

# BOOZ ALLEN & HAMILTON INC.

8283 GREENSBORO DRIVE • MCLEAN, VIRGINIA 22102-3888 • TELEPHONE: (703) 902-5000 • FAX: (703) 902-3333

January 11, 2001  
B-09075-0135-1012-0000201

Mr. Lance Swanhorst  
US Environmental Protection Agency  
Facilities Management and Services Division  
Architecture, Engineering and Real Estate Branch  
401 M Street, NW  
Washington, DC 20460

Subject: Task Order 12, Subtask 2  
Legal Notice announcing publication of the FINAL Finding of No Significant Impact (FNSI) and Programmatic Environmental Assessment (EA) for Remediation and Decontamination of EPA's Research Triangle Park (RTP), North Carolina Facilities

Dear Mr. Swanhorst:

Enclosed please find one copy of the legal notice published in RTP area newspapers, the Raleigh *News and Observer* and the Durham *Herald Sun*, on January 12, 2001, announcing the publication of the FINAL FNSI and Programmatic EA for Remediation and Decontamination of EPA's Research Triangle Park, North Carolina Facilities. Each library listed in the legal notice received twenty-five copies of the FNSI and EA on Friday, January 12, 2001.

If you have questions, or desire additional information, please contact me at 703-917-2846.

Sincerely,

  
Diane L. Clark  
Associate

## Enclosures

cc: Mr. Butch Mellen, EPA  
Mr. Russ Kulp, EPA  
Mr. Wesley Carpenter, EPA  
Mr. Scott Heefner, BAH  
Ms. Diane Clark, BAH  
Ms. Christine Millard, BAH  
Program Management Team, BAH

\*\*\*\*\*NOTICE\*\*\*\*\*

**FINDING OF NO SIGNIFICANT IMPACT**

**Environmental Protection Agency  
Environmental Research Center, ERC Annex, and Emissions Measurement Laboratory**

The National Environmental Policy Act (NEPA) requires all federal agencies to evaluate whether a proposed major action may have a significant impact on environmental quality. The U.S. Environmental Protection Agency (EPA) proposes to clean and remediate as necessary, three facilities, the Environmental Research Center (ERC), ERC Annex, and Emissions Measurement Laboratory (EML), in Research Triangle Park, North Carolina, before transferring the properties back to the GSA or the private property owner.

Care custody, and control of the ERC, ERC Annex, and EML is anticipated to be transferred to the General Services Administration or the property owner over the course of the next two years.

Under the purview of NEPA, EPA has conducted a programmatic environmental assessment (EA) and has issued a finding of no significant impact (FNSI), because the proposed action will not have a significant impact on the environment.

Copies of the programmatic EA and FNSI can be reviewed at the following libraries:

U.S. EPA Environmental Research Center Library  
86 TW Alexander Drive, Room C-100  
Research Triangle Park, N.C. 27709

Telephone: (919) 541-2777

U.S. EPA Mutual Building Library  
N.C. Mutual Life Building, Room 821  
411 West Chapel Hill Street  
Durham, N.C. 27701

Telephone: (919) 541-5514

Cameron Village Regional Library  
Cameron Village Shopping Center  
1930 Clark Avenue  
Raleigh, N.C. 27605

Telephone: (919) 856-6710

Durham County Public Library  
300 North Roxboro Street  
Durham, N.C. 27701

Telephone: (919) 560-0100

Interested persons and agencies wanting to comment on these documents may do so within the next thirty days by calling or writing to Mr. Lance Swanhorst, EPA, Architecture, Engineering and Real Estate Branch, 1200 Pennsylvania Avenue, N.W., Mail Stop 3204R, Washington, D.C. 20460, (202) 564-2160.

# BOOZ ALLEN & HAMILTON INC.

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January 11, 2001

B-09075-0135-1012-0000201

Mr. Lance Swanhorst  
US Environmental Protection Agency  
Facilities Management and Services Division  
Architecture, Engineering and Real Estate Branch  
401 M Street, SW  
Washington, DC 20460

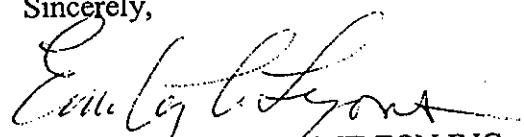
Subject: Task Order 12, Subtask 2  
FINAL Finding of No Significant Impact (FNSI) and Programmatic  
Environmental Assessment (EA) for Remediation and Decontamination of  
EPA's Research Triangle Park, North Carolina Facilities

Dear Mr. Swanhorst:

Enclosed please find one hard copy of the FINAL FNSI and Programmatic EA for  
Remediation and Decontamination of EPA's Research Triangle Park, North Carolina Facilities.

If you have questions, comments, or desire additional information, please contact me at  
703-917-2846.

Sincerely,



Emily L. Lloyd  
BOOZ ALLEN & HAMILTON INC.

*for* Diane L. Clark  
Associate

Enclosures

cc:	Mr. Butch Mellen, EPA Mr. Wesley Carpenter, EPA Mr. Thomas Ashmore, EPA Mr. Robert Garrison, EPA Mr. Howard Wilson, EPA Mr. Russ Kulp, EPA Mr. David Lloyd, EPA Mr. Fred Woods, EPA Mr. Leo Stein, EPA Ms. Ann Brown, EPA	Ms. Debbie Janes, EPA Mr. Joe Montgomery, EPA Ms. Marguerite Duffy, EPA Mr. Arthur Totten, EPA Mr. John Hamilton, EPA Mr. Scott Heefner, BAH Ms. Diane Clark, BAH Ms. Christine Millard, BAH Program Management Team, BAH
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**FINDING OF NO SIGNIFICANT IMPACT  
FOR REMEDIATION AND DECONTAMINATION OF  
U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
RESEARCH TRIANGLE PARK, NORTH CAROLINA FACILITIES**

**January 2001**

**FINDING OF NO SIGNIFICANT IMPACT  
FOR REMEDIATION AND DECONTAMINATION OF  
U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
RESEARCH TRIANGLE PARK, NORTH CAROLINA FACILITIES**

The U.S. Environmental Protection Agency (EPA) is constructing a new research facility in Research Triangle Park (RTP), North Carolina, to reduce the number of properties and facilities it occupies, and to decrease its overall property costs. EPA plans to vacate seven properties and associated facilities over the next 1 to 3 years, including the Environmental Research Center (ERC), the ERC Annex, the Emissions Measurement Laboratory (EML), the Annex Administration Building, the Catawba Office Building, Building 4201, and the North Carolina Mutual Life Insurance Building. These properties include buildings, mobile structures, tanks, sheds, vehicles, research-related equipment, and the site grounds. Activities performed at these properties include research and development (R&D), environmental assessments (EAs), air quality planning, standards development, and administrative functions.

In March and May 2000, EAs were completed for the proposed termination of the leases for the ERC, the ERC Annex, and the EML, and the subsequent transfer of these facilities back to the owner in the case of the ERC and to the General Services Administration (GSA) in the case of the ERC Annex and the EML. The EAs also addressed issues surrounding the environmental sampling of areas of potential environmental concern undertaken at these sites as part of EPA's Environmental Due Diligence Process (EDDP) (see Section 2.2 of the attached document). These EAs resulted in findings of no significant impact (FNSIs), which are provided in Appendix A of the attached Programmatic EA. In addition, EPA must determine whether the proposed remediation and decontamination of these facilities will have a significant impact on the environment or on local natural resources. The accompanying Programmatic EA addresses these questions, and considers other actions being taken at RTP and in the neighboring community, to ensure that cumulative environmental impacts, direct and indirect, are assessed.

Environmental documentation incorporated by reference in this FNSI and the accompanying Programmatic EA includes—

- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center, Research Triangle Park, North Carolina, March 2000*
- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Emissions Measurement Laboratory, Research Triangle Park, North Carolina, March 2000*
- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center Annex, Research Triangle Park, North Carolina, May 2000*

## **1. PROPOSED ACTION**

In consideration of the impending relocation of staff and operations from the existing leased facilities to a new research complex at another location in the RTP area, EPA proposes to remediate and decontaminate, as necessary, the ERC, ERC Annex, and EML facilities before transferring control to the property owner or GSA. A description of these facilities is provided in Section 2.1 of the accompanying Programmatic EA.

In anticipation of EPA's vacating the seven previously mentioned properties over the next 1 to 3 years, EPA conducted EDDP activities to evaluate and assess the environmental condition of the three properties and their associated facilities. EPA has conducted the Phase I EDDP activities (survey and site investigation), to document environmental conditions and to ensure regulatory compliance and conformance with the Community Environmental Response Facilitation Act (CERFA) and Title 40 of the Code of Federal Regulations (CFR) Part 373, and to minimize or eliminate any environmental risks or liabilities to which EPA might be exposed in association with the subject properties and related facilities. The Phase I EDDP has been conducted in a manner consistent with EPA's Draft Final *Guidelines for Acquiring and Transferring EPA Real Property and Complying with the Community Environmental Response Facilitation Act*, June 1998, and the American Society for Testing and Materials' (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-97. The findings of the Phase I EDDP for each facility are addressed in the referenced EAs (see Appendix A of the accompanying Programmatic EA).

The Phase I EDDP report indicates that no suspect areas of contamination exist at the administration buildings, including the Annex Administration Building, Building 4201, the Catawba Building, and the North Carolina Mutual Life Insurance Building. Consequently, EPA has not scheduled any Phase II sampling or Phase III cleanup activities at these facilities. However, as a result of EPA's Phase I EDDP activities, the Agency proposes to take the necessary actions to address the potential areas of environmental concern before vacating the ERC, ERC Annex, and EML facilities and returning control to GSA or the property owner.

Through Phase I preliminary surveys and site investigations of the three facilities, EPA identified a number of potential environmental concerns requiring Phase II confirmatory sampling and analysis and Phase III characterization, remediation, and decontamination. When Phase II is completed, a decision will be made on whether no further action is required or whether Phase III remediation activities are required.

## **2. ALTERNATIVES CONSIDERED**

As required by EPA regulations, 40 CFR Part 6—Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act, this EA must consider all reasonable and viable alternatives to the proposed action, including the no action alternative. Although one other alternative was initially considered (see Section 3.3 of the accompanying Programmatic EA), the two alternatives considered to be reasonable were:

- Remediate and decontaminate, as necessary, the ERC, the ERC Annex, and the EML facilities before transferring them back to the owner or GSA
- No Action alternative.

The no action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this FNSI and accompanying Programmatic EA, however, the local environmental baseline is more appropriately described as an extensively developed suburban research park area situated south of Durham, North Carolina, in Durham County.

### **3. ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES**

Analysis indicates that the proposed action will not have a significant impact on the environment.

- EPA has broad experience in determining the extent to which contamination from laboratory activities has occurred, in regulating the extent to which contamination is allowable, and in determining the appropriate actions to take, if any, to address such contamination.
- EPA has an established and proven standards-based EDDP program in place for performing necessary actions to address potential or actual contamination resulting from EPA activities.
- Analysis indicates that the RTP infrastructure services needed to support EPA's proposed EDDP activities should be well within the capacity of the presently available RTP infrastructure.
- Review of the EDDP activities indicates a short-term and sporadic increase in the need for solid and hazardous waste disposal services in the RTP area and suggests that none of these activities will result in unusual or unmanageable quantities of liquid, solid, or hazardous wastes for disposal.
- Consideration of the extensive, thorough facility lease termination preparations; the extent and type of EDDP and related activities; the minimal potential for indirect impacts on the neighboring community; and the minimal local support requirements involved in the proposed action suggests that this action should have neither significantly beneficial nor significantly adverse socioeconomic consequences.

Analysis of potential cumulative environmental impacts associated with sampling, remediation, and decontamination, as necessary, before transfer of the three facilities or with any related actions indicates that neither direct nor indirect cumulative environmental impacts should be either significantly beneficial or significantly adverse.

Analysis indicates that potentially adverse environmental impacts related to the proposed action will be minimized, mitigated, and controlled to acceptable levels of impact by implementing the following measures:

- EPA will ensure that vacated facilities are decontaminated and cleaned to remove chemicals and substances that could pose a threat to new occupants or the environment.
- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory and office equipment, field equipment, mobile trailers, personal property, hazardous chemicals, protective barriers, compressed gases, and wastes before transfer of the facilities to others.
- EPA will perform EDDP activities in accordance with local, state, and federal regulatory requirements.
- EPA will continue planned Phase II and III EDDP activities, as necessary, to ensure that identified environmental concerns do not pose a significant environmental risk.
- In the event that new environmental concerns are identified during performance of planned EDDP activities, EPA will conduct additional Phase II and III activities, if necessary.
- EPA will comply with Nuclear Regulatory Commission regulatory provisions for ceasing ERC and ERC Annex radiological activities and preparing used areas for future unrestricted use. EPA will also ensure that radioactive materials and associated equipment are transported to the new research facility or other destinations in accordance with NRC license provisions.
- EPA will transfer the closed ERC Annex and EML facilities to GSA and the ERC facility to the owner for management, control, and future uses as they may deem appropriate.

Consideration of the activities involved in the proposed sampling, remediation, and decontamination, before transfer of the three facilities, indicates that the proposed action should have no significant impact on the environment or on local natural resources. Therefore, a FNSI is recommended for publication for this proposed action. An environmental impact statement (EIS) is not required for the proposed action.

#### 4. CONCLUSION

Based on the environmental impact analysis presented in the *Programmatic Environmental Assessment for Remediation and Decontamination of U.S. Environmental Protection Agency's Research Triangle Park, North Carolina Facilities*, which is hereby incorporated by reference and is attached to this FNSI, it has been determined that the proposed action will have no significant impact on the environment or on natural resources at the EPA properties or in the neighboring community. Therefore, an EIS is not required and will not be prepared.

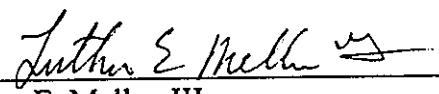
#### 5. PUBLIC COMMENT

Interested persons and agencies wanting to comment on the attached Programmatic EA or this FNSI may do so by calling or writing to Mr. Lance Swanhorst, EPA, AEREB, 1200 Pennsylvania Avenue, NW, Mail Stop 3204R, Washington, DC 20460, (202) 564-2160. Interested agencies, groups, and persons are invited to submit written comments to the above address within 30 days of the date of publication of availability of this FNSI.

Date: 1-10-01

  
\_\_\_\_\_  
William G. Laxton  
Director, Office of Administration  
and Resources Management  
RTP, NC

Date: 1-10-01

  
\_\_\_\_\_  
Luther E. Mellen III  
Chief, Architecture, Engineering and  
Real Estate Branch

**PROGRAMMATIC ENVIRONMENTAL ASSESSMENT  
FOR REMEDIATION AND DECONTAMINATION OF  
U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
RESEARCH TRIANGLE PARK, NORTH CAROLINA FACILITIES**

**January 2001**

**PROGRAMMATIC ENVIRONMENTAL ASSESSMENT  
FOR REMEDIATION AND DECONTAMINATION OF  
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ACRONYMS AND ABBREVIATION .....	iv
1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION .....	1
2.0 DESCRIPTION OF THE PROPOSED ACTION .....	2
2.1 Facilities To Be Transferred .....	2
2.2 Environmental Due Diligence Process (EDDP) .....	3
2.3 Proposed Phase II and III EDDP Activities .....	4
2.4 Planned Phase II and III EDDP Activities .....	4
2.4.1 Phase I EDDP Findings .....	4
2.4.2 Planned Phase II EDDP Activities .....	4
2.4.3 Planned Phase III EDDP Activities .....	5
3.0 ALTERNATIVES CONSIDERED .....	5
3.1 Proposed Action .....	5
3.2 No Action Alternative .....	5
3.3 Alternative Considered but Rejected .....	6
4.0 AFFECTED ENVIRONMENT .....	6
4.1 Setting and Site History .....	6
4.1.1 Environmental Research Center (ERC) .....	6
4.1.2 ERC Annex .....	6
4.1.3 Emissions Measurement Laboratory (EML) .....	7
4.2 Facility Leases .....	7
4.2.1 ERC Lease Agreement .....	7
4.2.2 ERC Annex Lease Agreement .....	8
4.2.3 EML Lease Agreement .....	9
4.3 Phase I EDDP Findings .....	9
4.4 Phase II EDDP Activities .....	11
4.5 Phase III EDDP Activities .....	12
4.6 Description of EDDP Potential Areas of Environmental Concern .....	13
4.7 Natural and Cultural Resources .....	13
4.7.1 Surface Water and Wetlands .....	13
4.7.2 Groundwater .....	13
4.7.3 Threatened and Endangered Species .....	13
4.7.4 Cultural and Historic Resources .....	14

5.0	ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES .....	14
5.1	Environmental Consequences .....	14
5.1.1	Phase II and III EDDP Activities .....	14
5.1.2	Natural Resources .....	18
5.1.3	Cultural and Historic Resources .....	18
5.2	Socioeconomic Consequences .....	18
5.2.1	Environmental Justice .....	19
5.3	Cumulative Impacts .....	19
5.3.1	Employment in the RTP Area .....	19
5.3.2	Employment Impacts .....	19
5.3.3	Infrastructure Impacts .....	19
5.3.4	Sampling, Analysis, and Remediation Activities .....	20
5.3.5	Summary .....	20
5.4	Mitigation Action Summary .....	20
6.0	FINDINGS AND CONCLUSIONS .....	21
7.0	LIST OF PREPARERS .....	24
8.0	LIST OF REFERENCES .....	24

#### LIST OF TABLES

Table 1.	Planned EDDP Potential Areas of Environmental Concern for the ERC .....	9
Table 2.	Planned EDDP Activities for the ERC Annex .....	10
Table 3.	Planned EDDP Activities for the EML .....	10

#### APPENDICES

APPENDIX A	Findings of No Significant Impact of the Lease Termination for the ERC, the ERC Annex, and the EML (March and May 2000) .....	A-1
APPENDIX B	U.S. Geological Survey 7.5-Minute Topographic Maps, Southwest and Southeast Durham, North Carolina .....	B-1
APPENDIX C	Site Plans for the ERC, the ERC Annex, and the EML .....	C-1
APPENDIX D	Overview of EPA's EDDP .....	D-1
APPENDIX E	Brochure Describing Phase II and III EDDP Sampling Activities .....	E-1
APPENDIX F	Overview of Potential and Actual Areas of Environmental Concern at EPA's RTP Facilities .....	F-1

## ACRONYMS AND ABBREVIATIONS

A/C	Air-Conditioning
A&E	Architecture and Engineering
ASTM	American Society for Testing and Materials
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EA	Environmental Assessment
EDDP	Environmental Due Diligence Process
EML	Emissions Measurement Laboratory
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERC	Environmental Research Center
FBC	Fluidized Bed Combustor
FGCS	Flue Gas Cleaning System
FNSI	Finding of No Significant Impact
GSA	General Services Administration
IAG	Interagency Agreement
NCDENR	North Carolina Department of Environment and Natural Resources
NERL	National Exposure Research Laboratory
NRC	Nuclear Regulatory Commission
OAQPS	Office of Air Quality Planning and Standards
ORD	Office of Research and Development
R&D	Research and Development
RCRA	Resource Conservation and Recovery Act
RTP	Research Triangle Park
SAP	Sampling and Analysis Plan
SFO	Solicitations for Offers
SOW	Statement of Work
USACE	U.S. Army Corps of Engineers
UST	Underground Storage Tank
WBS No.	Work Breakdown Structure Number

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U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
RESEARCH TRIANGLE PARK, NORTH CAROLINA FACILITIES**

**1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION**

The U.S. Environmental Protection Agency (EPA) is constructing a new research facility in Research Triangle Park (RTP), North Carolina, to reduce the number of properties and facilities it occupies, and to decrease its overall property costs. EPA plans to vacate seven properties and associated facilities over the next 1 to 2 years, including the Environmental Research Center (ERC), the ERC Annex, the Emissions Measurement Laboratory (EML), the Annex Administration Building, the Catawba Office Building, Building 4201, and the North Carolina Mutual Life Insurance Building. These properties include buildings, mobile structures, tanks, sheds, vehicles, research-related equipment, and the site grounds. Activities performed at these properties include research and development (R&D), environmental assessments (EA), air quality planning, standards development, and administrative functions.

In March and May 2000, EAs were completed for the proposed termination of the leases for the ERC, the ERC Annex, and the EML, and the subsequent transfer of these facilities back to the owner in the case of the ERC and to the General Services Administration (GSA) in the case of the ERC Annex and the EML. The EAs also addressed issues surrounding the environmental sampling of areas of potential environmental concern, which was undertaken at these sites as part of EPA's Environmental Due Diligence Process (EDDP) (see Section 2.2 of this document). These EAs resulted in findings of no significant impact (FNSIs), which are provided in Appendix A. In addition, EPA must determine whether the proposed remediation and decontamination of these facilities will have a significant impact on the environment or on local natural resources. This EA addresses these questions, and considers other actions being taken at RTP and in the neighboring community, to ensure that cumulative environmental impacts, direct and indirect, are assessed.

Analysis of the following subject areas is regularly included in most EAs. However, these issues have no direct relevance to this project or have been adequately analyzed in the previous EAs. Therefore, the listed subject areas are incorporated into this document by reference only and will not be discussed in this EA unless the need for further analysis is indicated:

- Natural resources
- Infrastructure
- Groundwater and surface water
- Noise
- Hazardous waste
- Radioactive materials
- General Conformity Requirements of the Clean Air Act Amendments of 1990
- Economic development

- Environmental justice requirements established by Executive Order (EO) 12898, and
- Quality of life.

Environmental documentation incorporated by reference in this EA includes—

- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center, Research Triangle Park, North Carolina, March 2000*
- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Emissions Measurement Laboratory, Research Triangle Park, North Carolina, March 2000*
- *Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center Annex, Research Triangle Park, North Carolina, May 2000.*

## **2.0 DESCRIPTION OF THE PROPOSED ACTION**

In consideration of the impending relocation of staff and operations from the existing leased facilities to a new research complex at another location in the RTP area, EPA proposes to remediate and decontaminate, as necessary, the ERC, the ERC Annex, and the EML facilities before transferring control to the property owner or GSA. A description of these facilities is provided in Section 2.1 of this document.

**2.1 Facilities To Be Transferred** The three facilities involved in the proposed action are as follows:

- **ERC.** The ERC main building is a multilevel facility constructed of concrete-reinforced steel, with a brick exterior and flat roof. It contains 253,390 net square feet of space and consists of buildings, wings of buildings, greenhouses, storage sheds, cooling towers, storage tanks, groundwater monitoring wells, air-conditioning (A/C) units, parking lots, and property-related articles (e.g., trailers, pilot plants or projects, laboratory equipment, gas cylinders, vehicles, gas pumps and stations, drum containers and racks, and animal cages). A topographic map showing the location of the ERC is provided in Appendix B. A site plan is provided in Appendix C.
- **ERC Annex.** The Annex is the second largest of the seven EPA facilities being vacated and includes a laboratory, a high bay research operation, offices, a computer support area, and a cafeteria. The Office of Research and Development (ORD), including 182 EPA and contractor personnel, has been the sole occupant of the Annex since June 1975. The Annex covers approximately 120,000 net square feet of space. The Annex property

covers approximately 20.74 acres, including a laboratory building, an emergency generator building, parking lots, mobile trailers, underground storage tanks (USTs), a waste accumulation building, and a loading dock. According to the lease agreement, the property owner and manager provide and operate all building equipment and systems, mains, lines, and meters. A topographic map showing the location of the ERC Annex is provided in Appendix B. A site plan is provided in Appendix C.

- **EML.** The EML is a one-story structure with office and laboratory space of about 9,005 square feet. It is used primarily as office space for the Office of Air Quality Planning and Standards (OAQPS). OAQPS directs national efforts to meet air quality goals, particularly for smog, air toxics, carbon monoxide, lead, particulate matter (soot and dust), sulfur dioxide, and nitrogen dioxide. The EML is co-located on a 22.05-acre parcel with two additional GSA-leased, EPA-occupied facilities, including the Fluid Modeling Facility (Grand Slam) and the Excess Property Warehouse (Warehouse). The three buildings are located on a knoll of approximately 7-acres with moderate side slopes. The Grand Slam and Warehouse facilities are leased by EPA under a separate lease agreement from that which covers the EML. This EA focuses solely on the EML lease. The EML consists of approximately 25 offices; a kitchen and lounge area; two conference rooms; a computer room; and three laboratories, which are now used for storage. The laboratories have not been used regularly since the early 1990s, with the exception of some small-scale research on degreasers. A metals and wood shop was also located at the EML before the facility's renovation in the early 1990s. According to the lease agreement, the lessor (GSA) provides and operates all building equipment and systems, mains, lines, and meters. The lessor is also responsible for janitorial and landscaping services. A topographic map showing the location of the EML is provided in Appendix B. A site plan is provided in Appendix C.

**2.2 Environmental Due Diligence Process** In anticipation of EPA's vacating the seven properties mentioned in Section 1.0 of this document, EPA conducted EDDP activities to evaluate and assess the environmental condition of the three properties and their associated facilities. EPA has conducted the Phase I EDDP activities (survey and site investigation) to document environmental conditions, to ensure regulatory compliance and conformance with the Community Environmental Response Facilitation Act (CERFA) and Title 40 Code of Federal Regulations (CFR) Part 373, and to minimize or eliminate any environmental risks or liabilities to which EPA might be exposed in association with the subject properties and related facilities. The Phase I EDDP has been conducted in a manner consistent with EPA's Draft Final *Guidelines for Acquiring and Transferring EPA Real Property and Complying with the Community Environmental Response Facilitation Act*, June 1998, and the American Society for Testing and Materials' (ASTMs) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-97. The findings of the Phase I EDDP for each facility are addressed in the referenced EAs (see Appendix A of this document).

A brief description of EPA's EDDP is provided in Appendix D of this document. Generally—

- Phase II of the EDDP uses physical sampling and analysis to verify Phase I suspected areas of environmental contamination.
- Phase III of the EDDP manages and mitigates contamination that was verified in Phase II.

A brochure describing Phase II and III EDDP sampling activities at EPA's ERC, ERC Annex, and EML facilities is provided in Appendix E. The brochure was prepared to provide information to EPA employees, contractors, and others working and living in the RTP area.

**2.3 Proposed Phase II and III EDDP Activities** As a result of EPA's Phase I EDDP activities, the Agency proposes to take the necessary actions to address the potential areas of environmental concern before vacating the ERC, ERC Annex, and EML facilities and returning control back to GSA or the property owner.

Through Phase I preliminary surveys and site investigations of the three facilities, EPA identified a number of potential environmental concerns requiring Phase II confirmatory sampling and analysis and Phase III characterization, remediation, and decontamination. When Phase II is completed, a decision will be made on whether no further action is required or Phase III remediation activities are required.

**2.4 Planned Phase II and III EDDP Activities** Because of the uncertainties noted in Section 2.3 of this document, this EA focuses on the EDDP programmatic approach to the planned Phase II and III EDDP activities that EPA will use to ensure that the proposed actions will not result in significant impacts on the environment or on local natural resources.

**2.4.1 Phase I EDDP Findings** The Phase I preliminary surveys and site investigations for the three facilities indicated that a number of potential environmental impacts in specific areas within the facilities can be adequately addressed through waste removal and decontamination activities. A brief overview of the potential environmental impacts identified through Phase I is provided in this document in Section 4.3, Phase I EDDP Findings. A more detailed description of the waste removal and decontamination activities is provided in applicable sections of Appendix F of this document.

**2.4.2 Planned Phase II EDDP Activities** Phase I also identified potential environmental concerns that might require Phase II confirmatory sampling and analysis to determine whether Phase III activities are required. EPA's standardized approach to Phase II activities is presented in Section 4.4 of this document. The environmental consequences of applying this standardized approach to these sites are addressed in Section 5.1.1.1 of this document.

**2.4.3 Planned Phase III EDDP Activities** The need for a number of Phase III activities has been identified through Phase I EDDP activities. Proposed Phase II activities may identify additional potential environmental concerns that will require follow-on Phase III activities. EPA's standardized approach to conducting Phase III activities is presented in Section 4.5 of this document. The environmental consequences of applying this standardized approach to these

sites are addressed in Section 5.1.1.2 of this document. Additionally, independent validation and verification sampling will be performed following Phase III by an independent third party in selected areas that have been remediated or decontaminated, to confirm that these activities were successful.

### **3.0 ALTERNATIVES CONSIDERED**

As required by EPA regulations, 40 CFR Part 6—Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act, this EA must consider all reasonable and viable alternatives to the proposed action, including the no action alternative. Although one other alternative was initially considered (see Section 3.3 of this document), the two alternatives considered to be reasonable were—

- Remediate and decontaminate, as necessary, the ERC, the ERC Annex, and the EML facilities before transferring them back to the owner or GSA
- No Action alternative.

The no action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this EA, however, the local environmental baseline is more appropriately described as an extensively developed suburban research park area situated south of Durham, North Carolina, in Durham County.

**3.1 Proposed Action** The proposed action is presented in Section 2.0 of this document. The environmental and socioeconomic impacts of the proposed action are analyzed and discussed in relation to the no action alternative in Section 5.0 of this document.

**3.2 No Action Alternative** Inclusion of the no action alternative is prescribed by EPA regulations as the benchmark against which EPA actions are to be evaluated. For the proposed action evaluated in this EA, the no action alternative would result in the properties' remaining contaminated and in hazardous substances remaining on-site. There would be no change in the affected environment described in Section 4.0 of this document.

However, because EPA plans to transfer the facilities to GSA or the owner of the property, leaving known or suspected contaminants and hazardous substances in place is considered to present an unacceptable health and environmental risk for future users of the facilities. Hence, the no action alternative is not a viable alternative and will not be considered further as a separate action by EPA.

**3.3 Alternative Considered but Rejected** An alternative that was considered, but rejected, involved transferring the facilities, with known or suspected contaminants and hazardous substances left in place, back to GSA or the property owner, and to fund all necessary remediation or decontamination activities. This alternative would leave EPA (1) with continuing

property liability; (2) open to excessive remediation and decontamination costs; and (3) with no assurance that the necessary remediation and decontamination would be accomplished in a timely manner. For these reasons, this alternative was rejected as neither reasonable nor viable.

## 4.0 AFFECTED ENVIRONMENT

Because of the programmatic nature of this proposed action, and in keeping with Council on Environmental Quality guidance, the issues and media addressed in this EA are limited to those with the potential for causing significant impacts on the environment or local natural resources.

**4.1 Setting and Site History** County of Durham and RTP covenants regulate the types of uses and facility operations in RTP. The covenants specify that only research can be conducted at the ERC, ERC Annex, and EML locations. According to the Research Triangle Foundation, the sites will be used strictly for research in the future, and there are no plans to change their zoning designations.

**4.1.1 ERC** EPA is currently using the ERC for R&D purposes. The ERC is the largest and most complex of the seven facilities that EPA is vacating at RTP. It consists of 18 wings or buildings, 2 greenhouses, 27 storage sheds, 2 cooling towers, 29 storage tanks (10 active or empty, 18 closed or removed, and 1 unused), 6 groundwater monitoring wells, 145 A/C units, parking lots, and property-related articles (e.g., trailers, pilot plants or projects, laboratory equipment, gas cylinders, vehicles, gas pumps and stations, drum containers and racks, and animal cages). Until mid-1969, the ERC property was undeveloped pinelands or farmland. In 1969, a contract with the former Department of Health, Education and Welfare provided the National Air Pollution Control Administration with 193,600 square feet of leased space for air pollution research. EPA officially occupied the complex in September 1971. Since then, EPA or its contractors have been the sole occupants of the complex. These entities have used the facility solely for R&D purposes. A site plan for the ERC is provided in Appendix C of this document.

**4.1.2 ERC Annex** Currently, EPA uses the ERC Annex property to conduct air exposure research, atmospheric modeling, atmospheric process research, and air measurements research. The ERC Annex is primarily occupied by ORD's National Exposure Research Laboratory (NERL). R&D activities at the ERC Annex are primarily focused on air and particulate matter sampling and analysis to establish guidelines and regulatory levels of pollutants. In addition, there is a dynamometer in the laboratory building, which is used to conduct tests on automobile emissions. According to interviews with EPA site personnel, the laboratory operations at the ERC Annex have remained substantially the same since EPA's initial occupancy. A site plan for the ERC Annex is provided in Appendix C of this document.

**4.1.3 EML** The EML is currently used for office and storage space. It is a one-story structure containing approximately 25 offices; a kitchen and lounge area; 2 conference rooms; a computer room; and 3 laboratories, which are now used for storage. The laboratories have not been used on a routine basis since the early 1990s, with the exception of some small-scale research on

degreasers. A metals and wood shop was also located at the EML before the facility's renovation in the early 1990s. The lease for this facility includes the EML Building, storage space to the north of the building, and a paved parking area to the west of the building. The storage space to the north of the building includes six small storage sheds, a mobile home, and a storage trailer. A large amount of field equipment and other items is stored in the laboratory space and the storage sheds. A site plan for the EML is provided in Appendix C of this document.

**4.2 Facility Leases** The lease for each facility formally establishes the lessor's and EPA's responsibilities for equipment, operations, maintenance, repairs, renovations, and other such items and functions.

**4.2.1 ERC Lease Agreement** The lease for the ERC covers specific activities, items, and materials that the owner must furnish, including—

- All parking spaces
- Repair and replacement of all paved surfaces
- Maintenance, repair, and replacement of the building structure (including exterior light poles)
- R Building (including the pathological incinerator)
- All plumbing and mechanical lines and services, from the main supply throughout the facility, including all restrooms in the facility, but excluding laboratory casework plumbing and laboratory mechanical services
- Operation, maintenance, repair, and replacement of the owner's building support equipment (e.g., heating, ventilation, and A/C; the main sanitary sewer system)
- S Building (EPA provides the owner with the chemicals needed for wastewater monitoring operations)
- All fire alarm systems
- Installation, operation, maintenance, repair, and replacement of a sprinkler system
- Replacement of a halon system with a sprinkler system (owner will remove existing halon systems when the sprinklers become operational).

Under the lease, EPA is responsible for the operation, maintenance, repair, and replacement of government-owned equipment and systems, janitorial services, grounds maintenance, landscaping, snow removal, security, utilities, and painting of interior spaces. The lease also contains a lessor's waiver-of-restoration clause, which exempts the government (tenant) from the

obligation to restore the lease premises affected by the government's build-out and alterations performed during the entirety of its occupancy of the leased premises. Further, this clause affirms the government's ownership of all fixtures it install on the lease premises, and its right to remove such fixtures prior to expiration of the lease term, or any extensions thereof. If any such fixtures are not removed by the government, title to such fixtures shall vest in the lessor. For example, in the event that the fixtures or items are not removed at the expiration of the lease term or of any extensions thereof, or within a reasonable time thereafter, title shall vest in the owner.

**4.2.2 ERC Annex Lease Agreement** According to the GSA-EPA lease agreement (i.e., Solicitations for Offers [SFO] MNC92248 page 20, per March 15, 1994, Lease No. GS-04B-32203), the property owner and manager provide and operate all building equipment and systems, mains, lines, and meters. The lessor has responsibility for security, janitorial service, utilities, trash removal, carpet cleaning, interior painting, and costs of verifying indoor air quality. The lessor is also responsible for the maintenance, repair, and replacement of the following:

- All government-installed equipment
- All equipment purchased at government cost by the lessor
- Carpet
- Fire protection system, including alarms, sensors, fire extinguishers, and halon systems, and all testing
- Six underground fuel tanks and their monitoring systems
- Interior, emergency, and exit lights, including bulbs, ballasts, and batteries
- Exterior lights installed by the government
- Doors with card readers
- Lighting on/off controls
- Special computer areas and attendant support equipment
- Electrical distribution and disconnects installed to support special government equipment
- All cafeteria equipment and furnishings, including cleaning exhaust ducts.

**4.2.3 EML Lease Agreement** According to the GSA-EPA lease agreement (i.e., SFO MNC93087 page 21, per April 28, 1994, Lease No. GS-04B-33078), the lessor provides and

operates all building equipment and systems, mains, lines, and meters. The lessor is also responsible for nonhazardous waste disposal, and janitorial and landscaping services.

**4.3 Phase I EDDP Findings** The previously referenced EAs for the ERC, the ERC Annex, and the EML facilities assessed the findings of EDDP Phase I in relation to confirmatory sampling and found that no significant impacts are expected from these activities. In addition, these EAs generally addressed Phase I findings concerning the potential environmental issues that need to be addressed at the three facilities by Phase II EDDP activities (see Tables 1, 2, and 3 on pages 9 and 10 of this document). The previous EAs addressed potential environmental concerns only in general terms because the extent and degree of contamination at the subject EPA facilities had not been determined at that time.

**Table 1. Planned EDDP Potential Areas of Environmental Concern for the ERC**

Work Breakdown Structure Number (WBS No.)	Potential Area of Environmental Concern
1.1.1	Jester Road Area
1.1.2	Storage Tanks
1.1.3	K Wing (1st and 3rd Floors)
1.1.4	G Highbay (Resource Conservation and Recovery Act [RCRA] Closure)
1.1.5	G Highbay (Outside Area)— <i>No Further Action</i>
1.1.6	Pathological Incinerator and Animal Carcass Storage
1.1.7	Hazardous Materials Storage Area
1.1.8	Roof Baghouses and Filters
1.1.9	Storm Water Drains
1.1.10	Waste Management Building
1.1.11	Sink Traps
1.1.12	Fume Hoods and Countertops
1.1.13	Innovative Furnace Reactor
1.1.14	Dynamometer
1.1.15	Groundwater Monitoring Wells
1.1.16	Cooling Towers— <i>No Further Action</i>
1.1.17	Chiller Outside of J Wing— <i>No Further Action</i>
1.1.18	Mercury Vapor Research Rooms
1.1.19	Multifuel Combustor
1.1.20	Dioxin Research Rooms
1.1.21	Radiological Materials and Use
1.1.22	Floor Drains and Trenches

**Table 2. Planned EDDP Activities for the ERC Annex**

<b>WBS No.</b>	<b>Potential Area of Environmental Concern</b>
1.2.1	USTs
1.2.2	Pit Below Car Test Area
1.2.3	Radiological Materials and Use
1.2.4	Welding Hood and Exhaust Ducts
1.2.5	Dynamometer
1.2.6	Wooden Sink Cabinet
1.2.7	Lead-Lined Ceiling
1.2.8	Sump at S17 and Outside Area
1.2.9	Inactive Underground Propane Tank
1.2.10	Sink Traps
1.2.11	Fume Hoods and Countertops
1.2.12	Hazardous Materials Building

**Table 3. Planned EDDP Activities for the EML**

<b>WBS No.</b>	<b>Potential Area of Environmental Concern</b>
1.3.1	Septic Tank Drain Field and Grease Trap
1.3.2	Fume Hoods and Countertops
1.3.3	Sink Traps

As the above tables illustrate, Phase II EDDP activities may show that no further action is required for some of the potential areas of environmental concern identified during Phase I activities, or they may show that Phase III EDDP activities are warranted. In other cases, the nature of the concern and data collection requirements may demand concurrent performance of Phase II and Phase III EDDP activities.

Since its completion of the Phase I EDDP activities for the three subject facilities, EPA has continued to follow the EDDP through Phases II and III. For example, EPA has prepared draft statements of work (SOWs) for Phase II and Phase III EDDP activities.

EPA has entered into an Interagency Agreement (IAG) with the U.S. Army Corps of Engineers (USACE) to perform a majority of the architecture and engineering (A&E) work required during Phase II and III EDDP activities. A separate IAG is being negotiated with the U.S. Department of Energy (DOE) to perform Phase II and III EDDP activities related to radiological materials and closure of the Nuclear Regulatory Commission (NRC) license.

**4.4 Phase II EDDP Activities** Each SOW developed for Phase II EDDP activities will follow a set format developed to ensure that the work is consistent with the standards established for EPA's EDDP Program.

The established Phase II EDDP SOW format contains the following elements:

- Heading: Identifies the Phase II project by number and short title
- Task Order Title: Identifies the formal Phase II project title
- Period of Performance: Identifies when the SOW is effective and the planned completion date
- Points of Contact: Identifies the task order project officer, the EPA EDDP project officer, and the USACE project officer
- Background: Provides a brief description of the EDDP and the facilities being vacated, identifies all potential areas of environmental concern being addressed, and explains why each concern was raised
- Purpose and Objective: Provides an overview of what is needed and what is being accomplished and sets the standards to be met
- SOW: Specifies the tasks to be performed in the categories of project planning activities, implementation, and closeout
  - Task 1—Project Planning—Requires a formal technical work plan, including the contractor's technical approach, sampling and analysis plan (SAP), cost estimate, and schedule, as well as utility (as necessary), staging, and storage requirements
  - Task 2—Project Implementation—Describes the standards to be used and how the work will be conducted. It includes EPA planning scope; additional contractor considerations (as necessary); and waste management and disposal requirements
  - Task 3—Project Closeout—It includes requirements for a preliminary findings briefing, a draft report, and a final report
- Deliverables: Describes how, when, and what documentation will be provided by the contractor. At a minimum, this usually includes a technical work plan, preliminary findings briefing materials, and draft and final reports of findings.

**4.5 Phase III EDDP Activities** Like the SOWs developed for Phase II EDDP activities, each SOW for Phase III EDDP activities will follow a set format developed to ensure that the work is consistent with the standards established by EPA's EDDP Program.

The established Phase III EDDP SOW format contains the following elements:

- Heading: Identifies the Phase III project by number and short title

- Task Order Title: Identifies the formal Phase III project title
- Period of Performance: Identifies when the SOW is effective and the planned completion date
- Points of Contact: Identifies the task order project officer, the EPA EDDP project officer, and the USACE project officer
- Background: Provides a brief description of the EDDP and the facilities being vacated, identifies all potential areas of environmental concern being addressed, and explains why each concern was raised
- Purpose and Objective: Provides an overview of what is needed and what is being accomplished and sets the standards to be met
- SOW: Specifies the tasks to be performed in the categories of project planning activities, implementation, and closeout
  - Task 1—Project Planning—Requires a formal technical work plan, including the contractor's technical approach, remedial action plan, cost estimate, and schedule, as well as a plan detailing equipment and waste staging and storage requirements
  - Task 2—Project Implementation—Describes the standards to be used and how the work will be conducted. It includes EPA planning scope, as well as waste management and disposal requirements
  - Task 3—Project Closeout—It includes requirements for a preliminary findings briefing, a draft report, and a final report.
- Deliverables: Describes how, when, and what documentation will be provided by the contractor. At a minimum, this usually includes a technical work plan, preliminary findings briefing materials, and draft and final reports of findings.

**4.6 Description of EDDP Potential Areas of Environmental Concern** A brief overview of each potential area of environmental concern anticipated for Phase II and III EDDP activities is provided in Appendix F of this document.

#### **4.7 Natural and Cultural Resources**

**4.7.1 Surface Water and Wetlands** There are neither surface waters nor known wetlands in the immediate vicinity of the ERC or the ERC Annex facilities, nor in project areas that could be disturbed by Phase II or Phase III EDDP activities at these facilities.

According to the U.S. Geological Survey 7.5-Minute Southeast Durham Topographic Map, Stirrup Iron Creek runs along the north and east borders of the EML facility, less than one-fifth of a mile away at an elevation approximately 100 feet lower than the facility. According to the North Carolina Department of Environment and Natural Resources (NCDENR), a wetland area known as the Stirrup Iron Creek Marsh and Slough is located 0.4 mile north and northeast of the EML facility.

**4.7.2 Groundwater** The ERC, the ERC Annex, and the EML are located within a classified surficial bedrock formation known as the Triassic Basin. This formation is not considered a sole-source aquifer. Specifically, the formation consists of a combination of clay and silt, known as saprolite, which extends from the surface of the ground to a depth of 60 to 80 feet. At the 60- or 80-foot mark, the formation transforms into weathered bedrock. According to records from storage tank investigations and closures, the groundwater flows in an east-southeasterly direction at a depth of 9.5 to 12.0 feet.

Before 1990, the EML water source provided by the property owner was an on-site well. Neither monitoring nor analytical requirements were imposed on the system because it had fewer than 15 service connections and served fewer than 25 people. The EDDP review team contacted the NCDENR Groundwater Branch to determine if any data existed in close proximity to the site to make a groundwater quality and flow determination. However, the NCDENR Groundwater Branch has been unable to make a determination at the subject property due to limited funding.

**4.7.3 Threatened and Endangered Species** The North Carolina Natural Heritage Program County Species List contains rare species, natural communities, and special animal habitats known to occur in counties throughout North Carolina, including Durham County. The list includes vertebrates, invertebrates, vascular plants, and natural communities. According to the list, Durham County has five endangered species, including the bald eagle, green floater, tall larkspur, smooth coneflower, and Michaux's sumac. According to letters from the NCDENR Division of Parks and Recreation, the North Carolina Natural Heritage Program does not have a record of rare species or high-quality natural communities at, or within a 1-mile radius of the ERC and EML sites. According to the NCDENR, it is not known whether any of the endangered species listed for Durham County are located on or frequent the three subject facilities. These letters and accompanying materials are provided in appendices to the referenced EAs.

**4.7.4 Cultural and Historic Resources** According to the National Register Information System and the Durham County Historic Inventory, none of the three subject facilities are registered as historic structures or historical areas, and no areas of historic value appear to exist within a 1-mile radius of the ERC, the ERC Annex, or the EML.

## 5.0 ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES

In this section, the environmental and socioeconomic consequences of the proposed action are described, characterized, and analyzed for potential significance, to the extent that relevant

information is available. In addition, the impacts of the proposed action are described and analyzed, in the context of cumulative environmental impacts where necessary. EPA expects no significant consequences, either adverse or beneficial, from this proposed action—remediation and decontamination as necessary, of the three facilities before the facilities are transferred to GSA or the property owner.

**5.1 Environmental Consequences** Because of the nature of the existing three facilities, the lack of definitive contaminant characterization data, and the variety of proposed Phase II and III EDDP activities, the environmental consequences of the proposed action are addressed in relation to the programmatic approach to be used in considering, approving, and performing each EDDP activity.

**5.1.1 Phase II and III EDDP Activities** The extent to which the Phase I EDDP preliminary survey and site investigation activities identified potential areas of environmental concern initially determined the extent to which Phase II and III EDDP activities were planned in support of the proposal to remediate and decontaminate, as necessary, the ERC, the ERC Annex, and the EML facilities. EPA's EDDP guidelines discuss Phase I, II, and III EDDP activities; reference and conform to ASTM standards; reference and comply with federal, state, and local environmental requirements; and provide the methodologies for completing the EDDP. EPA conducts an EDDP whenever real property is proposed for acquisition, transfer, or disposal.

**5.1.1.1 Phase II EDDP Activities** Generally, these activities consist of (1) reviewing and evaluating the findings and information in the Phase I report; (2) developing and implementing a SAP, including performance of field sampling; and (3) developing a Phase II report. The Phase II report recommends either performance of follow-on Phase III activities or termination of the EDDP (i.e., no further action).

EPA is responsible for the following:

- Reviewing and evaluating the significance of the findings and the information in the Phase I report.
- Developing a Phase II EDDP SOW for each potential area of environmental concern determined (1) to be significant (i.e., capable of affecting the quality of the human environment or of adversely impacting local natural resources) or (2) to require sampling and analysis to identify, and confirm or refute, environmental concerns requiring Phase III activities. When applicable, EPA references federal, state, or local established regulatory levels for contaminants, other regulatory requirements, and consensus standards to determine whether further action is required.
- Negotiating the requirements in an IAG to ensure that A&E related services are conducted by a qualified contractor in accordance with EPA's EDDP guidelines; ASTM standards; federal, state and local environmental regulations; and best management practices. The selected Phase II EDDP A&E contractor will perform work in accordance

with the SOWs to address potential areas of environmental concern listed in Section 4.3 of this document.

- Monitoring the progress and acceptability of the work being performed.
- Acting as the approval authority for the deliverables prepared by the contractor in accordance with the SOW.
- Determining from the completed Phase II report whether no further action is required or Phase III EDDP activities are required.

Review and analysis of the EPA Phase II EDDP activities in relation to the potential areas of environmental concern provided in Appendix F of this document indicate the following:

- EPA has broad experience in determining the extent to which contamination from laboratory activities has occurred, in regulating the extent to which contamination is allowable, and in determining the appropriate actions to take, if any, to address such contamination.
- EPA has an established and proven standards-based EDDP program in place for performing the necessary actions to address potential contamination at EPA facilities.
- The EA programmatic process has contractually enforceable safeguards to ensure contractor identification of, and conformance with, federal, state, and local environmental and health requirements.
- The use of an IAG provides the Agency a high degree of assurance that confirmatory sampling and analysis decisions will be made openly and objectively.
- The extensive documentation required for Phase II EDDP activities provides an adequate audit trail for monitoring performed work to ensure that program objectives are achieved and that projects are not lost or left incomplete through administrative error.
- Periodic meetings of all involved levels provide a high level of assurance that decisions are reasonable and based on current documented findings of specialized sampling and analysis.
- The requirement for a SAP, which includes a field sampling plan, a site health and safety plan, and a quality assurance project plan, provides a high level of assurance that decisions will be based on meaningful sampling and analytical data.
- The requirement for a field sampling plan and a staging and storage plan provides a high degree of assurance that EDDP solid and hazardous wastes will be properly managed and will not result in future liability.

All field, transportation, and laboratory activities undertaken during Phase II EDDP activities will be in compliance with federal, state, and local environmental regulations to ensure that potential contaminants being sampled are not released into the environment. Phase II activities will also comply with federal, state, and local occupational safety and health regulations to ensure that both the individuals performing the sampling and the public are not exposed to potentially hazardous substances disturbed, handled, and transported during Phase II sampling and analysis.

Where regulatory requirements and experience indicate that an environmental concern can be resolved only through remediation, EPA's EDDP allows Phase II and III EDDP activities to be conducted concurrently, or Phase II studies to be eliminated entirely or replaced by Phase III remediation and confirmation sampling. This arrangement can significantly shorten the time required to resolve a situation that threatens the environment or adversely affects local natural resources.

Review and analysis of the environmental and occupational safety and health regulatory requirements for Phase II EDDP sampling and analysis activities indicate that Phase II EDDP activities should be able to be performed without significantly adverse environmental and human health impacts.

**5.1.1.2 Phase III EDDP Activities** These activities consist of (1) reviewing and evaluating the findings of the Phase I and Phase II reports; (2) developing and implementing a more extensive SAP; (3) evaluating the risk associated with any identified contamination, while considering future land use; (4) evaluating, selecting, and implementing remedial alternatives to address the contamination; and (5) developing a Phase III report. As noted, in some cases, Phase II and III EDDP activities may be performed concurrently.

EPA is responsible for the following:

- Reviewing and evaluating the significance of the findings and information in the Phase I and Phase II reports.
- Developing a Phase III EDDP SOW for each environmental concern determined to be significant and in need of Phase III EDDP activities. EPA uses the Phase II report to develop a strategy for Phase III characterization, remediation, and decontamination.
- Acting as the approval authority for the remedial action plan prepared by the contractor.
- Monitoring the progress and acceptability of the work being performed.
- Acting as the approval authority for the deliverables prepared by the contractor, in accordance with the SOW.

- Ensuring that EPA's environmental liabilities or risks are minimized or eliminated at the end of the EDDP.

Review and analysis of the EPA Phase III EDDP activities, with respect to the environmental concerns provided in Appendix F of this document, yield essentially the same findings as analysis of the Phase II program:

- EPA has broad experience in determining the extent to which contamination from laboratory activities has occurred, in regulating the extent to which contamination is allowable, and in determining the appropriate actions to take, if any, to address such contamination.
- EPA has an established and proven standards-based EDDP program in place for performing the necessary actions to address potential contamination at EPA facilities.
- The EA programmatic process has contractually enforceable safeguards to ensure contractor identification of, and conformance with, federal, state, and local environmental and health requirements.
- The use of an IAG provides the Agency a high degree of assurance that confirmatory sampling and analysis decisions will be made openly and objectively.
- The extensive documentation required for Phase III EDDP activities provides an adequate audit trail for monitoring performed work to ensure that program objectives are achieved and that projects are not lost or left incomplete through administrative error.
- Periodic meetings of all involved levels provide a high level of assurance that decisions are reasonable and based on quality data and current documented findings.
- The contractual requirement for a remedial action plan, which includes a fieldwork plan, a site health and safety plan, and a quality assurance project plan, provides a high level of assurance that decisions will be based on meaningful standards and data.
- The requirement for a fieldwork plan and a staging and storage plan provides a high degree of assurance that EDDP solid and hazardous wastes will be properly managed and will not result in future liability.

All field, transportation, and laboratory activities undertaken during Phase III EDDP activities will be in compliance with federal, state, and local environmental regulatory requirements to ensure that the potential contaminants being sampled, analyzed, or remediated are not released into the environment. Phase III activities must also comply with federal, state, and local occupational safety and health regulations to ensure that both the individuals performing the sampling, analysis, and remediation and the public are not exposed to health-hazardous

substances disturbed, handled, and transported during Phase III sampling, analysis, and remediation activities.

Review and analysis of the above environmental and occupational safety and health regulatory requirements for Phase II and III EDDP sampling, analysis, and remediation activities indicate that Phase III EDDP activities should be able to be performed without significant impacts.

**5.1.2 Natural Resources** No wetlands have been identified in the immediate area of the ERC and ERC Annex facilities and storm water from the two facilities does not appear to flow into wetlands. Although a wetland has been identified 0.4 mile from the EML facility, EPA's proposed EDDP activities are not expected to have an impact on this wetland or on local storm water drainage.

In addition, based on the apparent lack of federally identified or state-identified threatened or endangered species on or around the three properties, the proposed EDDP activities should not have an impact on threatened or endangered species.

There have been no known uncontrolled releases of toxic and hazardous materials into the environment from laboratory, storage, or facility operations on the three properties. Analysis therefore suggests that local surface water and related resources have not been significantly impacted by past or current facility and laboratory operations and are not likely to be impacted by the proposed EDDP activities.

**5.1.3 Cultural and Historic Resources** Cultural and historic resources are not expected to be impacted by the proposed action since the buildings on the three properties do not qualify as historic structures and there are no known cultural or historic structures near the three facilities.

**5.2 Socioeconomic Consequences** Consideration of (1) the extensive facility lease termination preparations; (2) the extent and type of EDDP and related activities; (3) the minimal potential for indirect impacts on the neighboring community; and (4) the minimal local support requirements involved in the proposed action suggests that this action will have neither significantly beneficial nor significantly adverse socioeconomic consequences.

**5.2.1 Environmental Justice** Under EO 12898, issued February 11, 1994, federal agencies are required to identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations in the United States. Because of the nature of the proposed action (i.e., remediation and decontamination, as necessary, of the ERC, the ERC Annex, and the EML before transferring the three facilities) and the demographics in the immediate vicinity of the ERC, the ERC Annex, and the EML (the RTP area is moderately developed with mostly commercial business and research facilities), minority and low-income populations are not expected to be disproportionately affected. This is consistent with the goals of EO 12898 concerning environmental justice. Overall, the proposed action is not expected to significantly affect the long-term viability of either facilities being vacated or RTP, and should result in

neither significant beneficial nor significant adverse economic impacts on the local community and its citizens.

**5.3 Cumulative Impacts** In analyzing cumulative impacts related to the proposed action, it is important to note the types of facilities involved. The three properties and associated facilities considered here in relation to the transition to the new research facility are categorized as operational facilities or administrative facilities.

Operational facilities conduct research and analysis, which require science- and engineering-related staffs for operation of pilot plants (e.g., incinerators) and laboratories. These facilities manage and use hazardous materials and chemicals, generate waste, and discharge wastewaters and air emissions into the environment. Administrative facilities, in contrast, require administration-related staff and are used strictly as office space. They function strictly in an administrative capacity, which involves little or no management and use of hazardous materials and chemicals, generation of waste, and discharges or emissions.

**5.3.1 Employment in the RTP Area** RTP encompasses 6,900 acres of North Carolina pine forest and has approximately 1,400 acres available for development. It currently houses more than 100 R&D facilities, which employ over 37,500 RTP-area residents. The combined annual salaries in RTP amount to over \$1.2 billion.

**5.3.2 Employment Impacts** Because of the expected minimal extent and the routine nature of the proposed EDDP activities for the ERC, the ERC Annex, and the EML, the proposed work is not expected to have a significant impact on the existing labor pool in the RTP local area or to induce the permanent movement of other businesses or workers to the area.

**5.3.3 Infrastructure Impacts** The proposed EDDP activities' impacts on local infrastructure support (i.e., electrical, communications, fire protection, water supply, wastewater treatment, solid waste disposal, and hazardous materials management) are expected to be only marginally greater than the present impact.

During Phase II and III EDDP activities, there will be a short-term and sporadic increase in the need for solid and hazardous waste disposal services in the RTP area. Review of the EDDP SOW and the descriptions of the areas in which EDDP activities will be performed suggests that none of these activities will result in unusual or unmanageable quantities of liquid, solid, or hazardous wastes for disposal.

The EDDP activities will also result in a short-term and sporadic increase in the need for water. This increase is not expected to have a significant impact on the municipal water supply.

Review of the proposed Phase II and III EDDP activities and standard contract requirements indicates that wastewater generated during these activities will not be discharged into the Durham County sanitary sewer system unless analyses show that the wastewater is not out of compliance with the discharge limits established by the county.

**5.3.4 Sampling, Analysis, and Remediation Activities** Phase II and III EDDP sampling, analysis, and remediation activities will be performed by contractors who specialize in performing these services in compliance with environmental and occupational safety and health regulatory requirements. Because similar activities are performed throughout the United States by numerous contractors, the use of contractors for these activities at the ERC, the ERC Annex, and the EML is not expected to adversely impact similar specialized work being performed or planned for other locations in the local area. Local contractors and workers who are skilled in these activities may benefit from the opportunity to provide these services but are not expected to be adversely affected if others perform the services. Available information suggests that planned EDDP activities for the three facilities are relatively minor in nature and extent and probably will not qualify any of the facilities for categorization as a Superfund site.

Considering the expected nature and extent of the work, the treatment or disposal of removed contaminants, if any, is not expected to have significantly adverse impacts on the area's ability to manage similar treatment or disposal of wastes arising from contaminants at other local area locations.

**5.3.5 Summary** Review of the above analysis for cumulative impacts associated with the proposed action and related actions indicates that neither direct nor indirect cumulative environmental impacts should be either significantly beneficial or significantly adverse.

**5.4 Mitigation Action Summary** Several minimization or mitigation measures will be employed by EPA to minimize the impacts of the proposed remediation and decontamination of the ERC, the ERC Annex, and the EML before the facilities are transferred to GSA or the property owner. These measures include the following:

- EPA will ensure that the vacated facilities are decontaminated or cleaned to remove chemicals and substances that could pose a threat to new occupants or the environment.
- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory and office equipment, field equipment, mobile trailers, personal property, hazardous chemicals, protective barriers, compressed gases, and wastes before transfer of the facilities.
- EPA will perform EDDP activities to the extent necessary for compliance with local, state, and federal regulatory requirements.
- EPA will continue planned Phase II and III EDDP activities, as necessary, to ensure that identified environmental concerns do not pose a significant environmental risk.
- In the event that new environmental concerns are found during performance of planned EDDP activities, EPA will conduct additional Phase II and III activities, if necessary, to determine the extent to which EDDP activities must be performed to address these new concerns.

- EPA will comply with NRC regulatory provisions for ceasing ERC and ERC Annex radiological activities and preparing used areas for future unrestricted use. It will also ensure that radioactive materials and associated equipment are transported to the new research facility or other destinations in accordance with NRC license provisions.
- EPA will transfer the closed ERC Annex and EML facilities to GSA, and transfer the ERC facility to the owner, for management, control, and future use as they deem appropriate.

## **6.0 FINDINGS AND CONCLUSIONS**

Using the no action alternative as a baseline for determining impacts of the proposed action, initial assessment indicated the following potential concerns:

- Whether expertise exists within EPA to remediate and decontaminate, as necessary, the ERC, the ERC Annex, and the EML facilities for future unrestricted use
- Whether EPA's EDDP contains sufficient safeguards to ensure compliance with federal, state, and local regulatory requirements for protection of the environment and local natural resources
- The impact of Phase II and III EDDP activities on the RTP infrastructure
- Disposal of large quantities of hazardous substances and wastes associated with Phase II and III EDDP activities
- The local socioeconomic impact caused by the number of projects involving sampling, remediation, and decontamination, as necessary, of the ERC, the ERC Annex, and the EML facilities.

Analysis of available information produced the following findings:

- EPA has broad experience in determining the extent to which contamination from laboratory activities has occurred, in regulating the extent to which contamination is allowable, and in determining the appropriate actions to take, if any, to address such contamination.
- EPA has an established and proven standards-based EDDP program in place for performing necessary actions to address potential or actual contamination resulting from EPA activities.

- Analysis indicates that the RTP infrastructure services needed to support EPA's proposed EDDP activities should be well within the capacity of the presently available RTP infrastructure.
- Review of the EDDP activities indicates a short-term and sporadic increase in the need for solid and hazardous waste disposal services in the RTP area and suggests that none of these activities will result in unusual or unmanageable quantities of liquid, solid, or hazardous wastes for disposal.
- Consideration of the extensive, thorough facility lease termination preparations; the extent and type of EDDP and related activities; the minimal potential for indirect impacts on the neighboring community; and the minimal local support requirements involved in the proposed action suggests that this action should have neither significantly beneficial nor significantly adverse socioeconomic consequences.

Analysis of potential cumulative environmental impacts associated with the sampling, remediation, and decontamination, as necessary before transfer of the three facilities or with any related actions indicates that neither direct nor indirect cumulative environmental impacts should be either significantly beneficial or significantly adverse.

Analysis indicates that potentially adverse environmental impacts related to the proposed action will be minimized, mitigated, and controlled to acceptable levels of impact by implementing the following measures:

- EPA will ensure that vacated facilities are decontaminated and cleaned to remove chemicals and substances that could pose a threat to new occupants or the environment.
- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory and office equipment, field equipment, mobile trailers, personal property, hazardous chemicals, protective barriers, compressed gases, and wastes before transfer of the facilities to others.
- EPA will perform EDDP activities in accordance with local, state, and federal regulatory requirements.
- EPA will continue planned Phase II and III EDDP activities, as necessary, to ensure that identified environmental concerns do not pose a significant environmental risk.
- In the event that new environmental concerns are identified during performance of planned EDDP activities, EPA will conduct additional Phase II and III activities, if necessary.
- EPA will comply with NRC regulatory provisions for ceasing ERC and ERC Annex radiological activities and preparing used areas for future unrestricted use. EPA will also

ensure that radioactive materials and associated equipment are transported to the new research facility or other destinations in accordance with NRC license provisions.

- EPA will transfer the closed ERC Annex and EML facilities to GSA and the ERC facility to the owner for management, control, and future uses as they may deem appropriate.

Consideration of the activities involved in the proposed sampling, remediation, and decontamination, before transfer of the three facilities indicates that the proposed action should have no significant impact on the environment or on local natural resources. Therefore, a FNSI is recommended for publication for this proposed action. An environmental impact statement is not required for the proposed action.

## **7.0 LIST OF PREPARERS**

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## **8.0 LIST OF REFERENCES**

*Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Emissions Measurement Laboratory, Research Triangle Park, North Carolina, March 2000.*

*Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center, Research Triangle Park, North Carolina, March 2000.*

*Environmental Assessment for Property Transfer of U.S. Environmental Protection Agency, Environmental Research Center Annex, Research Triangle Park, North Carolina, May 2000.*

*Final Phase I Environmental Due Diligence Process Report for USEPA's Research Triangle Park, North Carolina, Facilities, July 1999.*

U.S. Environmental Protection Agency. Office of Administration. *EPA's Environmental Diligence Process and Transferring EPA Real Property*, September 1997 (see Appendix D of this document).

## **APPENDIX A**

**Findings of No Significant Impact of the Lease Termination for  
the ERC, the ERC Annex, and the EML  
(March and May 2000)**

## FINDING OF NO SIGNIFICANT IMPACT

### PROPERTY TRANSFER OF U.S. ENVIRONMENTAL PROTECTION AGENCY'S ENVIRONMENTAL RESEARCH CENTER RESEARCH TRIANGLE PARK, NORTH CAROLINA

The U.S. Environmental Protection Agency (EPA) is constructing a new research facility in Research Triangle Park (RTP), North Carolina, to reduce the number of properties and facilities it occupies and its overall property costs. EPA plans to vacate seven properties and associated facilities over the next 2 to 3 years, including the Environmental Research Center (ERC), the ERC Annex, the Annex Administration Building, the Emissions Measurement Laboratory, the Catawba Office Building, Building 4201, and the North Carolina Mutual Life Insurance Building. These properties include buildings, mobile structures, tanks, sheds, vehicles, research-related equipment, and the site grounds. Activities performed on these properties include research and development, environmental assessments, air quality planning, standards development, and administrative functions.

With construction of the new research center building complex nearing completion, EPA has evaluated the continued need for the ERC leased facility, and determined that the offices and laboratories are no longer adequate to support existing and projected future mission requirements and are excess to future EPA needs in the RTP area. Because the present leased facility is used through a lease agreement with the owner, EPA proposes to cleanup and close the ERC, allow the lease to expire, and return control of the facility to the owner.

#### 1. PROPOSED ACTION

In anticipation of EPA's vacating the seven previously mentioned properties over the next 2 to 3 years, the Agency has completed a Phase I Environmental Due Diligence Process (EDDP) to evaluate the environmental condition of the properties and their associated facilities. EPA has conducted this Phase I EDDP to ensure compliance and conformance with the Community Environmental Response Facilitation Act (CERFA) and Title 40 of the Code of Federal Regulations (CFR) Part 373, and to minimize or eliminate the Agency environmental risks or liabilities associated with the properties and related facilities. The Phase I EDDP is consistent with EPA's draft final *Guidelines for Acquiring and Transferring EPA Real Property and Complying with the Community Environmental Response Facilitation Act (CERFA)*, June 1998, and with the American Society for Testing and Materials' (ASTM's) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-97.

After conducting studies to document the environmental conditions at the ERC, and before vacating the facility and returning control to the owner, EPA will take all necessary actions to determine and address the applicable environmental compliance requirements. These actions may include, as necessary, conducting the EDDP Phase II Confirmatory Sampling and Analysis and the Phase III Investigation and Cleanup.

- Phase II of the EDDP consists of verifying suspected areas of environmental contamination through physical sampling and analysis.
- Phase III of the EDDP consists of managing and mitigating the areas of environmental contamination verified in Phase II.

After completing EDDP activities, EPA will return the property to the property owner. The owner will determine the property's future use.

## **2. ALTERNATIVES CONSIDERED**

As required by EPA's regulations, 40 CFR Part 6—Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act, the attached Environmental Assessment (EA) considered all reasonable and viable alternatives, including a no action alternative. Although several alternatives were initially considered, two alternatives were considered reasonable:

- Cleanup and closure the ERC, allow the lease to expire, and return of control of the facility to the owner
- No action alternative.

The no action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this EA, however, the local environmental baseline is more appropriately described as an extensively developed suburban research park area situated south of Durham, North Carolina, in Durham County, North Carolina.

## **3. ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES**

Analysis indicates that the proposed action will not have a significant impact on the environment.

- Groundwater and surface waters are not expected to be affected by the proposed closure of the facility, transfer of existing government-owned resources, and return of control of the facility to the property owner.
- The facility was not contaminated significantly by the use of hazardous materials and laboratory operations.
- EPA has initiated a program of studies to determine the potential extent to which contamination resulting from EPA activities has occurred and any appropriate actions that should be taken to address the contamination.
- EPA has a program in place to ensure that the appropriate actions are taken to address potential contamination resulting from EPA activities.

- Any potential facility contaminants will be addressed through planned and relatively simple cleanup procedures.
- Loss of employment opportunities related to closure of the facility should be recouped through reutilization of the facility by other users.

Consideration of the environmental impact minimization, mitigative, and control measures planned for the cleanup, closure, and transfer activities indicates that the proposed action should have no significantly adverse impacts, including direct and indirect cumulative impacts, on the quality of the human environment or on local natural resources. The planned measures are as follows:

- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory and support equipment, hazardous chemicals, and wastes before lease expiration and before transfer of the facility to the owner.
- EPA will ensure that vacated facilities are cleaned to remove chemicals and substances that could pose a threat to new occupants.
- EPA will, where operations are governed by permit requirements, close operations in accordance with permit closure requirements.
- EPA will conduct studies to determine the extent to which cleanup activities must be performed to address contamination from past EPA activities.
- EPA will perform cleanup activities to the extent necessary for compliance with local, state, and federal regulatory requirements.
- EPA will modify the referenced Nuclear Regulatory Commission (NRC) license to include the change of address, conducting the necessary leak testing before and after relocating the licensed equipment, and ensuring that the licensed materials and equipment are transported to the new research center complex or elsewhere in accordance with NRC provisions.
- EPA will arrange for closure of the monitoring wells before vacating the property.
- EPA will transfer the closed facility to the owner for management, control, and reutilization by other users.

In mitigating environmental impacts, particular attention will be given to impacts on soils and groundwater, because they are the only media that are expected to sustain potentially negative impacts. Use of standard investigative and remediation techniques developed for site cleanups will minimize environmental risks.

The proposed action will neither affect nor involve wetlands, floodplains, surface waters, cultural resources, or endangered species, and will not disproportionately affect minority or low-income populations.

Because no apparent significantly adverse environmental impacts are associated with the proposed action, a finding of no significant impact (FNSI) has been recommended for the proposed cleanup and closure of the ERC, expiration of the existing lease, and return of control of the facility to the owner. Consequently, an environmental impact statement (EIS) is not required for the proposed action.

#### 4. CONCLUSION

Based on the environmental impact analysis presented in the *Environmental Assessment for the Cleanup, Closure, and Transfer of the Environmental Research Center at Research Triangle Park, North Carolina*, which is hereby incorporated by reference and is attached to this FNSI, it has been determined that the proposed action will have no significant impact on the quality of the human environment or on natural resources on the EPA Environmental Research Center property or in the neighboring community. Therefore, an EIS is not required and will not be prepared.

#### 5. PUBLIC COMMENT

Interested persons and agencies wanting to comment on the attached EA or this FNSI may do so by calling or writing to Lance Swanhorst, EPA, AEREB, 1200 Pennsylvania Avenue, NW, Mail Stop 3204R, Washington, DC 20460, (202) 564-2160. Interested agencies, groups, and persons are invited to submit written comments to the above address within 30 days of the date of publication of availability of this FNSI.

Date: 3/2/00

William G. Laxton

William G. Laxton  
Director, Office of Administration  
and Resources Management  
RTP, NC

Date: 3/2/00

Luther E. Mellen III

Luther E. Mellen III  
Chief, Architecture, Engineering and  
Real Estate Branch

## FINDING OF NO SIGNIFICANT IMPACT

### PROPERTY TRANSFER OF U.S. ENVIRONMENTAL PROTECTION AGENCY'S ENVIRONMENTAL RESEARCH CENTER ANNEX RESEARCH TRIANGLE PARK, NORTH CAROLINA

The U.S. Environmental Protection Agency (EPA) is constructing a new research facility in Research Triangle Park (RTP), North Carolina, to reduce the number of properties and facilities it occupies and its overall property costs. EPA plans to vacate seven properties and associated facilities over the next 2 to 3 years, including the Environmental Research Center Annex (ERC Annex), the Environmental Research Center (ERC), the Emissions Measurement Laboratory, the Annex Administration Building, the Catawba Office Building, Building 4201, and the North Carolina Mutual Life Insurance Building. These properties include buildings, mobile structures, tanks, sheds, vehicles, research-related equipment, and the site grounds. Activities performed on these properties include research and development, environmental studies, air quality planning, standards development, and administrative functions.

With construction of the new research center building complex nearing completion, EPA has evaluated the continued need for the existing ERC Annex facility and determined that the offices and laboratories are no longer adequate to support existing and projected future mission requirements and are excess to future EPA needs in the RTP area. Because the present leased facility is occupied under a lease agreement between the General Services Administration (GSA) and the landowner, EPA proposes to close and vacate the ERC Annex and return control of the facility to GSA.

#### 1. PROPOSED ACTION

In anticipation of EPA's vacating the seven previously mentioned properties over the next 2 to 3 years, the Agency has conducted a Phase I Environmental Due Diligence Process (EDDP) to evaluate the environmental condition of the subject properties and their associated facilities. EPA has conducted this Phase I EDDP to ensure compliance and conformance with the Community Environmental Response Facilitation Act (CERFA) and Title 40 of the Code of Federal Regulations (CFR) Part 373, and to minimize or eliminate the Agency's environmental risks or liabilities associated with the properties and related facilities. The Phase I EDDP is consistent with EPA's draft final *Guidelines for Acquiring and Transferring EPA Real Property and Complying with the Community Environmental Response Facilitation Act (CERFA)*, June 1998, and the American Society for Testing and Materials' (ASTM's) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-97.

After conducting studies to document the environmental conditions at the ERC Annex and before vacating the facility and returning control to GSA, EPA will take all necessary actions to determine and address the applicable environmental compliance requirements. These actions may include, as necessary, conducting the EDDP Phase II Confirmatory Sampling and Analysis and the Phase III Investigation and Cleanup. Specific activities within these respective places

encompass the following.

- Phase II of the EDDP consists of verifying suspected areas of environmental contamination through physical sampling and analysis.
- Phase III of the EDDP consists of managing and mitigating the areas of environmental contamination verified in Phase II.

After completing the full extent of required EDDP activities, EPA will return the property to GSA for subsequent use and disposition.

## **2. ALTERNATIVES CONSIDERED**

As required by EPA's regulations, 40 CFR Part 6—Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act, the attached Environmental Assessment (EA) considered all reasonable and viable alternatives, including a no action alternative. Although several alternatives were initially considered, two alternatives were considered reasonable:

- Cleanup, closure, and vacancy of the ERC Annex and return of control to GSA
- No action alternative.

The no action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this EA, however, the local environmental baseline is more appropriately described as an extensively developed suburban research park area situated south of Durham, North Carolina, in Durham County, North Carolina.

## **3. ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES**

Analysis indicates that the proposed action will not likely have a significant impact on the environment. Specifically:

- Groundwater and surface waters are not expected to be affected by the proposed closure of the facility, the transfer of existing government-owned resources, and the return of control of the facility to GSA.
- The facility does not appear to be contaminated by the use of hazardous materials and laboratory operations.
- EPA has initiated a program of studies to determine the potential and extent of contamination resulting from past EPA activities, and to identify any appropriate actions that should be taken to address the contamination.
- EPA has a program in place for addressing, as appropriate, the potential contamination resulting from EPA activities.

- Potential facility-, property-, and equipment-related contaminants will be addressed through planned cleanup procedures.
- Loss of employment opportunities related to closure of the facility should be recouped through reutilization of the facility by other users.

Consideration of the environmental impact minimization, mitigative, and control measures planned for the cleanup, closure, and transfer activities indicates that the proposed action should have no significantly adverse impacts, including direct and indirect cumulative impacts, on the quality of the human environment or on local natural resources. These planned measures are as follows:

- EPA will work with federal and state environmental staffs to ensure that all underground storage tanks and the inactive propane tank are in compliance with regulatory requirements when EPA vacates the ERC Annex.
- EPA will continue Phase II and III EDDP activities, as necessary, to ensure that the past sump pump (Room S100A), and welding activities do not pose an environmental risk.
- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory and office equipment, field equipment, mobile trailers, EPA property, hazardous chemicals, protective barriers, compressed gases, and wastes before transferring the facility to GSA.
- EPA will ensure that vacated facilities are cleaned to remove chemicals and substances that could pose a threat to new occupants or the environment.
- EPA will, where operations are governed by permit requirements, close operations in accordance with the permit closure requirements.
- EPA will conduct studies to determine the extent to which cleanup activities are needed to address potential contamination from past EPA activities.
- EPA will perform cleanup activities to the extent necessary for compliance with local, state, and federal environmental regulatory requirements;
- EPA will comply with Nuclear Regulatory Commission (NRC) license and regulatory provisions for ceasing Annex radiological activities and preparing used areas for future unrestricted use. EPA will also ensure that radioactive materials and associated equipment are transported to the new research center complex or other destinations in accordance with NRC license provisions and other applicable DOT regulations.
- EPA will transfer the closed facility to GSA for management, control, and reutilization by other occupants.

The proposed action will neither affect nor impact wetlands, floodplains, surface waters, cultural resources, or endangered species, and will not disproportionately affect minority or low-income populations.

Because there are no apparent significantly adverse environmental impacts associated with the proposed action, a finding of no significant impact (FNSI) has been recommended for the proposed cleanup and closure of the ERC Annex and the return of control of the facility to GSA. Consequently, an environmental impact statement (EIS) is not required for the proposed action.

#### 4. CONCLUSION

Based on the environmental impact analysis presented in the *Environmental Assessment for the Clean-Up, Closure, And Transfer Of The Environmental Research Center Annex At Research Triangle Park, North Carolina*, which is hereby incorporated by reference and is attached to this FNSI, it has been determined that the proposed action will have no significant impact on the quality of the human environment or on natural resources on the EPA ERC Annex property or in the neighboring community. Therefore, an EIS is not required and will not be prepared.

#### 5. PUBLIC COMMENT

Interested persons and agencies wanting to comment on the attached EA or this FNSI may do so by calling or writing to Mr. Lance Swanhorst, EPA, Architecture, Engineering and Real Estate Branch (AEREB), 1200 Pennsylvania Avenue, NW, Mail Stop 3204R, Washington, DC 20460, telephone number (202) 564-2160. Interested agencies, groups, and persons are invited to submit written comments to the above address within 30 days of the date of publication of this FNSI.

Date: 5/31/00

William G. Laxton  
William G. Laxton  
Director, Office of Administration  
and Resources Management  
U.S. Environmental Protection Agency  
Research Triangle Park, NC

Date: 5-31-2000

Luther E. Mellen III  
Luther E. Mellen III  
Chief, Architecture, Engineering and  
Real Estate Branch  
U.S. Environmental Protection Agency  
Headquarters, Washington, DC

## FINDING OF NO SIGNIFICANT IMPACT

### PROPERTY TRANSFER OF U.S. ENVIRONMENTAL PROTECTION AGENCY'S EMISSIONS MEASUREMENT LABORATORY RESEARCH TRIANGLE PARK, NORTH CAROLINA

The U.S. Environmental Protection Agency (EPA) is constructing a new research facility in Research Triangle Park (RTP), North Carolina, to reduce the number of properties and facilities it occupies, and its overall property costs. EPA plans to vacate seven properties and associated facilities over the next 2 to 3 years, including the Emissions Measurement Laboratory (EML), the Environmental Research Center (ERC), the ERC Annex, the Annex Administration Building, the Catawba Office Building, Building 4201, and the North Carolina Mutual Life Insurance Building. These properties include buildings, mobile structures, tanks, sheds, vehicles, research-related equipment, and the site grounds. Activities performed on the properties include research and development, environmental assessments, air quality planning, standards development, and administrative functions.

With construction of the new research center building complex nearing completion, EPA has evaluated the continued need for the existing EML leased facility, and determined that the offices and laboratories are no longer adequate to support existing and projected future mission requirements and are excess to future EPA needs in the RTP area. Because the present leased facility is used through a lease agreement between the General Services Administration (GSA) and the property owner, EPA proposes to close and vacate the EML and return control of the facility to GSA.

#### 1. PROPOSED ACTION

In anticipation of EPA's vacating the seven previously mentioned properties over the next 2 to 3 years, the Agency has conducted a Phase I Environmental Due Diligence Process (EDDP) to evaluate the environmental condition of the subject properties and their associated facilities. EPA has conducted this Phase I EDDP to ensure compliance and conformance with the Community Environmental Response Facilitation Act (CERFA) and Title 40 of the Code of Federal Regulations (CFR) Part 373, and to minimize or eliminate the Agency environmental risks or liabilities associated with the properties and related facilities. The Phase I EDDP is consistent with EPA's draft final *Guidelines for Acquiring and Transferring EPA Real Property and Complying with the Community Environmental Response Facilitation Act (CERFA)*, June 1998, and the American Society for Testing and Materials' (ASTM's) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-97.

After conducting studies to document environmental conditions at the EML, and before vacating the facility and returning control to GSA, EPA will take all necessary actions to determine and address the applicable environmental compliance requirements. These actions may include, as necessary, conducting the EDDP Phase II Confirmatory Sampling and Analysis and the Phase III Investigation and Cleanup.

- Phase II of the EDDP consists of verifying suspected areas of environmental contamination through physical sampling and analysis.
- Phase III of the EDDP consists of managing and mitigating the areas of environmental contamination verified in Phase II.

After completing EDDP activities, EPA will return the property to GSA.

## **2. ALTERNATIVES CONSIDERED**

As required by EPA's regulations, 40 CFR Part 6—Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act, the attached Environmental Assessment (EA) considered all reasonable and viable alternatives, including a no action alternative. Although several alternatives were initially considered, two alternatives were considered reasonable:

- Cleanup, closure, and vacancy of the EML and return of control of the facility to GSA
- No action alternative.

The no action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this EA, however, the local environmental baseline is more appropriately described as an extensively developed suburban research park area situated south of Durham, North Carolina, in Durham County, North Carolina.

## **3. ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES**

Analysis indicates that the proposed action will not have a significant impact on the environment.

- Groundwater and surface waters are not expected to be affected by the proposed closure of the facility, the transfer of existing government-owned resources, and the return of control of the facility to GSA.
- The facility was not contaminated significantly by the use of hazardous materials and laboratory operations.
- EPA has initiated a program of studies to determine the potential extent to which contamination resulting from EPA activities has occurred and to identify any appropriate actions that should be taken to address the contamination.
- EPA has a program in place for addressing, as appropriate, potential contamination resulting from EPA activities.
- Potential wastewater-related contaminants will be addressed through planned and relatively simple cleanup procedures.

- Any potential facility contaminants will be addressed through planned and relatively simple cleanup procedures.
- Loss of employment opportunities related to the closure of the facility should be recouped through reutilization of the facility by other users.

Consideration of the environmental impact minimization, mitigative, and control measures planned for the cleanup, closure, and transfer activities indicates that the proposed action should have no significantly adverse impacts, including direct and indirect cumulative impacts, on the quality of the human environment or on local natural resources. The planned measures are as follows:

- EPA will arrange for the collection, removal, and disposal or reutilization of laboratory equipment, field equipment, metal pipes, an office trailer, a mobile home, EPA property, hazardous chemicals, compressed gases, and wastes before transfer of the facility to GSA.
- EPA will ensure that the vacated facilities are cleaned to remove chemicals and substances that could pose a threat to new occupants.
- EPA will, where operations are governed by permit requirements, close operations in accordance with the permit closure requirements.
- EPA will conduct studies to determine the extent to which cleanup activities are needed to address contamination from past EPA activities.
- EPA will perform cleanup activities to the extent necessary for compliance with local, state, and federal regulatory requirements.
- EPA will comply with its Nuclear Regulatory Commission (NRC) license in disassembling and packaging the beta gauge before relocating the equipment, and will ensure that the materials and equipment are transported to Texas A&M University in accordance with NRC provisions.
- EPA will transfer the closed facility to GSA for management, control, and reutilization by other users.

The proposed action will neither affect nor involve wetlands, floodplains, surface waters, cultural resources, or endangered species and will not disproportionately affect minority or low-income populations.

Because no apparent significantly adverse environmental impacts are associated with the proposed action, a finding of no significant impact (FNSI) has been recommended for the proposed cleanup, closure of the EML, and the return of control of the facility to GSA. Consequently, no environmental impact statement (EIS) is required for the proposed action.

#### 4. CONCLUSION

Based on the environmental impact analysis presented in the *Environmental Assessment for the Cleanup, Closure, and Transfer of the Emissions Measurement Laboratory at Research Triangle Park, North Carolina*, which is hereby incorporated by reference and is attached to this FNSI, it has been determined that the proposed action will have no significant impact on the quality of the human environment or on natural resources on the EPA Emissions Measurement Laboratory property or in the neighboring community. Therefore, an EIS is not required and will not be prepared.

#### 5. PUBLIC COMMENT

Interested persons and agencies wanting to comment on the attached EA or this FNSI may do so by calling or writing to Lance Swanhorst, EPA, AEREB, 1200 Pennsylvania Avenue, NW, Mail Stop 3204R, Washington, DC 20460, (202) 564-2160. Interested agencies, groups, and persons are invited to submit written comments to the above address within 30 days of the date of publication of availability of this FNSI.

Date: 3/2/00

William G. Laxton  
William G. Laxton  
Director, Office of Administration  
and Resources Management  
RTP, NC

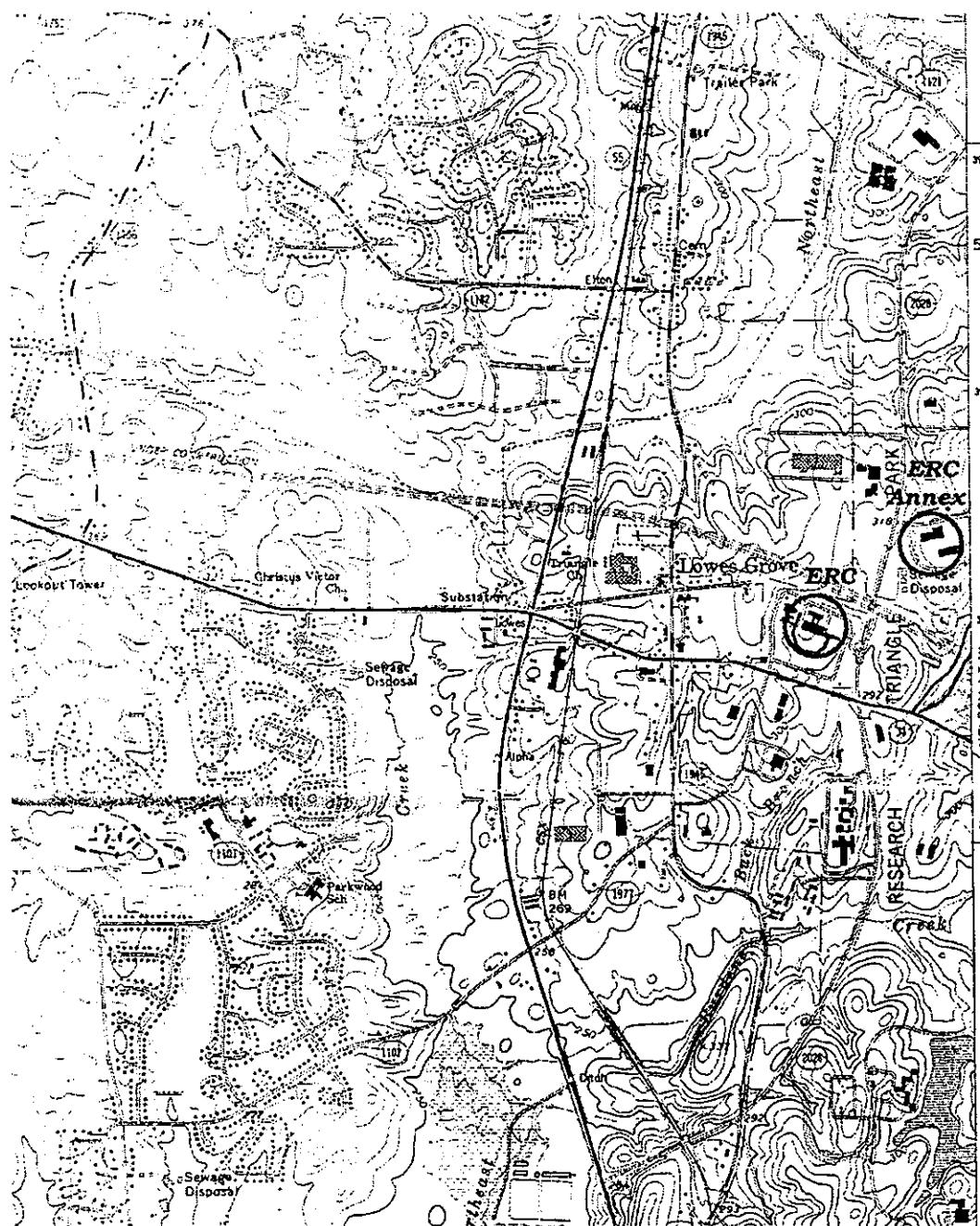
Date: 3/2/00

Luther E. Mellen III  
Luther E. Mellen III  
Chief, Architecture, Engineering and  
Real Estate Branch

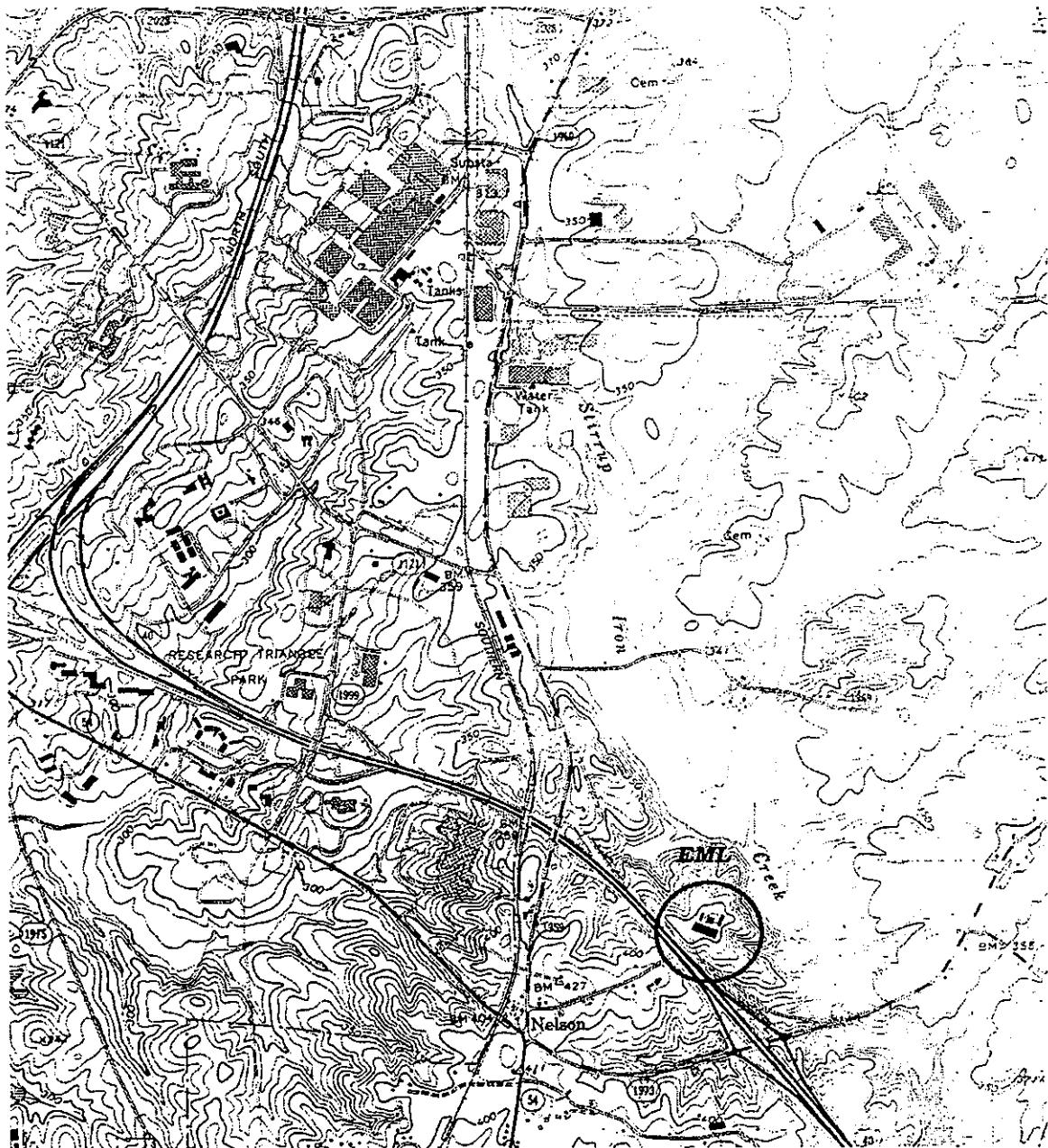
## **APPENDIX B**

**U.S. Geological Survey  
7.5-Minute Topographic Maps,  
Southwest and Southeast Durham, North Carolina**

U.S. Department of Interior Geological Survey  
Southwest Durham Quadrangle  
North Carolina



Southwest Durham, N.C.  
NW/4 Durham South 15' Quadrangle  
35078-H8-TF-024

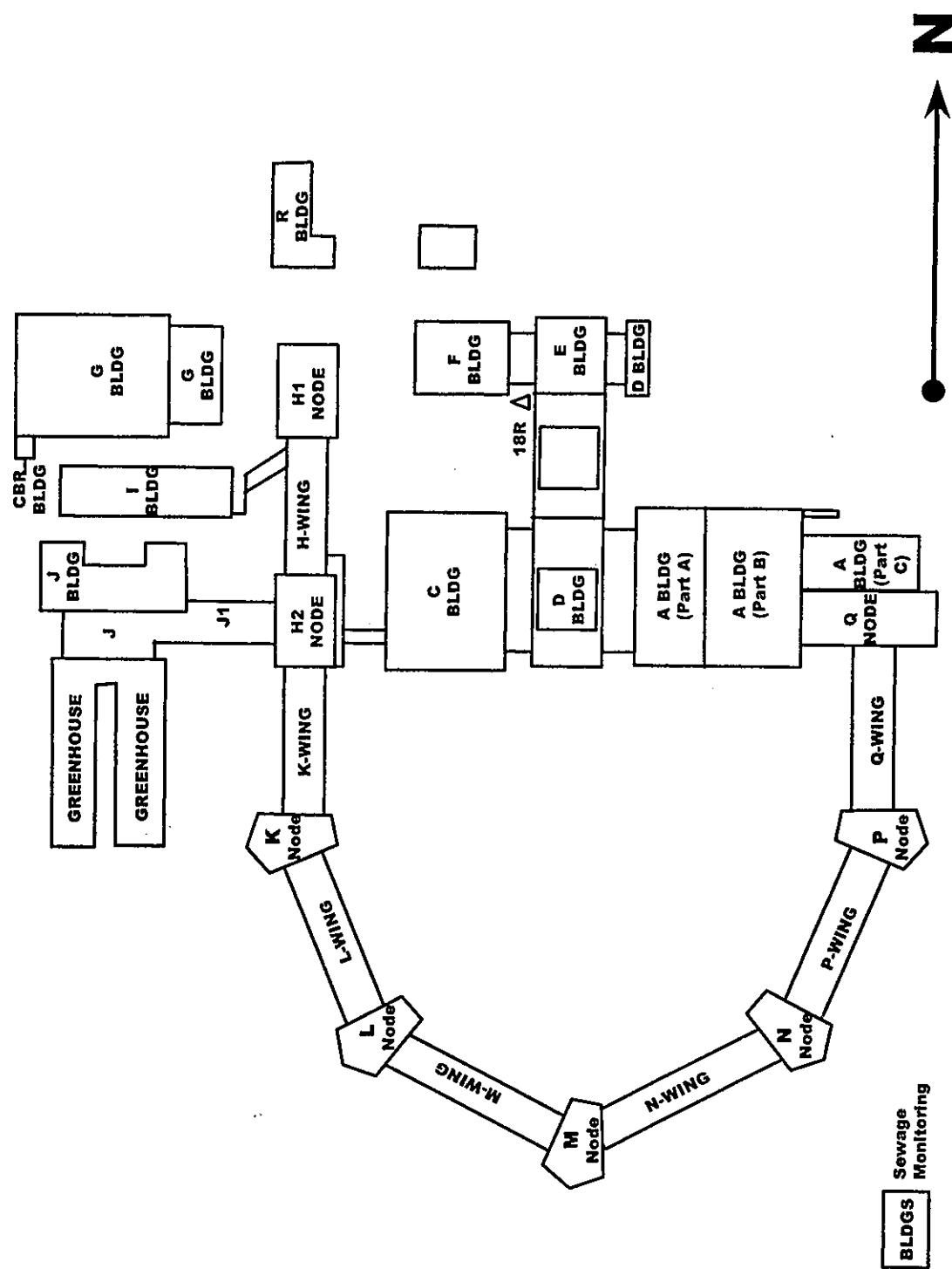


Southeast Durham, N.C.  
NE/4 Durham South 15' Quadrangle  
35078-H7-TF-024  
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DMA 5255 IV NE Series V842

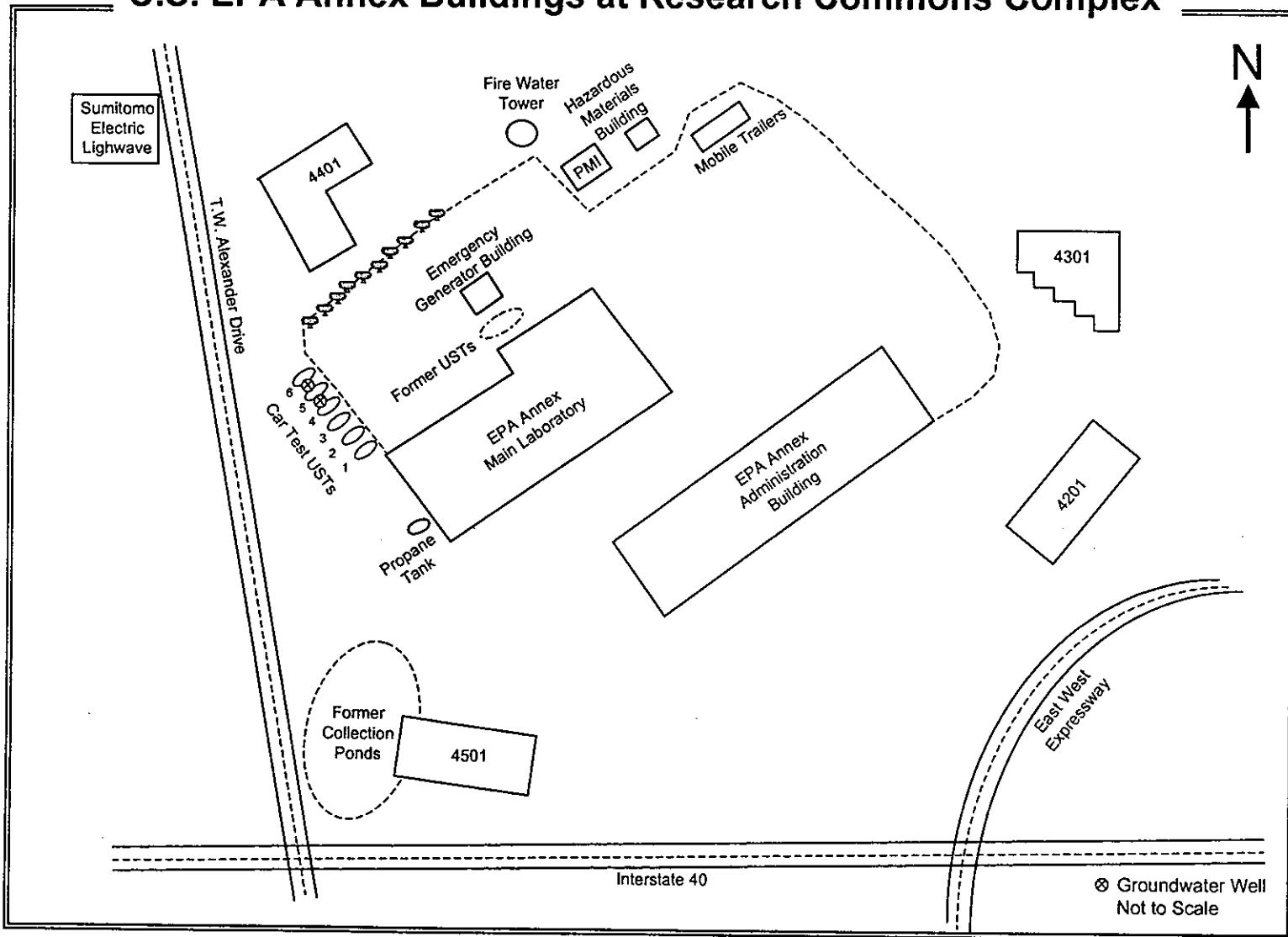
## **APPENDIX C**

**Site Plans for the ERC, the ERC Annex, and the EML**

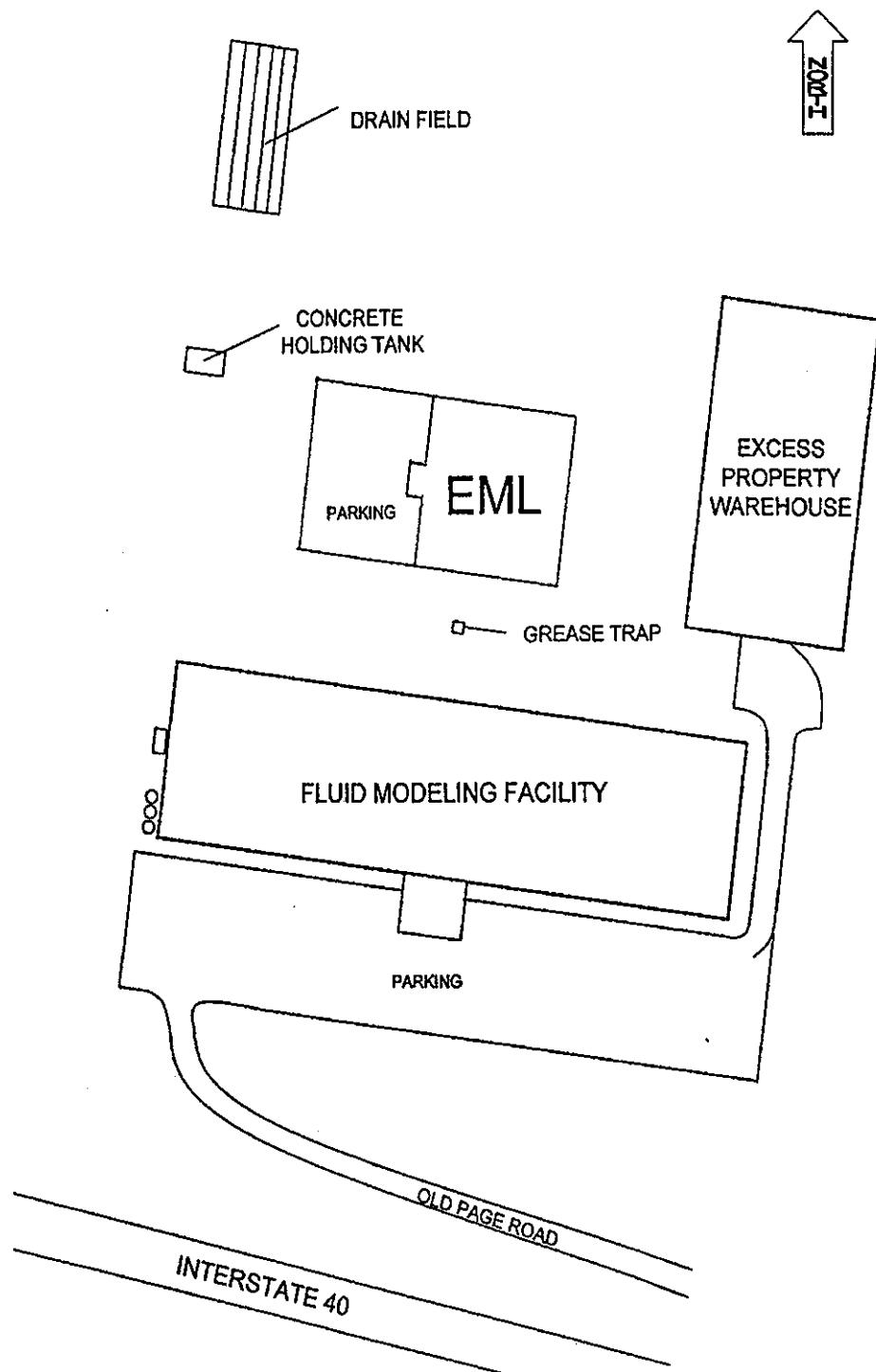
## Site Plan of the Environmental Research Center



Site Plan of the Environmental Research Center Annex



## Site Plan of the Emissions Measurement Laboratory



**APPENDIX D**

**Overview of EPA's EDDP**



## EPA's Environmental Diligence Process and Transferring EPA Real Property

Quick Reference Guide

The EPA's Office of Administration has established recommended procedures for environmental management activities associated with transferring EPA real property and complying with the Community Environmental Response Facilitation Act (CERFA). These environmental activities and recommended procedures are commonly referred to as the EPA's environmental due diligence process (EDDP). The intent of EPA's EDDP is to identify, document, manage, and mitigate as necessary EPA environmental liability associated with terminating or establishing its interest in real property. The EDDP applies when terminating or establishing EPA's interest in any real property or when transferring real property. For example, the EDDP should be performed when an EPA laboratory is closing and vacating its current location because of mission change, lease termination, or new construction.

To assist in the EDDP, EPA's Facilities Management and Services Division (FMSD) and Safety, Health and Environmental Management Division (SHEMD) developed *Guidelines for Transferring EPA Real Property and Complying with CERFA*, September 1997. This reference guide provides a summary of the *Guidelines* to give you an overview of the EDDP. Specifically, this guide briefly describes:

- The three phases of an EDDP
- General funding responsibilities for transferring EPA real property
- Other activities to complete as part of a property transfer.

### A THREE-PHASED PROCESS

EPA's EDDP for its laboratory facilities includes three phases to identify, document, manage, and mitigate environmental liabilities, risk, and contamination. The three phases are:

- Phase I: Preliminary Survey & Site Inspection
- Phase II: Confirmatory Sampling & Analysis
- Phase III: Investigation & Cleanup.

The type of real property transfer—acquisition, termination or closure, or lease—can have a direct impact on how many phases of the EDDP are performed. At a minimum, Phase I of the EDDP will be conducted for all EPA

real property acquisitions, terminations or closures, and leases. Phase II or III activities may not be required and depend on the results of the previous phase. For example, if a Phase I does not identify any potential environmental issues, then a Phase II would not be performed. However, if Phase II activities identified and confirmed the existence of environmental issues resulting from EPA operations and facility management, then Phase III would be considered to address the issues.

A brief description of each of the EDDP phases is provided below, however the *Guidelines* should be referenced for a comprehensive discussion of the process.

## **PHASE I - PRELIMINARY SURVEY AND SITE INSPECTION**

Phase I is the most important stage of the process, as it is the foundation for the other two phases. It is performed to qualitatively characterize the site and identify any suspected areas of environmental contamination that may require further investigation and remediation.

Phase I activities consist of the following activities:

- Planning the EDDP...
- Completing the site questionnaire
- Conducting a records review
- Performing a visual site inspection

- Conducting personnel interviews
- Gathering and evaluating data
- Developing a Phase I report.

Phase I activities require cooperation and information from all parties involved in the property transfer including EPA facility and environmental management representatives, the General Services Administration (GSA), other government entities, state and local municipalities, and contractors. Based on the data and information gathered during this phase, conclusions and recommendations are documented in a Phase I report.

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## **PHASE II - CONFIRMATORY SAMPLING AND ANALYSIS**

The objective of Phase II is to verify suspected areas of environmental contamination through physical sampling and analysis. Depending on the conclusions and recommendations described in the Phase I report, several activities may be performed under Phase II. Typically, Phase II activities consist of the following:

- Reviewing and evaluating the findings and information in the Phase I report
- Developing and implementing a sampling and analysis plan (SAP)

- Identifying preliminary remedial alternatives
- Developing a Phase II report.

The Phase II sampling and analysis results must be formally documented in a report. In addition to the fundamental components that are discussed in the *Guidelines*, the Phase II report includes recommendations for performing follow-on Phase III activities or terminating the EDDP.

---

## **PHASE III - INVESTIGATION AND CLEANUP**

The objective of Phase III is to manage and mitigate the areas of environmental contamination that were verified in Phase II. The Phase II report is used to analyze the potential contaminants of concern and to develop a strategy for Phase III. Typically, Phase III activities include:

- Reviewing and evaluating the findings in the Phase I and Phase II reports
- Developing and implementing a more extensive SAP

- Evaluating the risk associated with the contamination while considering future land-use
- Evaluating, selecting, and implementing remedial alternatives to address the contamination
- Developing a Phase III report.

In some cases, Phase II and Phase III activities will be performed concurrently.

## FUNDING RESPONSIBILITIES

A May 29, 1996 memorandum on management responsibility for transferring EPA real property, from the Office of Administration (OA) Director has established the following funding responsibilities.

- The funding resources for Phase I activities is usually the responsibility of the EPA's OA. The resources are allocated when the OA receives notification from the operating program offices or regional office that some type of real property transfer is anticipated.
- The funding resources for Phases II and III depend on site-specific conditions and operations, and could either be the operating program's or the OA's responsibility.
- If Phase II and III activities are a result of operational research activities, such as removing and disposing of hazardous materials and surplus chemicals, decontaminating laboratory equipment or other structures, safe shutdown of

laboratory equipment or operations, or cleanup of environmental testing media, then the program offices are considered responsible for providing the funding resources.

- If the Phase II and III activities are a result of facility-related activities, such as management of tank and sewer systems, buildings, or utilities, then the OA may provide the funding resources.

Additionally, the program offices are usually responsible for providing the funding resources for property transfer-related activities, such as equipment deactivation and decommissioning, facility surveillance and monitoring, management of personal property and surplus equipment, permit transfer or termination, building restoration and improvements, and removal of chemicals and hazardous substances. These property transfer-related activities must be performed in addition to the Phase I, II, and III EDDP and are briefly discussed below.

---

## PROPERTY TRANSFER-RELATED ACTIVITIES

During the property transfer and in concert with the EDDP, several activities should be performed independently or concurrently by various EPA organizations, including the OA and applicable program offices, to ensure real property is transferred legally, on time, and within budget. These activities are briefly described below.

*Removal of Chemicals and Hazardous Materials.* EPA laboratories usually have large amounts and a variety of chemicals, hazardous materials, and environmental samples and standards as a result of their laboratory research and analysis operations. During real

property transfer, these chemicals and hazardous materials must be properly managed (i.e., removed, relocated, or disposed of) before the property is vacated and in accordance with EPA, Occupational Safety and Health Administration (OSHA), and state and local regulations to ensure protection of human health and the environment.

*Permit / License Transfer or Termination.* EPA laboratory and facility operations involve numerous environmental activities and applications that usually require federal, state, or local permitting or licensing (e.g., RCRA or Clean Air Act permits, underground storage

tank permits, National Pollutant Discharge Elimination System permit, permits to discharge to the local publicly owned treatment works, or Nuclear Regulatory Commission licenses). Permits and licenses will need to be transferred or terminated before the real property transfer takes place.

**Personal Property and Surplus Equipment.** According to the federal real-estate regulations, 41 CFR §101-43.001-23, personal property means "any property, except real property, records of the Federal Government, and naval vessels." Surplus equipment means any excess article, implement, and so on, not required for use by the federal government. All personal property and surplus equipment should be properly managed in accordance with EPA's *Personal Property Management Policy Manual*. Additionally, before the property is vacated all personal property and surplus equipment should be removed and transferred off-site for future use elsewhere or proper disposal.

**Deactivation and Decommissioning.** Deactivation and decommissioning is the process of placing equipment in a safe and stable condition to minimize long-term costs of maintenance, while ensuring the protection of workers, the public, and the environment. Examples include removing and managing liquids and lubricants, draining and de-energizing nonessential components, removing and

managing hazardous substances, and disassembling or demolishing equipment.

**Surveillance and Monitoring.** For some facilities there will be a period, when the facility has been vacated and before additional real property transfer activities are performed, during which surveillance and monitoring of the property may be necessary. Surveillance and monitoring may not be necessary if an evaluation concludes that a thorough deactivation has been performed and safety, health, and environmental hazards are not present, or if the Phase I does not reveal any suspected areas of contamination. The *Guidelines* provide additional details on when surveillance and monitoring should be considered and may apply.

**Building Restoration and Improvements.** During the property transfer activities, buildings and facilities are often evaluated to determine their condition and integrity. Several building and facility components are inspected, including the structural integrity, electrical systems, exterior, plumbing, interior, basement, crawl space, and HVAC equipment. Any discrepancies or potential areas of concern noted are brought to the attention of the appropriate EPA representative, such as FMSD, SHEMD, and program offices. Therefore, depending on the severity of the problem, building or facility restoration or improvements may be considered.

For more information on this reference guide or to obtain a copy of the *Guidelines*, contact:

FMSD's Architecture, Engineering,  
and Real Estate Branch Chief  
Office of Administration  
Phone: (202) 260-2160

or

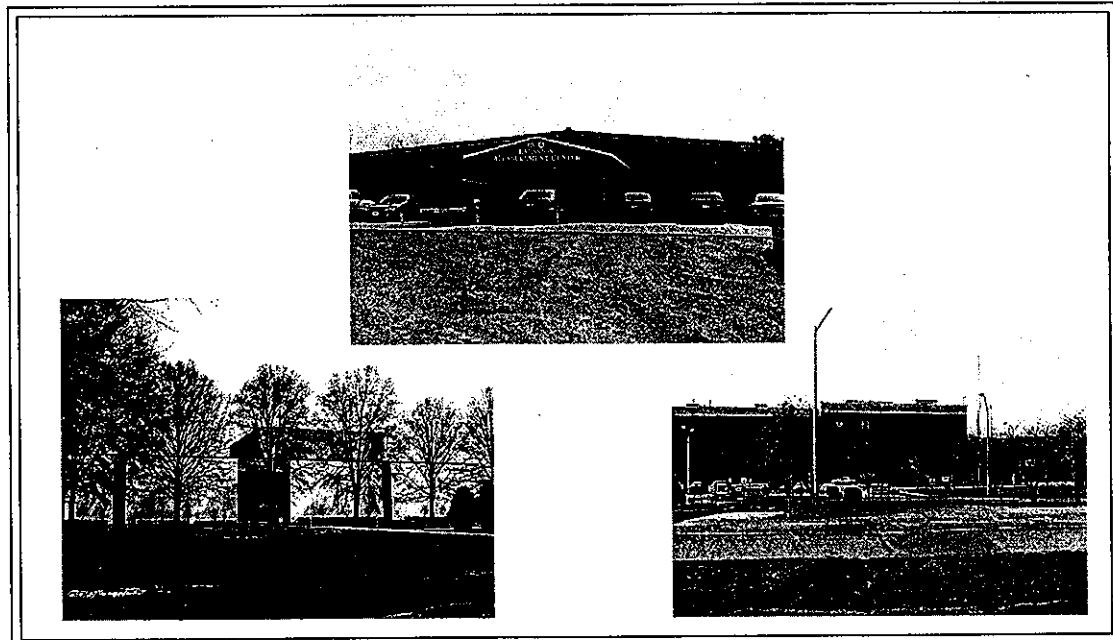
SHEMD's Technical Support and  
Evaluation Branch Chief  
Office of Administration  
Phone: (202) 260-1640

## **APPENDIX E**

**Brochure Describing Phase II and III EDDP Sampling Activities**



# Sampling Activities at EPA's Environmental Research Center, Environmental Research Center Annex, and Emissions Measurement Laboratory Research Triangle Park, North Carolina



Information for EPA Employees and others working and living in the  
Research Triangle Park Area—

How the EPA is making certain that the Agency's move to its new quarters  
is not leaving behind any hazardous problems

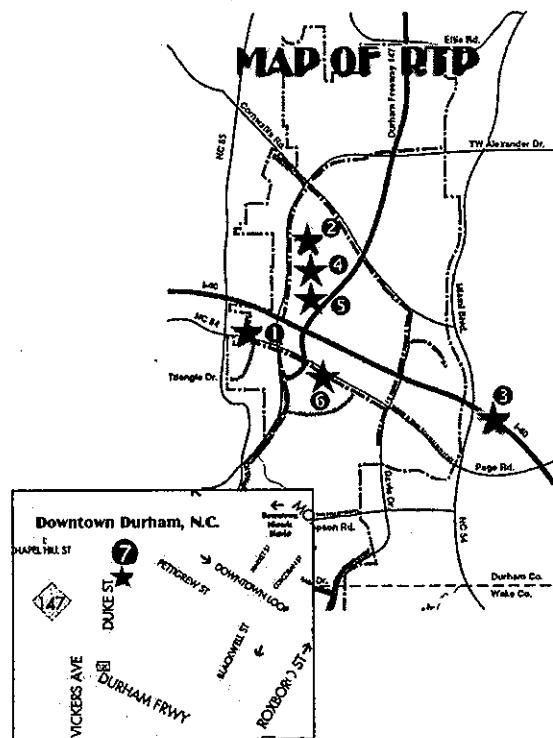


## EPA Mission:

The mission of the Environmental Protection Agency is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends.

## Purpose

The purpose of this notice is to inform EPA's employees and contractors, and the local community, of planned environmental sampling activities in Research Triangle Park (RTP), North Carolina, which will begin in summer 2000 and may continue through 2001. This sampling will fulfill federal, state, and local environmental regulatory requirements associated with relocating facility employees and operations.



\* Seven EPA facilities in RTP, NC. (See list under Background)

## Background

To consolidate its facilities and reduce costs, EPA is planning to relocate from seven buildings in RTP and Durham, N.C., to one new facility also located in RTP. Due to the nature of EPA's operations, various chemicals, hazardous materials and radiological materials are used in environmental research. Though EPA has been diligent in the proper storage, handling and disposal of such materials, EPA takes proper procedures to ensure that environmental hazards do not exist upon vacating its properties. Consequently, EPA is following its own environmental protocol through an Environmental Due Diligence Process (EDDP) to identify, document, manage, remove, and mitigate any environmental contamination or risk to health caused by EPA activities at the following properties:

1. Environmental Research Center (ERC), RTP
  2. ERC Annex, RTP
  3. Emissions Measurement Laboratory (EML),  
RTP
  4. Annex Administration Building, RTP
  5. Building 4201, RTP
  6. Catawba Building, RTP
  7. North Carolina Mutual Life Insurance Building  
Durham

EPA's EDDP is a three-phase approach, including site assessment (Phase I), confirmatory sampling (Phase II), and cleanup and decontamination (Phase III). EPA is performing the EDDP in accordance with the Community Environmental Response Facilitation Act (CERFA), American Society for Testing and Materials (ASTM) standard E 1527, and EPA's EDDP guidelines. Pre-

and reduce costs, from seven buildings in new facility also nature of EPA's operation of hazardous materials, re used in environmental A has been diligent in disposal of proper procedures to hazards do not exist. Consequently, EPA follows protocol through the Environmental Decision Process (EDDP) to remove, and mitigate contamination or risks at facilities at the following:

inter (ERC), RTP

aboratory (EML),

ding, RTP

Insurance Building,

approach, including confirmatory sampling and decontamination during the EDDP in industry Environmental CERFA), American standards (ASTM) standards and guidelines. Pres-

ently, the EPA has completed Phase I. Phase II and III EDDP activities will begin in summer 2000 and will continue through 2001.

EPA is required under CERFA to notify present and future property owners of possible environmental contamination.

### Findings from Phase I

The Phase I Site Assessment for the seven facilities listed at left, and shown on the map of RTP, was completed in July 1999. The Phase I report indicates that no suspect areas of contamination exist at the administration buildings, including the Annex Administration Building, Building 4201, the Catawba Building, and the North Carolina Mutual Life Insurance Building. Consequently, EPA has not scheduled any Phase II sampling or Phase III cleanup activities at these facilities.

Although hazardous conditions were not evident at the ERC, the ERC Annex, and the EML, findings indicate that some areas of potential environmental concern may exist at these facilities and warrant further investigation through the Phase II sampling process. Working conditions in and around the sample sites, however, are considered to be safe if personnel follow safety procedures. The areas of potential environmental concern at these facilities are related to past EPA laboratory operations, including the use and storage of hazardous and radiological materials and waste management practices and activities; and the closeout of environmental permits and a Nuclear Regulatory Commission license.

### What to Expect

Contractors will be on site collecting and analyzing samples at the ERC, the ERC Annex, and the EML. Contractors will comply with, or conform to, all applicable regulations and protocols to ensure their own safety as well as the safety of facility employees and the general public. Do not be alarmed if you see people in hazardous chemical safety gear working around your area. Even though conditions are not considered hazardous, occupational safety and health regulations may require sampling personnel to wear personal safety equipment, such as protective suits, safety goggles, and respirators. Access to identified sites will be restricted during sampling and clean-up activities.

### Next Steps

EPA will perform Phase II sampling from summer 2000 through 2001. Based on the results of the sampling, clean-up, and decontamination of the sites may be required.



## NEPA Process

In addition to the EDDP process, the EPA follows the procedures of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321) and EPA's regulations for implementing NEPA (40 Code of Federal Regulations Part 6). NEPA establishes the national environmental policy and goals for the protection, maintenance, and enhancement of the environment. NEPA also mandates that EPA produce a document that evaluates potential impacts on the environment before making decisions on major federal actions that may significantly affect the environment. For these documents, EPA uses a multidisciplinary process to provide environmental impact information to federal, state, local, and tribal officials, as well as citizens.

EPA's decision to vacate the previously noted seven facilities is considered a major federal action under the purview of NEPA. Therefore, EPA initiated NEPA reviews for these facilities while completing the EDDP and relocation schedule. EPA completed and published in-depth NEPA documents for activities at the EML and the ERC on March 31, 2000. Under the regulatory requirements of NEPA, the public had 30 days to review and comment these NEPA documents. EPA recently completed NEPA documents for the ERC Annex and these documents are available for public review and comment at the locations listed below. The public has until July 10, 2000, to submit comments to EPA.

US EPA Environmental Research Center Library  
86 TW Alexander Drive, Room C-100  
Research Triangle Park, NC 27709

Telephone: (919) 541-2777

US EPA Mutual Building Library  
NC Mutual Life Building, Room 821  
411 West Chapel Hill Street  
Durham, NC 27701

Telephone: (919) 541-5514

Cameron Village Regional Library  
Cameron Village Shopping Center  
1930 Clark Avenue  
Raleigh, NC 27605

Telephone: (919) 856-6710

Durham County Public Library  
300 North Roxboro Street  
Durham, NC 27701

Telephone: (919) 560-0100

For information from EPA Public Affairs contact:

DEBBIE JANES

(919) 541-4577

For additional information on EDDP activities contact: RUSS KULP

(919) 541-2130

For additional information on NEPA activities contact: LANCE SWANHORST

(202) 564-2160



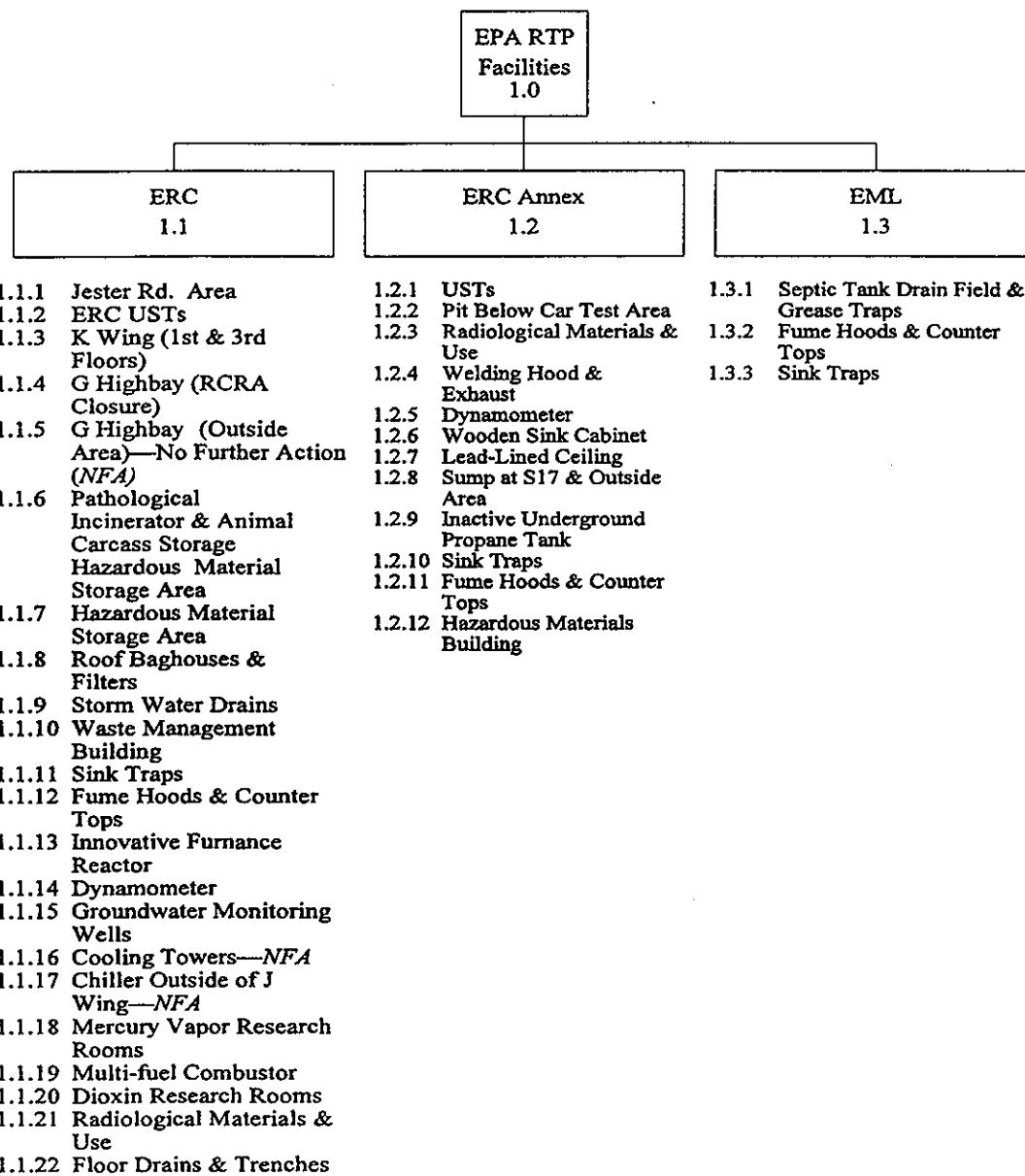
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## **APPENDIX F**

### **Overview of Potential and Actual Areas of Environmental Concern at EPA's RTP Facilities**

## Overview of Potential and Actual Areas of Environmental Concern at EPA's RTP Facilities

The following pages briefly describe the potential or actual environmental concerns at the subject sites, the Environmental Research Center (ERC), the ERC Annex, and the Emissions Measurement Laboratory (EML). These issues will be addressed through Phases II and III of the Environmental Due Diligence Process (EDDP). Below is a list of the potential and actual areas of environmental concern organized by location.



## **1.1 Environmental Research Center (ERC)**

### **Project 1.1.1—Jester Road Area**

The Jester Road area is located approximately 100 yards northwest of the ERC and covers approximately 9 acres of the 41.67 acres at the ERC complex. The area is segregated into three parcels of land by a 6-foot-high chain-link fence that surrounds the entire 9 acres. Each parcel of land is secured by a chain-link fence, and has its own locked entrance, with keys given only to authorized personnel, employed by either the U.S. Environmental Protection Agency (EPA) or the property owner. The westernmost area is the largest of the three areas, covering approximately 7 acres, and is generally referred to as the Storage Shed Area, since storage sheds were removed from the location in the mid-1980s. This area consists mostly of high vegetation and trees. The topography slopes downward in a northwesterly direction toward Interstate 40. The area is vacant and contains no structures. The middle area is the smallest area of the three, covering less than 1 acre of land, and is generally referred to as the Former Chemical Management Area. It also consists mostly of high vegetation and trees; its topography slopes to the north in the direction of Interstate 40. This middle area also is vacant and contains no structures. The easternmost parcel of land covers approximately 1.15 acres. It is the only area of the three that is actively managed and occupied by EPA. At the time of the site inspection, this area contained 15 storage sheds or trailers, a vehicle (mobile home), 2 mobile generators, and a drum container with solid, dry-filled 55-gallon drums. The easternmost area is often referred to as the Shed and Vehicle Storage Area. This area is the only actively used area of the three at Jester Road. EPA uses the area for research operations. A summary of the three distinct parcels of land that constitute the Jester Road Area is provided below.

*Storage Shed Area*—This area is approximately 7 acres in size and is currently vacant. It is covered mostly by high vegetation and trees. The area contained storage sheds from the 1970s into the mid-1980s. The sheds were used to store property, including scrap metals, and were removed from the area in the mid-1980s.

EPA conducted preliminary screening on the eastern border of this area. The screening involved cutting soil borings in three locations and taking soil samples at depths of 0 to 2 feet and 2 to 4 feet. The soil was sampled for metals, dioxins, semi-volatile organic compounds (SVOC), volatile organic compounds (VOC), and pesticides. The results of the screening are documented in *Field Investigation Report, U.S. Environmental Protection Agency Research Triangle Park Facilities, Research Triangle Park, North Carolina*, dated June 28, 1999. This report indicates that VOCs (acetone), SVOCs (benzoic acid), metals (arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, thallium, vanadium, and zinc), and dioxins (1,2,3,4,5,6,7,8-heptachloro-dibenzo-p-dioxin and octachlorodibenzo-p-dioxin) are present at Jester Road. In the storage shed area, only arsenic and beryllium are present at levels above North Carolina Department of Environment and Natural Resources (NCDENR) Inactive Hazardous Site Branch generic soil remediation goals. These concentrations could reflect background levels in the area or could result from past practices or operations.

*Former Chemical Management Area*—This area is approximately 0.3 acres in size and is currently vacant. It is covered mostly by high vegetation. From the 1970s through the mid-1980s, this area was used by EPA to manage chemicals and hazardous constituents, including dioxins, dibenzofurans, polychlorinated biphenyls, SVOCs, inorganics, and organic chemicals and reagents. Discussions with EPA personnel and review of late-1970s and mid-1980s aerial photographs indicated that chemicals and hazardous constituents were managed in roughly 20 to 25 sheds in the eastern and central portions of the area. Site personnel indicated that past management practices may have resulted in spills or releases into the environment in this area.

EPA conducted preliminary screening on the perimeter of this area. The screening involved cutting soil borings in numerous locations and taking soil samples at depths of 0 to 2 feet and 2 to 4 feet. The soil was sampled for metals, dioxins, SVOCs, VOCs, and pesticides. The results of the screening are documented in *Field Investigation Report, U.S. Environmental Protection Agency Research Triangle Park Facilities, Research Triangle Park, North Carolina*, dated June 28, 1999. This report indicates that VOCs (acetone), SVOCs (benzoic acid), metals (arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, thallium, vanadium, and zinc), and dioxins (1,2,3,4,5,6,7,8-heptachloro-dibenzo-p-dioxin and octachlorodibenzo-p-dioxin) are present at Jester Road. In the former chemical management area, only arsenic, selenium, and thallium are present at levels above NCDENR Interactive Hazardous Site Branch generic soil remediation goals. These concentrations could reflect background levels in the area or could result from past practices or operations.

*Shed and Vehicle Storage Area*—Currently, this storage area is the only actively used area of the three at Jester Road. The area covers approximately 1.15 acres and contains 15 storage sheds or trailers, a drum storage rack with drums, and 2 vehicles. The area has been used for research operations in the past and continues to support current activities. For example, an Open Burn Test Facility (OBTF) operates in one of the sheds for research on burning wood, coal, tires, agricultural plastics, fiberglass, food, garbage, and other debris. The OBTF consists of an oven (2 feet by 3 feet), including a burn chamber and stack, contained in a shed (10 feet by 12 feet) that is used by EPA ORD National Risk Management Research Laboratory (NRMRL) for open burning. Because the OBTF has never been formally decontaminated after use, hazardous constituents from the combustion process may be present in the fly and bottom ash, residuals inside the chamber, and the interior of the exhaust stack. Other research, which may have involved the use of a variety of hazardous constituents has also been performed in this area through the use of mobile trailer laboratories; however, this research is not as well documented as that performed in the OBTF. This area also had two aboveground storage tanks, each with a capacity of approximately 50 gallons, that reportedly contained a petroleum product. These tanks did not have secondary containment or a concrete pad to contain or collect drips or spills. According to site personnel, the tanks were removed from the area in January 1998, but petroleum residuals may remain in the soil where the tanks were located. The other sheds are used to store maintenance and repair equipment, gasoline, and other hazardous materials.

EPA conducted preliminary screening on the western border of this area and in the vicinity of the OBTF and the former ASTs. The screening involved cutting soil borings in numerous locations and taking soil samples at depths of 0 to 2 feet and 2 to 4 feet. The soil was sampled for metals, dioxins, SVOCs, VOCs, and pesticides. The results of the screening are documented in *Field Investigation Report, U.S. Environmental Protection Agency Research Triangle Park Facilities, Research Triangle Park, North Carolina*, dated June 28, 1999. This report indicates that VOCs (acetone), SVOCs (benzoic acid), metals (arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, thallium, vanadium, and zinc), and dioxins (1,2,3,4,5,6,7,8-heptachloro-dibenzo-p-dioxin and octachlorodibenzo-p-dioxin) are present at Jester Road. In the shed and vehicle storage area, only arsenic, beryllium, and thallium are present at levels above NCDENR Inactive Hazardous Site Branch generic soil remediation goals. These concentrations could reflect background levels in the area or could result from past practices or operations.

EPA will perform Phase II sampling in all three Jester Road areas to verify and supplement preliminary screening sampling results. Soil samples and, as appropriate, groundwater samples will be collected to determine if past research or storage operations impacted the environment. While no significant environmental concerns are anticipated, EPA will mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with NCDENR regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.2—ERC Underground Storage Tanks (UST)**

The ERC has had 29 active, inactive, and closed-in-place or removed storage tanks on the property. Twenty-three of these tanks are or were owned by EPA, and six are or were owned by the property owner. Documentation indicates that 29 tanks have been closed or are actively managed in accordance with the State of North Carolina regulations. Although some of the removed tanks required remediation due to releases resulting from tank system failures, EPA and the property owner completed this remediation under the direction of the State of North Carolina. The remediation required groundwater well installation and monitoring in selected areas, soil cleanup in selected areas, and tank removal or closure. Because groundwater sampling performed during the tank closure activities indicated no contamination, remediation was limited to soil cleanup and tank removal or closure. No institutional controls or post-remediation activities were required.

Tanks 4A–6A are active USTs located outside of Q Node. These tanks were installed in 1993 to provide fuel and gasoline supplies to vehicles for research using the dynamometer. No active monitoring or gauging records exist for the period from April 1993 to November 1996. These tanks were screened to determine whether any potential environmental concerns existed. The results of the screening were inconclusive because the contractor could not take a sufficient number of soil samples due to the high water table. Additionally, no groundwater samples were collected because this activity was not in the SOW. Based on the inconclusive screening results, these tanks and the surrounding area are considered a potential environmental concern.

The tanks identified as 4A–6A will be removed and properly closed in accordance with NCDENR and federal requirements. Appropriate soil and/or groundwater samples will be collected during the closure process. Because the tanks were recently installed, no environmental concerns are anticipated during the sampling and tank closure process; however, EPA will mitigate any contamination that is discovered in accordance with NCDENR UST regulations. Following removal of the USTs, the area will be restored to its original (pre-EDDP) condition.

#### **Project 1.1.3—K Wing (1st and 3rd Floors)**

These rooms are occupied and operated by EPA's ORD and have been used for carcinogen and radioactive research for more than 20 years. Although no major spills or releases are documented, EPA site personnel stated that hazardous constituents and radioactive materials could be present from past practices, releases, equipment leaks, or accidents. Suspected areas of contamination include fume hoods, countertops, dust accumulation areas, and laboratory equipment.

EPA performed preliminary screening on 4 of the 19 rooms on these floors (Rooms 111, 309, 310, and 321) to determine whether hazardous constituents were present in or on the fume hoods, countertops, dust accumulation areas, and laboratory equipment. The screening detected bis(2-ethylhexyl)phthalate in one sample; octachlorodibenzo-p-dioxin in another sample; and metals, including arsenic, barium, cadmium, chromium, lead, mercury, and silver, in wipe samples. The concentrations of these constituents were low and are likely attributed to chemicals used in normal research operations. Detailed information on the screening results is contained in a separate document, *Field Investigation Report, U.S. Environmental Protection Agency Research Triangle Park Facilities, Research Triangle Park, North Carolina*, dated June 28, 1999.

The countertops, fume hoods, dust accumulation areas, and laboratory equipment located in K Wing will be decontaminated by wiping down surfaces with appropriate solvents. Following decontamination, swipe samples will be collected from each of the floors to verify that the surfaces have been adequately decontaminated. If verification samples determine that surfaces were not sufficiently decontaminated, additional cleanup will be performed and verification samples will be collected to ensure the area is fully decontaminated.

#### **Project 1.1.4—G Highbay (Resource Conservation and Recovery Act [RCRA] Closure)**

G Highbay contains six hazardous waste combustors, including the fluidized bed reactor, the rotary kiln, the package boiler simulator (PBS), the rainbow tunnel combustor (rainbow), the North American Boiler, and the plasma arc furnace. The six combustors are manifolded into a flue gas cleaning system (FGCS), which is permitted with NCDENR for RCRA Research, Development, and Demonstration (RD&D) activities and with the NCDENR Division of Air Quality for emissions. The G Highbay areas are occupied and operated by EPA's ORD NRMRL, which also holds the RCRA RD&D permit. The FGCS consists of the incinerator quench, a baghouse filter system, and a scrubber. This system cleans the off-gases generated in the combustion process.

According to site personnel and records, because these units typically burn fuel and hazardous constituent mixtures, the by-products and residues generated by the combustion process may contain hazardous constituents. Three of the six combustors, the rotary kiln, the PBS, and the rainbow, as well as the baghouse, will be moved to the new facility for future research operations. The remaining combustors and the FGCS will be decontaminated in accordance with NCDENR's RCRA RD&D permit requirements. EPA is currently developing a RCRA RD&D permit closure plan for submittal to NCDENR for review and comment, which upon NCDENR approval, will be used to determine appropriate decontamination methods, and waste characterization and disposal. Confirmation sampling will be performed following the decontamination to ensure that efforts were successful. Following completion of all decontamination and confirmation sampling, the RCRA RD&D permit will be closed with NCDENR.

#### **Project 1.1.5—G Highbay (Outside Area)**

This project has been determined to require no further action.

#### **Project 1.1.6—Pathological Incinerator and Animal Carcass Storage**

The pathological incinerator is a North Carolina-regulated unit owned by the property owner and operated by EPA ORD for the past 20 years. Specifically, the property owner owns and manages the permit with the State of North Carolina, and EPA or its contractors operate it. The incinerator is located outside of R Building.

The incinerator, which was installed and began operations in 1979, is permitted with the NCDENR Division of Air Quality. From 1979 to the present, the incinerator has been operated by three contractors. The property owner has performed preventive maintenance and tests on the incinerator during its operations over the past 20 years. According to interviews with site personnel, the incinerator burns a variety of wastes, including animal carcasses, animal bedding, uncontaminated laboratory waste, biohazardous waste, plastics, medical waste, and low-level decayed waste (e.g., tritium and carbon-14). The property owner has burned used oil in the incinerator.

As a result of the constituents burned in the incinerator, by-products and residuals may typically contain hazardous constituents. The property owner intends to continue use of the pathological incinerator after EPA vacates the property. EPA will remove all ash and incineration by-products from the incinerator, and will properly characterize and dispose of all wastes in accordance with federal, state, and local requirements.

#### **Project 1.1.7—Hazardous Material Storage Area**

The hazardous materials storage area is located in ERC's R Building, and is used to store various types of chemicals and hazardous materials, including solvents, bases, acids, and oils for use in research operations. These materials are stored on shelves in containers, and the area has secondary contaminant and epoxy floors. This area has been used for storage of hazardous materials for approximately 17 years.

Site characterization will be undertaken as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.8—Roof Baghouses and Filters**

The ERC baghouses and filters located on the roofs of H and K Wings are used to filter air emissions circulated from the interior of the laboratories. Research conducted in the H and K Wings involves the use of chemical reagents and hazardous constituents, including carcinogens, metals, pathogens, radioactive materials, SVOCs, and VOCs. During the use and management of these chemicals, they volatilize in the fume hoods and biological safety hoods and flow through air ducts to the baghouses and filters on the roof. The filters will be removed and disposed of as part of the Phase III EDDP activities. All baghouse filters will be removed, and appropriate waste characterization of the filters for waste determination will be performed. Following removal of the filters, the interior surfaces of the baghouses will be decontaminated using a high-pressure wash. The wash waters and filters will be sampled for appropriate waste characterization and disposal. Following decontamination, swipe samples from each of the baghouses will be collected to verify that decontamination efforts are complete.

#### **Project 1.1.9—Storm Water Drains**

The storm water drains are located around the exterior of the building. Storm water flows in a southeasterly direction. During a site visit, some storm water drains appeared dirty and contained debris. One contained a greyish-white sludge. According to site personnel, this sludge is stripping wax residuals. Additionally, site personnel and the property manager stated that releases and spills had occurred on site grounds and had been reported. The storm drains may contain residues from these spills. Site characterization will be undertaken as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina and municipal storm water discharge regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.10—Waste Management Building**

The ERC waste management building is located east of the R Building. Two storage areas are associated with the building, one area that stores hazardous, nonhazardous, and low-level radioactive wastes, and another area that stores supplies and research compressed gases. The waste management building is a RCRA large quantity generator (LQG) storage area. There has been only one reported spill, which occurred on March 3, 1997 and involved a mixture of toluene, methanol, and dioxin, at less than 50 parts per million, stored in a four-liter bottle with insufficient head-space. The spill was confined in secondary containment and cleaned upon observation.

EPA will properly close hazardous waste generation and storage operations, including decontamination of the waste management building, in accordance with the State of North Carolina's RCRA LQG requirements. The decontamination will include a solvent and/or high-

pressure wash, and confirmation samples will be collected to verify that the decontamination was complete. All wastes generated during the decontamination activities will be characterized for appropriate waste disposal.

#### **Project 1.1.11—Sink Traps**

Due to the historical disposal practices of laboratory chemicals, residuals may be contained in the ERC laboratory sink traps. The Phase I EDDP investigation revealed that the sink traps located in the laboratories appeared clear and in good condition with no significant buildup. The sink traps were screened for mercury vapors in October 1998 using a portable Jerome 431-X Gold Film Mercury Analyzer as part of the preliminary screening activities. The results indicated that mercury vapors were present. The benchwork and sinks will be left in place by EPA.

The sink traps will be decontaminated by disconnecting the traps and emptying the contents into hazardous waste containers. Following decontamination, a mercury vapor analyzer will be used to verify that no mercury vapors remain. The traps will be reattached and the sinks restored to their original (pre-EDDP) condition.

#### **Project 1.1.12—Fume Hoods and Countertops**

In the past, site personnel managed and used chemical reagents and hazardous constituents on the surfaces of the countertops and in the fume hoods. As a result, spills or releases of these substances may have occurred over the period of EPA's occupancy. Ten percent of the fume hoods were screened for the presence of perchlorate salts in November 1998 as part of preliminary screening activities. The analytical results did not indicate the presence of any detectable concentrations of perchlorate salts. Additionally, based on EPA's Asbestos Operation and Maintenance Work Practices Report for Research Triangle Park (RTP) facilities, the fume hoods probably contain transite board, which is in good condition and is nonfriable. The benchwork, fume hoods, and countertops will be left in place by EPA.

All countertop and fume hood surfaces will be decontaminated by wiping down surfaces with appropriate solvents. Following decontamination, swipe samples will be collected from each of the laboratories to verify that the surfaces have been adequately decontaminated.

#### **Project 1.1.13—Innovative Furnace Reactor (IFR)**

The IFR is a 30-cubic-feet-per-minute vertical combustor, housed in room C127. The reactor is operated by EPA ORD NRMRL. It burns coal, natural gas, and fuel oil. Gases, such as sulfur dioxide ( $\text{SO}_2$ ) and hydrogen sulfate ( $\text{HSO}_4$ ), are added into the gas stream during research operations. According to facility personnel, chlorinated solvents were burned in the reactor on at least one occasion. Site personnel also indicated that the reactor has operated for approximately 15 years, but research to-date has not confirmed what activities were performed in the room from 1970 to 1982.

The reactor operates approximately 40 percent of the year. Its refractory (i.e., brick-like material around the combustion chamber) was replaced about 4 years ago. Although the reactor does not

burn hazardous wastes, it may contain hazardous constituents from by-products and residues typically generated during the combustion process.

Site characterization will be undertaken as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.14—Dynamometer**

The dynamometer is located in the ERC Room Q130. It is operated by EPA ORD NERL. It consists of a light duty vehicle system that is used for car emissions research. This dynamometer was installed in 1972 and has been operated continuously since that year, except for a renovation period in 1993. During the renovation, the rollers were replaced, the pit and constant volume sampling system were cleaned, and an evaporation enclosing containment system was installed. Upon dismantling and decommissioning of the dynamometer equipment, contamination will be cleaned up by a licensed contractor using absorbent materials and solvents. The residue and waste materials will be disposed of as hazardous waste. It is likely that the flooring will not be impacted and that it can be left in place in a state that is not injurious to human health or the environment.

#### **Project 1.1.15—Groundwater Monitoring Wells**

A total of six wells have been installed by EPA at the ERC during the excavation and remediation of USTs. The wells were installed during the excavation and remediation of UST systems at the ERC to determine if hazardous or petroleum constituents had migrated into the groundwater from reported storage tank releases. The wells were installed for monitoring purposes only. The monitoring wells are no longer used. The locations of the wells are listed below:

- Two observation wells in the vicinity of Q Node
- One observation well across the perimeter road near D Building
- One observation well in close proximity to R Building
- One observation well behind G Highbay
- One observation well behind K Wing.

These existing six groundwater monitoring wells will be abandoned in accordance with the North Carolina Administrative Code, Title 15A, Subchapter 2C, Section .0113.

#### **Project 1.1.16—Cooling Towers**

This project has been determined to require no further action.

#### **Project 1.1.17—Chiller Outside of J Wing**

This project has been determined to require no further action.

#### **Project 1.1.18—Mercury Vapor Research Rooms**

Mercury vapor research was conducted by EPA ORD NRMRL in Rooms H201 and N108 of the ERC. The majority of the research is done within the confines of fume hoods. No spills or releases are known to have occurred. A mercury vapor analyzer will be used to determine if mercury vapors are present in the laboratory areas. If mercury vapors are present, EPA will mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.19—Multifuel Combustor**

Room J224 of the ERC's K Wing is occupied and operated by EPA ORD NRMRL. According to site personnel, the multifuel combustor (MFC) has been located in this room since 1993. Previously, from 1974 to 1984, this area was used for research on strontium-90. In 1984, the area was modified for irradiation chamber research; however, the research was never performed. Because the research never occurred, the room was used as a storage area for equipment from 1984 to 1993, when the combustor began operating.

The multifuel combustor is used for research periodically throughout the year to burn solid materials, including coal, wood, refuse-derived fuel, plastics, and other materials. The combustor is not a RCRA-permitted unit, and no hazardous materials or wastes are burned in it. Fly and bottom ash are generated in the combustion process. The ash is tested to determine how it will be managed and disposed of. On one occasion the ash was managed as a hazardous waste because it exceeded a regulatory threshold level for cadmium.

The MFC will be moved to the new facility for future research operations. The room and any remaining equipment (i.e., ductwork) will be sampled as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.20—Dioxin Research Rooms**

Dioxin research and solvent stripping was conducted in Rooms G214 and G217 of the ERC by EPA ORD NRMRL. These rooms were previously used as wet chemistry laboratories. During the site visit, the rooms appeared to be clean and in good operating condition. Site personnel stated that they were not aware of any spills or releases. Swipe sampling of the dioxin research rooms will be undertaken as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.1.21—Radiological Materials and Use**

The ERC operates under a broad-scope Nuclear Regulatory Commission (NRC) license (License Number 32-14048-04), which expires December 31, 2003. The NRC license specifies the

authorized (i.e., sealed and unsealed source) materials used. The license authorizes specific materials for use in the following:

- R&D as defined in 10 Code of Federal Regulations (CFR) Section 30.4
- Gas chromatographs for sample analysis
- Custom particle size analysis for air monitoring
- Aerosol neutralizers for air monitoring and aerosol analysis
- Calibration and reference standards incident to R&D.

Activities associated with R&D include purchasing commercially produced biological products for use in various toxicology screening tests and incorporating radioactive materials into biological samples (i.e., radiolabeling). Fifty-five of the 200 laboratory spaces at the ERC, and the T-18, Waste Management, and R Buildings, including the pathological incinerator, are the only locations subject to unsealed-source usage. However, unsealed-source radiological materials may have been used in the past in additional areas not yet identified. EDDP activities will include a review of all radionuclide-use applications that have been maintained since the license was issued in 1975 to identify additional authorized-use rooms and determine if appropriate exit surveys were performed and documented.

The radioactive materials management program includes, but is not limited to, quarterly audits of the laboratories by the Radiation Safety Officer (RSO) and radiation safety staff. The program also requires inventory control and leak testing of sealed sources every 6 months. The *EPA/RTP Radiation Safety Manual* documents the current management program policy and practices. Review of this manual and records suggests that close monitoring of radioactive materials use is exercised. In particular, Section 7.5 of the *EPA/RTP Radiation Safety Manual* outlines the monitoring of laboratory work areas subject to any process using radioactive materials. According to the RSO and the safety manual, wipe testing of the work areas to detect the presence of contamination is conducted daily for any process extending more than one day. At a minimum, monthly wipe testing is required if radioactive material is present in the laboratory. All wipe testing performed in each laboratory is documented; all documents are retained by the RSO for archival purposes.

No reportable radiological releases have been reported in authorized-use areas. Because the T-18, the Waste Management, and the R Buildings; the pathological incinerator; and the waste compactor are also routinely involved with radioactive materials, there is a potential for fixed and surficial contamination in these areas. EPA will ensure that all ERC areas, historical and current, that have the potential to release radiological materials are identified and included in the decommissioning plan. According to the RSO, an initiative is planned for review of all Radionuclide Use Applications archived by EPA since the NRC license was established. By reviewing these records and other documentation, EPA expects to identify the authorized-use rooms, both historical and current, at the ERC. Since unrestricted release of sealed-source locations with no history of leaks and well-documented leak testing history requires only leak testing before equipment relocation, EPA will assemble a well-documented use and leak test history for each current and past sealed-source location at the ERC. NRC Staff Report

(NUREG)-5849, *Manual for Conducting Radiological Surveys in Support of License Termination*, June 1992, and NUREG-1575, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, Final, will be referenced for decommissioning the areas exposed to unsealed sources.

Potential locations of fixed contamination will be assessed and identified, including, but not limited to, wooden portions, cinder block, and concrete surfaces of the T-18, Waste Management, and R Buildings; the refractory of the pathological incinerator; and floor tiles, cabinetry, and large pieces of laboratory equipment, such as centrifuge rotors and buckets in the laboratory spaces. Potential locations of surficial contamination will also be assessed and identified at each location, including, but not limited to, fume hoods and related ductwork where long-lived compounds (e.g., iodine-125) are used, countertops, and epoxy-coated flooring. All identified locations that have been known or suspected to have used or stored radioactive materials that have not previously been decommissioned for unrestricted use will be surveyed for radiological contamination and, where necessary, remediated to meet NRC regulatory cleanup standards to release the ERC for unrestricted use.

#### **Project 1.1.22—Floor Drains and Trenches**

During a site visit, floor drains and trenches were noted as dirty and containing debris. Site personnel were not aware of any past or current environmental problems with the floor drains or wastewater discharge lines and systems. However, based on visual appearance and the types of hazardous materials managed and used at the ERC, it is possible that the debris could contain hazardous constituents. Site characterization and sampling of the floor drains and trenches will be undertaken as part of EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

## **1.2     ERC Annex**

#### **Project 1.2.1—USTs**

The Annex houses six EPA owned and operated USTs that support the automobile test research facility. Tanks 1 and 2 are 1,000-gallon USTs, which are 7 years old; Tanks 3 and 4 are 550-gallon USTs, which are 10 years old; and Tanks 5 and 6 are 700-gallon USTs, which are 22 years old. According to interviews, a site assessment report review, and an inventory records review, no product releases, spills, or overfills appear to have occurred from the six USTs. However, with the exception of inventory control reports and reports on tightness tests, no quantitative information is available to confirm this conclusion.

In February 1998, the piping for all six tanks underwent line tightness testing. Testing results indicate that Tanks 1 and 6 and all associated lines were satisfactory. The *Field Investigation Report*, June 1999, documents the results of the tightness testing performed on Tanks 2, 3, 4, and 5 in December 1998. According to this report, Tanks 2 and 3 passed the tests, but Tanks 4 and 5

failed due to o-ring leaks. These o-rings were replaced, and the tanks were retested in July 1999. They passed this test.

All six USTs will be removed and properly closed in accordance with NCDENR and federal requirements. Appropriate soil and/or groundwater samples will be collected during the closure process. No environmental concerns are anticipated during the sampling and tank closure process; however EPA will mitigate any contamination that is discovered in accordance with NCDENR UST regulations. Following removal of the USTs, the area will be restored to its original (pre-EDDP) condition.

#### **Project 1.2.2—Pit Below Car Test Area**

The pit, located in the ERC Annex in Room S100A, is a long, brick-lined, enclosed room with two lengthwise drainage channels. The car test area is located above and adjacent to the pit, and the wind tunnel housing and support beams run through the room. The previous occupant's operations involved the use of sulfates, sulfuric acid, or sulfur dioxide, and the room was cleaned by EPA before installation of the wind tunnel and supporting equipment to ensure that research activities were not impacted by existing contaminants.

The floor drains in the car test area historically discharged into the pit, and several other sources, such as the machine shop floor drain and air-conditioning unit condensate, currently discharge into the pit. In addition, the former boiler supporting the wind tunnel discharged spent cooling water to the floor channels in the pit.

During the Phase I EDDP investigation, evidence of stains, growths, corrosion, and degradation was observed on the walls and in the floor channels. During the preliminary screening, samples were collected from the floor drain channels and the black residue and crystalline buildup on the walls. Based on the physical evidence and preliminary screening results, the floor drain channels are a potential area of concern and warrant further EDDP activities. All debris/sediment from the floor drain channels and walls of the pit will be removed using a pressure washer and/or steam cleaner. The wash water will be collected and disposed of by pumping the materials into a holding tank. Waste characterization of the wash water will be performed to determine appropriate disposal alternatives. Based on the preliminary screening results, it is assumed that the wash water will be discharged to a local publicly owned treatment works.

#### **Project 1.2.3—Radiological Materials and Use**

The ERC Annex operates under a broad-scope NRC license (License Number 32-14048-04), which expires December 31, 2003. The NRC license authorizes use of specific radioactive materials for the following purposes:

- R&D as defined in 10 CFR Section 30.4
- Gas chromatographs for sample analysis
- Custom particle size analysis for air monitoring
- Aerosol neutralizers for air monitoring and aerosol analysis
- Calibration and/or reference standards incident to R&D.

The radioactive materials management program requires inventory control and leak testing of sealed sources every 6 months. The *1995 Radiation Safety Manual* documents the current management program policy and practices.

According to the inventory records and the facility's RSO, 14 rooms at the ERC Annex are occupied by analytical equipment with sealed sources. Sealed radionuclide sources include nickel-63, krypton-85, and carbon-14. The required leak testing and inventory of sealed sources are conducted every 6 months and documented by the RSO. According to the RSO, all survey results have been satisfactory and no releases have occurred. In addition, the current and former RSOs have indicated, and past environmental audit reports have confirmed, that there have been no known releases or accidents associated with radiological materials at the Annex during EPA's occupancy. Considering the results of the radiological survey, the absence of any release of radiological materials, and the strong management program, there appears to be little cause for concern regarding radioactive materials associated with sealed sources at the ERC Annex.

The NRC requires leak testing before equipment relocation for sealed-source locations with no history of leaks and a well-documented leak testing history. Therefore, EPA will propose in its decommissioning plan to the NRC to assemble a well-documented use and leak test history for each current and past sealed-source location at the ERC Annex. If documentation is not sufficient to ensure that no sealed-source leaks have occurred at the Annex, EPA will survey suspect locations for radiological contamination and, where necessary, perform remediation to meet NRC regulatory cleanup standards to release the ERC Annex for unrestricted use.

#### **Project 1.2.4—Welding Hood and Exhaust Ducts**

The welding hood and associated ductwork will be dismantled and decontaminated by removing all particulate matter and residues and by wiping down the welding hood, fan, and ductwork. Approximately 75 linear feet of duct will require decontamination. All residue, wipe cloths, and solvents will be disposed of as hazardous waste. Following decontamination, swipe samples from the welding hood, duct, and fan (from a total of six sample locations) will be taken to verify that decontamination efforts were successful.

#### **Project 1.2.5—Dynamometer**

The dynamometer is located in the car test area at the ERC Annex. A thick film of oil-like material was observed underneath the compressor equipment alongside the dynamometer and is likely to be present below the dynamometer rollers. Site personnel stated the oil-like material resulted from replacing compressors and hydraulic oil. The area has been cleaned occasionally in the past using oil dry wipes and absorbents. During the preliminary screening, bis(2-ethylhexyl) phthalate and low concentrations of RCRA metals were detected.

The EPA is planning to move the Annex dynamometer to the new facility. The remaining ductwork and the area surrounding the car test area (including the pit that contains the dynamometer) will be managed under the EDDP. Upon dismantling and decommissioning of the dynamometer equipment, any contamination will be cleaned by a licensed contractor. Following

decontamination, confirmation sampling will be performed to verify that decontamination methods were successful, and all wastes will be properly characterized and disposed of.

#### **Project 1.2.6—Wooden Sink Cabinet**

A stained wooden sink cabinet is located in Annex Laboratory S-238. Due to the possibility that the stained wooden sink cabinet is contaminated, EPA has determined that the stained wood will be removed under the EDDP. The bottom shelf of the cabinet will be removed and replaced and the wooden sink cabinet restored to its original condition. All wastes generated will be appropriately disposed of.

#### **Project 1.2.7—Lead-Lined Ceiling**

A lead-lined ceiling is located in Annex Laboratory S107. The 180-square-foot lead liner consists of a 1/16-inch-thick foil encased in polyethylene material. The liner was installed to support solar radiance research activities, which are no longer conducted at the Annex. Due to the potential safety hazard involved in leaving the lead liner in place (if future renovation or construction activities are performed), EPA has determined that the lead liner will be removed under the EDDP. The liner is located above a drop-ceiling, which will require removal to access the lead liner. Following removal of the liner, the drop ceiling will be restored to its original condition. All wastes generated will be appropriately disposed.

#### **Project 1.2.8—Sump at S17 and Outside Area**

A sump is located outside of the Annex laboratory building's Room S17. Wastewater from the main laboratory passes through this sump before it is discharged to the municipal sewer system. Other potential sources of wastewater discharging to the sump at S17 include roof condensate, wash water from past cleaning of the pit (Room S100A), and spent water from the former EPA-operated package boiler supporting the wind tunnel. Although no odor was present at the sump at the time of the site walk-over, clear standing water and sediment were present. There is no available information on discharges into the pit by the property's former owner, Beaunit Corporation. The sump system will be drained and the sediments removed and sampled as part of the EDDP. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.2.9—Inactive Underground Propane Tank**

The inactive 200-gallon underground propane storage tank is located on the west side of the laboratory building. Facility records suggest that the tank was installed by EPA to support equipment no longer in use. The location of the tank is designated by a small above-grade brick-walled area. No information is available to indicate whether the tank has been emptied or still contains product. Due to the potential safety hazard of leaving the unmarked tank in place, EPA has determined that the tank will be removed under the EDDP. An authorized and licensed propane contractor will be used to bleed the tank and all lines of any remaining product. Following removal of all remaining propane, the contractor will remove the tank and associated

lines, as well as the brick wall that marks the area. The excavation site will be filled with clean soil, and the area will be revegetated. All wastes generated will be disposed of appropriately.

#### **Project 1.2.10—Sink Traps**

Due to the historical disposal practices for laboratory chemicals, residuals may be present in the ERC Annex laboratory sink traps. The Phase I investigation revealed that the sink traps located in the laboratories appeared clear and in good condition with no significant buildup. The sink traps were screened for mercury vapors in October 1998 using a portable Jerome 431-X Gold Film Mercury Analyzer as part of the preliminary screening activities. The results indicated that mercury vapors were present. The benchwork and sinks will be left in place by EPA.

The sink traps will be decontaminated by disconnecting the traps and emptying the contents into hazardous waste containers. Following decontamination, a mercury vapor analyzer will be used to verify that no mercury vapors remain. The traps will be reattached and the sinks restored to their original (pre-EDDP) condition.

#### **Project 1.2.11—Fume Hoods and Countertops**

In the past, site personnel managed and used chemical reagents and hazardous constituents on the surfaces of the countertops and in the fume hoods. As a result, spills or releases of these substances may have occurred over the period of EPA's occupancy. Ten percent of the fume hoods were screened for the presence of perchlorate salts in November 1998 as part of preliminary screening activities. The analytical results did not indicate the presence of any detectable concentrations of perchlorate salts. Additionally, based on the EPA's Asbestos Operation and Maintenance Work Practices Report for RTP facilities, the fume hoods probably contain transite board, which is in good condition and is nonfriable. The benchwork, fume hoods, and countertops will be left in place by EPA.

All countertop and fume hood surfaces will be decontaminated by wiping down surfaces with appropriate solvents. Following decontamination, swipe samples will be collected from each of the laboratories (and baghouses) to verify that the surfaces have been adequately decontaminated.

#### **Project 1.2.12—Hazardous Materials Building**

The ERC Annex is classified as an LQG under the RCRA hazardous waste generator program. Historically, the Annex has been a conditionally exempt small quantity generator; however, EPA anticipates an increase in the amount of hazardous waste generated during the transition process, as unwanted and unused chemicals and materials are converted to waste. Due to this anticipated increase in the amount of hazardous waste generated, EPA performed the activities required to be classified as an LQG.

All hazardous waste generated at the Annex is collected in waste containers by the research staff, properly labeled, and taken to the Waste Management Building for temporary storage and eventual off-site disposal. The waste generated at the Annex primarily consists of non-halogenated solvents. No spills or releases have been reported. All Phase III decontamination

and sampling activities to be performed at the Annex Waste Management Building will be conducted in accordance with NCDENR RCRA LQG closeout procedures and requirements.

The floors, walls, and associated equipment of the Hazardous Materials Building will be decontaminated in accordance with NCDENR RCRA LQG guidance. Following decontamination, swipe samples will be collected from various locations within the Waste Management Building to verify that decontamination efforts are complete.

### 1.3 EML

#### **Project 1.3.1—Septic Tank, Drain Field, and Grease Traps**

*Holding Tank (Active)*—According to EPA site personnel, the former septic tank is used as a holding tank in the current wastewater system. The holding tank for the EML wastewater discharges is located to the west of the subject property. On November 20, 1998, a liquid sample was taken from the holding tank during preliminary screening activities. The holding tank sample was analyzed for SVOCs, VOCs, and RCRA metals. The results of the analysis of this sample indicated no detectable concentrations of VOCs, SVOCs, or RCRA metals above the laboratory method detection limits.

*Drain Field (Inactive)*—Reportedly, in the past, wastewater discharges from the subject building and the Grand Slam facility were discharged from the former septic tank (current holding tank) to a drain field. Based on the location of the former septic tank, the topography of the site, and discussions with EPA site personnel, the former drain field system is probably located to the north of the holding tank. An aerial photograph provided by EPA facilities personnel shows darker green areas of vegetation in the area north of the holding tank. These areas probably correspond to the location of the drain field lines. An EPA representative at the Grand Slam facility made reference to the presence of increased vegetation over the drain field lines. Although the location of the drain field was unknown at the time of the site visit, the area was noted as being heavily overgrown with vegetation. Because of past laboratory practices at the EML and the Grand Slam facility, residual amounts of chemicals from laboratory discharges could exist in the former drain field.

*Grease Trap (Active)*—The grease trap is housed in a small brick structure (3 feet by 3 feet) with an aluminum roof, located to the south of the EML. The depth of the grease trap is unknown, and no diagrams are available to confirm whether the structure receives waste from the EML. However, representatives of the owner indicated that the grease trap collects sewage from the Grand Slam facility and the EML before discharging the waste to the municipal sewer lines. As a result, it is likely that the grease trap received past laboratory discharges. In particular, EPA site personnel have stated that the sewer lines from the Grand Slam have always been hooked up to the grease trap and that the trap receives wastewater from the Grand Slam facility bathrooms. Reportedly, the discharges contained small amounts of dark room chemicals and food dyes.

The holding tanks, drain field, and grease trap will be investigated as part of the EDDP to ensure that the site soils and groundwater have not been affected by historical laboratory discharges. As part of the Phase II investigations, soil, sludge, and/or groundwater samples will be collected and analyzed for constituents of concern. While no environmental concerns are anticipated, EPA is prepared to mitigate any contamination that is discovered. Possible cleanup activities would be conducted in accordance with North Carolina regulations and would be performed by qualified and licensed cleanup contractors.

#### **Project 1.3.2—Fume Hoods and Countertops**

In the past, site personnel managed and used chemical reagents and hazardous constituents on the surfaces of the countertops and in the fume hoods. As a result, spills or releases of these substances may have occurred over the period of EPA's occupancy. Ten percent of the fume hoods were screened for the presence of perchlorate salts in November 1998 as part of preliminary screening activities. The analytical results did not indicate the presence of any detectable concentrations of perchlorate salts. Additionally, based on EPA's Asbestos Operation and Maintenance Work Practices Report for RTP facilities, the fume hoods probably contain transite board, which is in good condition and is nonfriable. The benchwork, fume hoods, and countertops will be left in place by EPA.

All countertop and fume hood surfaces will be decontaminated by wiping down surfaces with appropriate solvents. Following decontamination, swipe samples will be collected from each of the laboratories (and baghouses) to verify that the surfaces have been adequately decontaminated.

#### **Project 1.3.3—Sink Traps**

Due to the historical disposal practices of laboratory chemicals, residuals may be contained in the EML laboratory sink traps. The Phase I investigation revealed that the sink traps located in the laboratories appeared clear and in good condition with no significant buildup. The sink traps were screened for mercury vapors in October 1998 using a portable Jerome 431-X Gold Film Mercury Analyzer as part of the preliminary screening activities. The results indicated that mercury vapors were present. The benchwork and sinks will be left in place by EPA.

The sink traps will be decontaminated by disconnecting the traps and emptying the contents into hazardous waste containers. Following decontamination, a mercury vapor analyzer will be used to verify that no mercury vapors remain. The traps will be reattached and the sinks restored to their original (pre-EDDP) condition.