesser extent subsurface *materials* during work requiring excavations.

The Department concurs with Amtrak's proposal to use a 25 ppm *soil* cleanup criteria based on the following conditions that are specific to the site: .

- Access is restricted to employees by means of a fence surrounding the railyard.
- The facility *will* continue to be *operated* as a *railyard*.
- Following cleanup of materials with PCBs greater than 25 ppm, average surficial levels of PCBs remaining will be substantially less than 25 ppm.
- The majority of the railyard is covered with ballast, minimizing the potential for surficial runoff transporting PCBs off-site and the tracking of PCB contaminated soils into buildings or off-site by employees or vehicles.

-2-

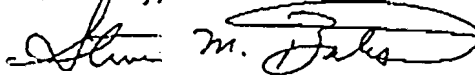
25, 1997
Mr. Richard Gardineer
RE: Amtrak, Sunnyside Yard

The Department recommends that stone, asphalt or other suitable covering be placed in areas where all of the following conditions are met:

- PCB levels approach 25 ppm in surface soils.
- Employees or vehicles frequent the area.
- Surface soil conditions are such that soils could be transported via tracking.

If you have any questions, please call me at (518) 458-6305.

Sincerely,



Steven M. Bates, P.E.
Chief, Southern Section
Bureau of Environmental Exposure Investigation

cc: Dr. N. Kim
Dr. A. Carlson

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