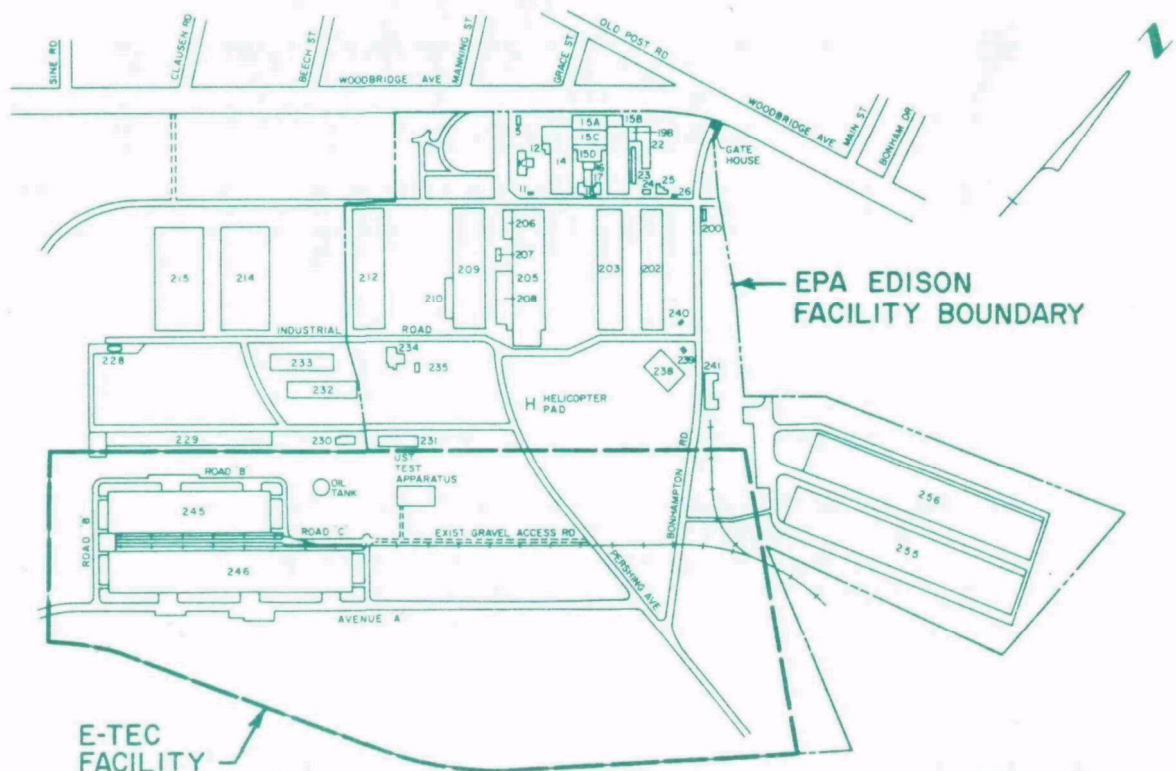


FINAL ENVIRONMENTAL IMPACT STATEMENT ON THE DEVELOPMENT OF AN ENVIRONMENTAL TECHNOLOGY AND ENGINEERING (E-TEC) FACILITY IN EDISON, NEW JERSEY





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 31 1990

OFFICE OF
RESEARCH AND DEVELOPMENT

To All Interested Government Agencies, Public Groups, and
Citizens:

Enclosed for your review is a copy of the Final Environmental Impact Statement on the Development of an Environmental Technology and Engineering (E-TEC) Facility in Edison, New Jersey. This Environmental Impact Statement (EIS) was prepared by the U.S. Environmental Protection Agency (EPA), with assistance from Gannett Fleming Environmental Engineers, Inc., and EcolSciences, Inc., in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations.

The EIS is an issue-oriented decision-making tool that was prepared to evaluate the environmental impacts associated with construction and operation of the proposed Environmental Technology and Engineering (E-TEC) Facility, and to evaluate alternatives to locating the facility in Edison, New Jersey. The proposed E-TEC facility would be utilized by government, academic, and industry researchers to develop and evaluate innovative treatment and disposal technologies for hazardous substances.

The draft EIS evaluated potential impacts to air quality, water quality and public health, and the suitability of alternative locations for the E-TEC facility in terms of environmental impacts, engineering feasibility, cost-effectiveness, and implementability. EPA solicited public comment on the draft EIS. The purpose of this final EIS is to address comments received on the draft EIS and to present EPA's conclusions and recommendations.

Public participation, especially at the local level, is an essential component of the decision-making process. Public meetings and availability sessions were held during preparation of the draft EIS to ensure input from local, state, and Federal representatives. A public hearing was held in Edison, New Jersey, on February 27, 1990, to receive formal comments on the draft EIS. This was followed by an informal public availability session on March 31, 1990. The comment period was closed on April 6, 1990. Copies of all written comments received on the draft EIS are included in Appendix I, and are addressed in Chapter 8 of the final EIS.

EPA will accept written comments on the final EIS for thirty (30) days from the date that the notice of availability of this final EIS is published in the Federal Register. Comments should be addressed to Chief, Environmental Impacts Branch, EPA-Region II. After evaluating written comments on the final EIS, EPA will decide whether to implement the recommendations of this document and will publish a formal Record of Decision for the project.

If you have any questions concerning the above, or need additional information, please contact Mr. Robert Hargrove, Project Officer, Environmental Impacts Branch, at (212) 264-1840.

Sincerely yours,



Erich W. Bretthauer
Assistant Administrator
for Research and Development

Enclosure

Final
Environmental Impact Statement on the Development of
an Environmental Technology and Engineering (E-TEC) Facility
in Edison, New Jersey
July 1990

Prepared by:
U.S. Environmental Protection Agency (EPA)

Abstract: In accordance with the National Environmental Policy Act (NEPA) and the U.S. Environmental Protection Agency's (EPA) regulations implementing NEPA (40 CFR Part 6), a final Environmental Impact Statement (EIS) has been prepared on the Environmental Technology and Engineering (E-TEC) Facility proposed to be located in Edison, New Jersey. The recommended alternative involves the renovation of existing buildings at EPA's Edison Facility. The final EIS evaluates and responds to comments received on the January 1990 draft EIS, addressing three major issues: the facility location/alternatives evaluation, chronic risk assessment, and acute risk assessment/catastrophic release. Further, there were a number of comments on the management and operation of the facility. The final EIS concludes that the recommended alternative represents the most environmentally sound, cost-effective, and implementable alternative, and will not result in any significant adverse impacts or risk to public health or the environment.

Written comments on the final EIS will be received by EPA for 30 days following publication of its notice of availability in the Federal Register.

Contact for information:

Mr. Robert Hargrove, Chief
Environmental Impacts Branch
U.S. Environmental Protection Agency - Region II
26 Federal Plaza, Room 500
New York, New York 10278
(212) 264-1892

Approved by: Erich W. Bretthauer 7/31/90

Erich W. Bretthauer
Assistant Administrator
for Research and Development

Date

FINAL
ENVIRONMENTAL IMPACT STATEMENT
ON THE
DEVELOPMENT OF AN
ENVIRONMENTAL TECHNOLOGY AND ENGINEERING (E-TEC) FACILITY

EDISON TOWNSHIP
MIDDLESEX COUNTY
NEW JERSEY

PREPARED BY:

U.S. ENVIRONMENTAL PROTECTION AGENCY

WITH ASSISTANCE FROM:

GANNETT FLEMING ENVIRONMENTAL ENGINEERS, INC.
HARRISBURG, PA

IN ASSOCIATION WITH:

ECOLSCIENCES, INC.
ROCKAWAY, NJ

JULY 1990

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

A Draft Environmental Impact Statement (DEIS) for the establishment of an Environmental Technology and Engineering (E-TEC) facility was issued in January 1990. The DEIS presented an in-depth description of the alternatives considered, the affected environment, and the environmental impacts associated with the preferred alternative.

A public hearing was held in Edison, New Jersey on February 27, 1990 in order to allow interested individuals, governmental agencies and other organizations the opportunity to publicly comment on the DEIS. During the comment period on the DEIS (January 24 - April 6), additional written and oral comments were accepted. This Final Environmental Impact Statement (FEIS) has been prepared in order to address all comments and incorporate them into the EIS process. Comments on this FEIS will be accepted for 30 days following publication of a notice of availability of the FEIS publication in the Federal Register. EPA will then evaluate all comments received on the FEIS and issue its record of decision (ROD).

The comments received on the DEIS did not require major revisions or additions, so this FEIS document was prepared as a summary document to supplement the DEIS. Unless otherwise noted, the DEIS is incorporated by reference.

The format of the FEIS is shown on Table ES-1. The remaining portions of the executive summary highlight the key issues related to the project, discussed in the EIS.

Purpose and Need

The Superfund Amendments and Reauthorization Act (SARA) of 1986 specifically authorized the Environmental Protection Agency (EPA) to establish a technology research, demonstration, and evaluation program to promote the development of innovative treatment technologies for hazardous substances. In response to this legislation, the EPA's goal is to establish an E-TEC

Table ES-1

FEIS Format

Executive Summary	Replaces DEIS Executive Summary
Chapters 1-6	Same as DEIS Chapters 1-6 (not reprinted in FEIS)
Chapter 7	Revisions to the DEIS
Chapter 8	Comment Responses
Appendix A	Same as DEIS, Appendix A (not reprinted in FEIS)
Appendix B	Revised in FEIS, Replaces DEIS Appendix B
Appendices C-H	Same as DEIS Appendices C-H (not reprinted in FEIS)
Appendix I	Written Comments Received

facility, having state-of-the-art capabilities, for the testing and evaluation of hazardous substances control technologies in a safe and environmentally sound manner. The recommended E-TEC facility would be equipped with appropriate treatment technologies to protect the health of the facility users and the surrounding community. Because of the nature of the proposal and public interest and concern, the EPA determined that an EIS is needed to address key concerns, including feasible alternatives to and environmental impacts of the proposed action, pursuant to the National Environmental Policy Act (NEPA).

Alternatives

Four categories of alternative actions were evaluated in detail to identify the recommended location of the E-TEC facility. The four categories are identified below:

- i. no action,
- ii. construction of a complete facility,
- iii. leasing of space in an existing building or facility, and
- iv. renovation of existing buildings at the EPA Edison Facility.

The alternatives were screened based on the criteria of: 1) the availability of siting locations, 2) implementability, 3) environmental soundness, and 4) cost.

Implementation of the no action alternative would mean that EPA would not build and outfit a new E-TEC facility. Hazardous substance treatment technology research and evaluation would have to take place, as needed, at existing EPA facilities. This alternative would not meet the goals and objectives of the SARA legislation.

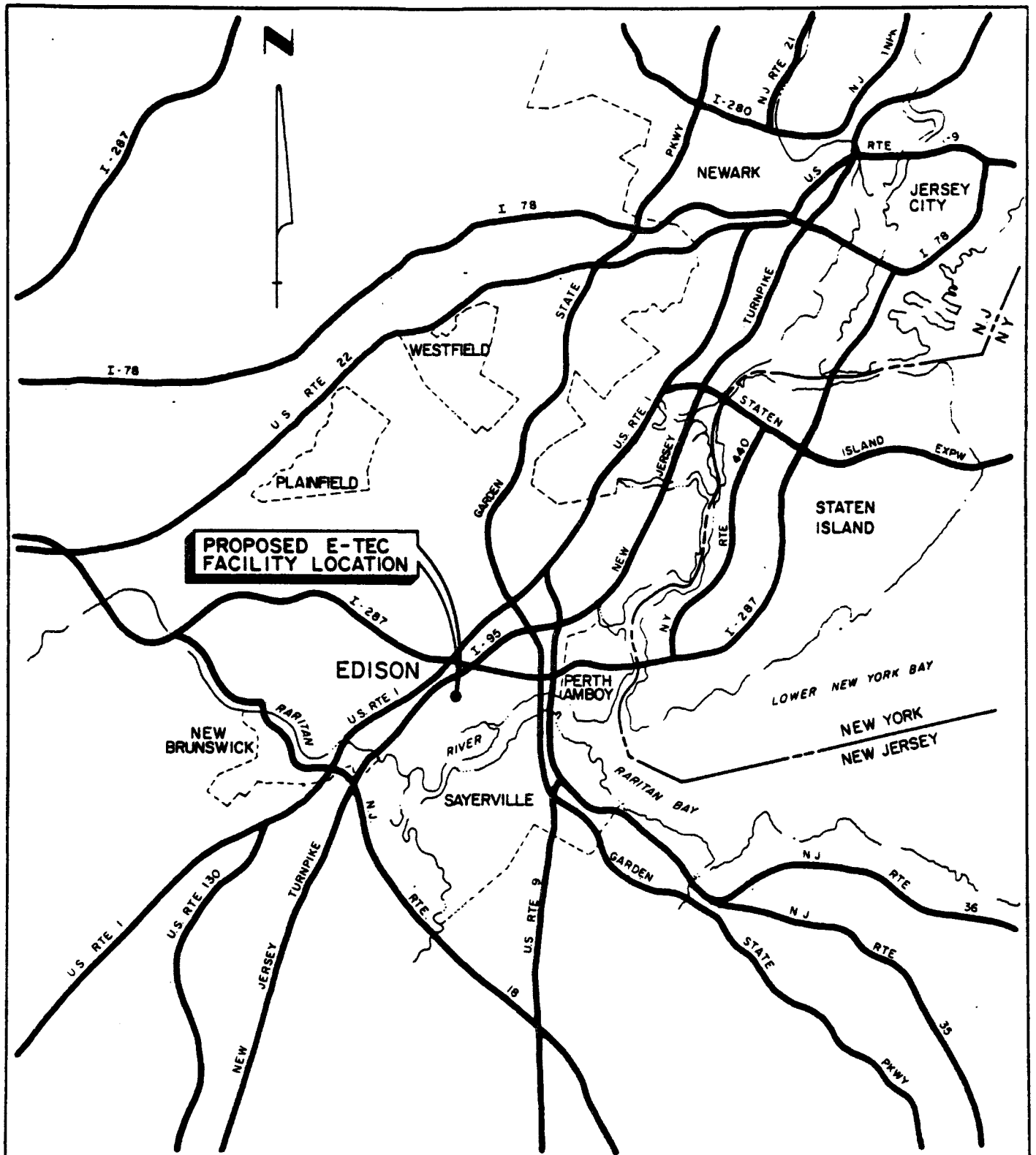
In evaluating the remaining alternative actions, it is necessary to reduce the quantity of possible locations to a finite number that meet the siting criteria. These criteria include: (1) meeting the goals and mission

of the SARA legislation and the Superfund Innovative Technology and Evaluation (SITE) Program, (2) coordinating the research activities with industry, academia and other government agencies, and (3) locating the facility on a property large enough to house a large warehouse type building(s) and provide a buffer zone. The urbanized northeast meets these siting criteria and it has many designated Superfund sites, whose clean-up would be greatly facilitated with the location of the E-TEC facility in this geographic region. The northeast has many urbanized areas where the infrastructure, academic institutions, and large scale building facilities would be available.

The second category of alternatives involves the construction of a complete facility on undeveloped land. This alternative would require acquisition of a large plot of land (100 acres) and complete construction of a warehouse type building(s). A desirable attribute of the proposed facility would be to have it located in close proximity to major transportation networks, educational institutions and industrial entities. The cost of undeveloped land in northeastern areas fitting this description is very high. In addition, the cost of constructing a complete, new facility would be very high in an industrial, developed area.

A logical alternative to constructing a complete facility would be to lease space at another existing facility. This category could include leasing space at an EPA facility, military installation, other government property, academic institution, or industrial complex. All of these possibilities were examined in the alternatives analysis but were ruled out on the basis of lack of available space, conflicting use or the cost of leasing private space.

The remaining alternative, renovation of existing warehouse buildings at the EPA Edison Facility, involves upgrading two existing warehouse buildings on a site currently owned by EPA and occupied by EPA's Office of Research and Development (ORD). From an implementability and cost perspective, this alternative is superior to the others. No change in land use or conversion from undeveloped land to developed land would be required with this alternative and the ORD personnel already on-site would operate the proposed E-TEC facility so no relocation of staff would be required. Additionally, the EPA Edison Facility (see Figure ES-1) is located near major transportation routes and supporting governmental, academic, and industrial institutions.



PROPOSED E-TEC FACILITY
EDISON, NEW JERSEY

VICINITY MAP



SCALE IN MILES

U.S. ENVIRONMENTAL PROTECTION AGENCY

The recommended alternative was determined to be the renovation of the existing warehouse buildings at the EPA Edison Facility. The discussion of the affected environment and environmental impacts will focus on this alternative.

Affected Environment

The affected environment includes both the natural environment (geology, soils, ground water, surface water, floodplains, wetlands, air, and ecology) and the man-made environment (land use, cultural resources, noise, aesthetics, and socioeconomics).

The 110-acre site recommended for the E-TEC facility is situated within the northern reach of the Inner Coastal Plain subprovince of the New Jersey Coastal Plain Physiographic Province. The soils in the vicinity, with the exception of the Urban Land, Pits and Psamments, are typical of the coastal plain and include: urban land; pits; sand and gravel; Psamments, nearly level; Atsion sand; Manahawkin muck; klej loamy sand, 0 to 3% slopes; and sassafras loam, 2 to 5% slopes. The coastal plain includes the Farrington Sand Aquifer which flows southeast toward the Raritan River in the vicinity of the recommended location of the E-TEC facility. The Farrington Sand Aquifer, which is part of a large aquifer (the New Jersey Coastal Plain Aquifer) that has been designated as a sole source aquifer under the Safe Drinking Water Act (SDWA), serves as a major water source in eastern and southern Middlesex County. The closest potable wells are located 1.5 to 2 miles upgradient from the facility. The proposed E-TEC facility project complies with Section 1424(e) of the SDWA.

The proposed site lies within the Raritan River drainage basin. The drainage from the proposed site flows through swales, small streams and culverts, to eventually discharge into the Red Root Creek. Red Root Creek is a tributary to the Raritan River. There are no floodplains (100-year or 500-year) in the vicinity of the recommended site. There are some wetland areas associated with small streams or in areas of hydric soils but all of these areas occur in the southern portion of the 110-acre tract, well removed from the existing warehouse buildings and service roadways.

The air quality in the region of the E-TEC facility is in compliance with all established National Ambient Air Quality Standards (NAAQS) except ozone. The State of New Jersey as a whole is in violation of the ozone standard.

Because of the development of the area around the recommended site and the fencing of the site itself, few migratory animals can be found on the site, with the exception of some bird species. The undeveloped portion of the recommended site could provide habitat for small mammals and reptiles that could satisfy all of their habitat requirements on the site itself.

The general area to the south and east of the 110-acre site is dominated by light industrial development. The Middlesex County College (MCC) borders the site to the west. The recommended site itself has been greatly disturbed and has only one area where a natural surface may exist. No known prehistoric sites are recorded in the immediate area and a cultural resources survey of the undisturbed area did not reveal the existence of significant cultural resources.

The major source of noise in the surrounding area of the recommended site is vehicular traffic and the operation of motorized equipment; the warehouse buildings on the site are not currently in use, so the site does not currently contribute significantly to the background noise.

The majority of the residents, 73%, in the surrounding community are over the age of 18 and the property is dominated by residential parcels. There is a substantial transportation network in the vicinity of the recommended site. Interstates and major highways converge near the site and an Amtrak rail line passes through the area.

Environmental Consequences

The main environmental concerns of the operation of the E-TEC facility focused on five areas - water quality, ground water quality, transportation, air quality, and public health. These issues were examined in the EIS to determine whether the facility would cause significant impacts. Mitigative

measures will be incorporated into the design and operation of the facility to minimize the potential for adverse environmental impacts.

The primary source of potential impacts to surface water quality would be the discharge of wastewater from the facility. The wastewater generated at the facility would be treated, as necessary, prior to discharge to the Middlesex County Utilities Authority (MCUA) plant. No wastewater would be discharged to the sewer system until the concentrations of contaminants were below the allowable effluent limits specified in the facility's discharge permit issued by the New Jersey Department of Environmental Protection (NJDEP). The maximum quantity of wastewater discharged to MCUA on a daily basis would not be expected to exceed 100,000 gallons per day. Because the capacity of the MCUA treatment plant is 110 million gallons per day, the flow from the facility would not cause a significant impact to the operation of the MCUA plant.

The aquifer underlying the facility has been designated a sole source aquifer by EPA, pursuant to the Safe Drinking Water Act (SDWA). Accordingly, the recommended project would have to comply with Section 1424e of the SDWA. The siting and operation of the facility would not cause significant impacts to the ground water quality and, therefore, would comply with the provisions of this Act. The possibility of liquid spills impacting the aquifer would be minimized by the following:

- o Product handling would occur on impervious areas.
- o Soils tend to attenuate the transport of most hazardous substances through adsorption or absorption.
- o Transported materials would be packaged according to the codes and standards established by state and federal regulations.
- o The proposed facility staff would be trained in spill containment and clean-up procedures.
- o The closest ground water wells in the area are upgradient from the proposed facility.

Material transported to or from the facility would include contaminated or uncontaminated surface water, ground water or soil, as well as equipment. The rate of delivery would average approximately one truckload per week. All transported items would be under the management control of the EPA, which would include the following: 1) all materials would be packaged according to federal and state regulations, 2) only licensed haulers would be used, 3) trucks would travel on major roads and highways to the extent possible, 4) the facility staff would work together with the local agencies to establish contingency plans for traffic accidents, and 5) the EPA Regional and National Emergency Response Teams in the area could assist local emergency response personnel in the containment and clean-up of spills if needed. These control measures and the low volume of trucks entering and exiting the facility would minimize the potential for a transportation accident and would help to minimize adverse impacts if such a spill occurred.

During the EIS process, air modeling, using EPA-approved models and methodologies, was conducted to determine the impact of the facility's operation on the air quality of the area. The model results indicated that, with the backup air pollution control equipment that would be installed in the buildings, the operation of the facility would not violate the NAAQS for the criteria pollutants. The background air concentration for ozone in the State of New Jersey currently violates the NAAQS, but the operation of the facility would not be expected to contribute significantly to this existing problem. The facility would have to obtain and comply with an air discharge permit issued by the State of New Jersey.

Public health concerns involve both long-term (chronic) exposures from expected daily activities and short-term (acute) exposures from a hypothetical catastrophic release. A risk assessment for each of these health effects was conducted. Chronic health effects include the potential for carcinogenesis so the chronic risk assessment quantitatively addressed the excess risk of developing cancer from exposure to chemicals emitted from the E-TEC facility over a lifetime exposure (70 years). Public exposure to emissions would be minimized to the extent possible through the use of air pollution control systems and management practices, such as using the smallest quantity of hazardous substances possible in conducting evaluations.

In the EIS, a catastrophic event causing the vaporization of all stored chemicals was simulated to determine the potential health impacts of such a release. It was assumed that all chemicals stored within the buildings would become entrained in the air and exit the facility. The health impact of concern with this type of event would be acute (short-term) exposure to hazardous substances. The risk assessment determined that potential adverse impacts to the exposed public could be mitigated by instituting management controls that would restrict the quantity of chemicals stored within the buildings to that quantity that would prevent exposure to contaminant concentrations above the threshold concentration (the concentration below which no irreversible adverse impacts are expected to occur), even in the event of a catastrophic release.

Proposed Action

In summary, with appropriate mitigative measures and precautions implemented, the recommended alternative - locating the E-TEC facility at the EPA Edison Facility - would meet the goals and objectives of the SARA legislation and would cause minimal environmental impacts to the surrounding community.

Issues of Concern Raised by Public or Governmental Agencies

Following the issuance of the DEIS document, EPA received many comments from concerned individuals, community groups and governmental agencies regarding the recommended action. The list below highlights the major issues of concern. These items have been fully addressed throughout the FEIS document.

- o The location of the E-TEC facility in a populated area close to sensitive land uses.
- o The potential long-term and short-term health effects from the facility operation.
- o The potential health risks of the facility operation to sensitive population (e.g., children, elderly).
- o The perceived need for an evacuation of the area if a catastrophic release or accident occurred.

- o The use of assumptions and preliminary data in the air modeling and short- and long-term risk assessments.
- o The procedures that would be followed if an emergency situation occurred.
- o The ability of Edison Township to handle/respond to emergencies.
- o The size of the current operation and the potential for facility expansion.
- o The perception that Edison itself would not benefit from the location and operation of the E-TEC facility.
- o The responsible party at the time of facility closure or in case of an accident or spill.
- o The importance of adherence to management controls in safe facility operation.

Areas of Controversy, Unresolved Issues

Of the issues raised at the public hearing and during the comment period, there is only one unresolved issue, that is, the details of the facility's permits. However, since this EIS covers the specific question of the facility's location (not its permits), this issue is necessarily unresolved. The permitting process is outlined in Section B.7., page 7-29, of this document. The permits include appropriate public participation which affords the public the opportunity to comment on the permits. EPA expects that the public's specific concerns related to the permits will be resolved during the respective permit public participation processes.

Subsequent to the public hearing, EPA and the MCC officials met to discuss concerns raised by the college. These meetings are part of EPA's ongoing outreach effort to foster public understanding of the proposed research activities at the E-TEC facility, and have taken place both before and after the public hearing.

MCC has expressed the intention to contract for an independent review of the DEIS. EPA has no objection and has offered to cooperate fully with the college, by meeting with them and their advisers to explain the evaluations

presented in the DEIS. As yet, MCC's consultant has not completed its evaluation; therefore, EPA's response to it is not presented in this FEIS. EPA is hopeful that the MCC's independent evaluation will be submitted prior to the close of the 30-day comment period, which will enable it to be fully evaluated as part of our NEPA process.

However, regardless of when they are received, EPA will address all reasonable comments on the project, and will factor them (as appropriate) into operation and management of the facility.

TABLE OF CONTENTS

TABLE OF CONTENTS

	<u>Page</u>
Executive Summary	ES-1
Table of Contents	i
List of Figures	i
List of Tables	ii
List of Acronyms	iii
List of Unit Abbreviations	v

CHAPTER 7

7. REVISIONS TO THE DEIS

CHAPTER 8

8. COMMENT RESPONSES

8.1	GENERAL RESPONSES	8-2
8.1.1	Facility Location/Alternatives Evaluation	8-3
8.1.2	Chronic Release Risk Assessment	8-11
8.1.3	Catastrophic Release/Acute Risk Assessment	8-14
8.1	RESPONSES TO COMMENTS FROM THE PUBLIC HEARING	8-21
8.3	RESPONSES TO COMMENTS FROM LETTERS RECEIVED	8-60

APPENDIX I

I. WRITTEN COMMENTS RECEIVED

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
ES-1	Vicinity Map	ES-5
3-6	Surrounding Land Use	7-2
B-1	Site Plan	7-9
B-2	Preliminary Layout of E-TEC Facility	7-10
B-3	Preliminary Layout Building 245 - Bay 4	7-11
B-4	Preliminary Layout Building 245 - Bay 3	7-12
B-5	Preliminary Layout of Pollution Abatement Equipment	7-13
B-6	Preliminary Layout Building 246 - Bay 4	7-14
B-7	E-TEC Preliminary Wastewater Treatment Systems	7-17
B-8	Preliminary Air Pollution Control Systems for E-TEC	7-20

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
ES-1	FEIS Format	ES-2
B-1	Examples of Treatment Technologies to be Evaluated in the Proposed E-TEC Facility	7-25
B-2	Examples of Chemicals That Could be Stored in the Proposed E-TEC Facility	7-28
E-4	Toxicity of Indicator Chemicals	7-32
E-5	Risk Characterization - Worst Case Long-Term, Low Level Release	7-33

LIST OF ACRONYMS

ACGIH	-	American Conference of Governmental Industrial Hygienists
ACOE	-	Army Corps of Engineers
CRAVE	-	Carcinogen Risk Assessment Verification Endeavor
DERP	-	Defense Environmental Restoration Program
DOD	-	U.S. Department of Defense
EIS/DEIS/ FEIS	-	Environmental Impact Statement/Draft Environmental Impact Statement/Final Environmental Impact Statement
EPA/USEPA	-	United States Environmental Protection Agency
E-TEC	-	Environmental Technology and Engineering Facility
HEPA	-	High Efficiency Particulate Adsorption
ID	-	Induced Draft
ISCLT	-	Industrial Source Complex Long-Term
ISCST	-	Industrial Source Complex Short-Term
MCC	-	Middlesex County College
MCUA	-	Middlesex County Utilities Authority
NAAQS	-	National Ambient Air Quality Standards
NEPA	-	National Environmental Policy Act
NJDEP	-	New Jersey Department of Environmental Protection
NJIT	-	New Jersey Institute of Technology
NOAEL	-	No Observed Adverse Effects Level
NOx	-	Nitrogen Oxides
ORD	-	Office of Research and Development
PAHs	-	Polynuclear Aromatic Hydrocarbons
PCBs	-	Polychlorinated Biphenyls
q ₁ *	-	Carcinogenic Potency Factor
RCRA	-	Resource Conservation & Recovery Act
R&D	-	Research and Development

RD&D	-	Research, Development and Demonstration
RfD	-	Reference Dose (Inhalation, unless otherwise specified)
RREL	-	Risk Reduction Engineering Laboratory
SARA	-	Superfund Amendments and Reauthorization Act
SDWA	-	Safe Drinking Water Act
SITE	-	Superfund Innovative Technology Evaluation
STEL	-	Short-Term Exposure Limit
STP	-	Sewage Treatment Plant
TCE	-	Trichloroethylene
T&E	-	Testing and Evaluation
TLV	-	Threshold Limit Value
TSD	-	Treatment, Storage & Disposal
TWA	-	Treatment Works Approval or Time Weighted Average
UST	-	Underground Storage Tank
VOC	-	Volatile Organic Compounds
WEP	-	Wet Electrostatic Precipitator
WWTP	-	Waste Water Treatment Plant

LIST OF UNIT ABBREVIATIONS

°C	-	degree Celsius or centigrade
°F	-	degree Fahrenheit
ft	-	feet
gal	-	gallon
g/s	-	grams per second
°K	-	degree Kelvin
kg	-	kilogram
km	-	kilometer
L	-	liter
lb/hr	-	pounds per hour
MGD	-	million gallons per day
mg/L	-	milligrams per liter
ml	-	milliliters
m/s	-	meters per second
ppb	-	parts per billion
ppm	-	parts per million
ppt	-	parts per thousand
T	-	ton
ug/L	-	micrograms per liter
ug/m ³	-	micrograms per cubic meter

CHAPTER 7

7.0 REVISIONS TO THE DEIS

This chapter identifies additions or revisions to the information presented in the DEIS. These items were the result of comments raised during the review of the DEIS or came about through the continued investigation of the issues involved in the recommended project. The referenced page numbers refer to the DEIS document.

Page 3-30 Existing Land Use

The following sentence should be added after the third paragraph on the page:

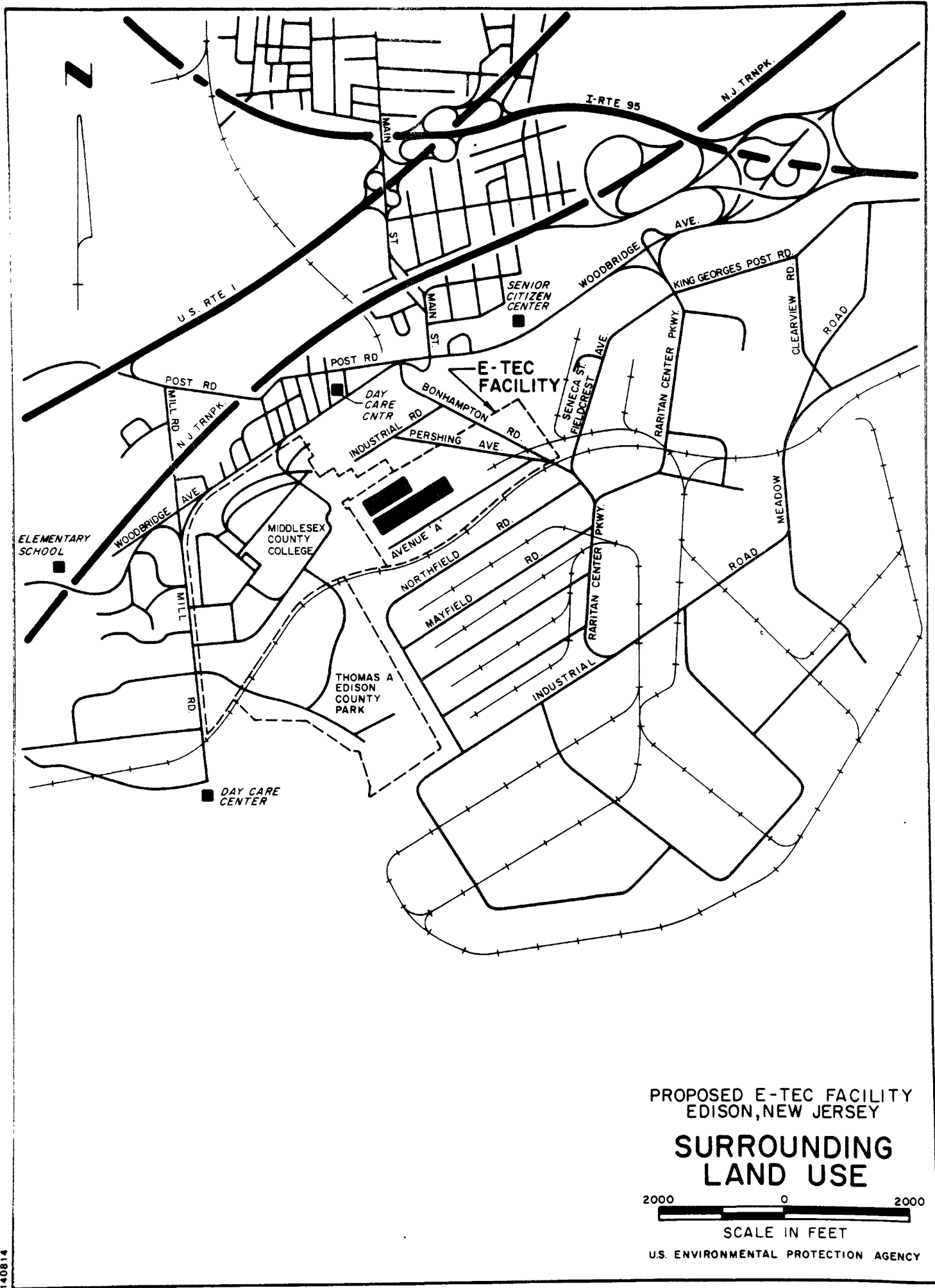
"Figure 3-6 shows some of the surrounding land uses."

Figure 3-6 is presented in this document on page 7-2 and the existing Figure 3-6 of the DEIS, surrounding landfills and superfund sites, now becomes Figure 3.7. The content of this figure was not revised and, therefore, this figure is not reprinted in the FEIS.

Page 4-10 Impacts on Water Quality

The second paragraph of the discussion should be revised to the following:

"The quantity of wastewater discharged from the proposed facility to the Middlesex County Utilities Authority (MCUA) wastewater treatment plant is not expected to exceed 100,000 gallons per day (gpd). The current capacity of the MCUA plant is 110 million gallons per day (mgd) so the input from the facility would represent less than 0.1% of the total flow. Prior to operation, the facility would be required to obtain a discharge permit from the New Jersey Department of Environmental Protection (NJDEP). Compliance with any permit conditions would ensure that the addition of this flow, both from a hydraulic and constituent standpoint, would not cause operational problems at the MCUA treatment plant.



Concurrently with the design of the E-TEC facility, it would be determined whether or not the existing sewer system could handle the projected wastewater flow. If necessary, the wastewater conveyance system would be upgraded to handle the required capacity."

Page 4-18 Impacts on Public Health

The following paragraphs should be added to the end of the discussion on Public Health.

"The preliminary design of the facility may include an outside storage tank. This tank would be used for the storage of materials if it was determined that outside storage of the particular material at that specific concentration would be as protective or more protective of facility worker and general public health than inside storage. This determination would be made prior to bringing new material onto the facility and would include: 1) an evaluation of the effects of a catastrophic release of the material if it were stored inside the building, and 2) an evaluation of the potential health effects caused by a release if a fire occurred in or in the proximity of the outside tank. The first evaluation would follow the procedures outlined in the discussion of the catastrophic release in Appendix F. The second analysis would involve conducting air modeling using an appropriate EPA-approved model, such as ISCST, SPILLS, INPUFF or DEGADIS. The specific model used would be chosen based on the material to be stored in the tank and the type of release being modeled.

No material would be stored outside the buildings unless it was determined that it would be safe to do so."

Page 4-21 Mitigation of Operational Impacts

The last paragraph of the section should be revised such that it reads:

"Appendix G contains information relating to additional mitigation procedures."

Chapter 5 Coordination

Chapter 5 has been amended to include information regarding the on going public participation related to the project.

5.4 ADDITIONAL PUBLIC PARTICIPATION ACTIVITIES SINCE THE ISSUANCE OF THE DEIS

The notification of issuance of the DEIS was published in the Federal Register on January 24, 1990. A public hearing was held in Edison, New Jersey, at the Stelton Community Center on February 27, 1990 to accept public comments on the DEIS. On March 31, 1990, the EPA held a public availability session at the Middlesex County College to answer concerns expressed about the DEIS. In addition, comments were accepted during the comment period (January 24, 1990 through April 6, 1990).

Since the public hearing, EPA has met with several groups in an effort to better foster public understanding of this project.

- o Two meetings were held with Middlesex County College (MCC).
- o A meeting was held with the Middlesex Interfaith Partnership with the Homeless.
- o Three meetings were held with Edison senior citizens.
- o A meeting was held with Jane Tousman, a long-standing environmentalist in Edison.
- o Several public tours of the recommended E-TEC facility site were conducted.

EPA has also requested a meeting with the Edison Environmental Commission, but has not received a response yet.

Further, in response to public requests, the EPA sent out letters to all interested parties inquiring if they were interested in serving on a citizens

advisory committee for the E-TEC facility, should it be built in Edison. That letter also notified the public that EPA intended to conduct tours of the EPA Edison Facility, from June through August, to show the public the types of research being conducted and being proposed for the E-TEC facility.

As listed above, EPA met with the MCC to discuss the college's concerns. During these meetings, the college expressed the desire to contract for an independent review of the DEIS. EPA has no objection and has offered to cooperate fully with the college by meeting with them and their advisors to explain the evaluations presented in the DEIS. MCC's consultant has not yet completed its evaluation; therefore, EPA has not been able to respond to it in this FEIS. EPA is hopeful that the review will be submitted prior to the close of the 30 day comment period on the FEIS, which will enable a full evaluation of the results as part of the NEPA process. However, EPA will evaluate any reasonable review of the DEIS and factor it (as appropriate) into the decision-making process for the facility.

In addition to the public participation activities of the EIS process, the permitting process of the facility will also involve public participation. The permits needed are described in Revised Appendix B, Section B.7 (page 7-29 of this document). These permits will include appropriate public participation activities to afford the public the opportunity to comment on the permit actions."

Page 6-1 List of Preparers

The following names should be added to the list of preparers:

Daniel Sullivan	Supervisory Engineer Releases Control Branch EPA Office of Research and Development
Patricia Laforanara	Physical Scientist Releases Control Branch EPA Office of Research and Development

Maeve Arthars

Environmental Scientist
Environmental Impacts Branch
EPA Region II

Michael Verhaar

Environmental Scientist
Environmental Impacts Branch
EPA Region II

Page 6-5 References

The following is an addition to the References Section.

"Wurman, Major General James W. 1990. Interview in Newark's Star-Ledger dated April 29, 1990."

Appendix B Description of Proposed Facility

Appendix B of the DEIS has been revised to include the most up-to-date information regarding the facility description and operation. The revised Appendix B is printed in this document on the following pages (7-7 through 7-30).

APPENDIX B

REVISED

Description of Proposed Facility

The recommended alternative for development of the E-TEC facility is the renovation of existing buildings at the EPA Facility in Edison. This is the most environmentally sound, implementable and cost-effective alternative considered; with the mitigation measures described in this EIS, there will be no significant adverse environmental impacts associated with this proposal. A detailed description of the proposed facility is given below.

The proposed E-TEC facility would be a fully permitted, state-of-the-art research facility for the testing and evaluation of technologies to treat hazardous wastes. It would be operated by the Releases Control Branch of EPA, which has historically developed new technology in areas such as oil and hazardous materials spills control and clean-up, soil washing, underground storage tank leak detection, and mobile incineration units.

Ten federal, state, and county permits that could be necessary for the E-TEC facility have been identified, as discussed below. Since issuance of the draft EIS, preliminary design work necessary for scoping out these permit applications has been initiated. This work contributed information that specifically addresses reviewer concerns, and is, therefore, presented below.

B.1 DESCRIPTION OF THE PROPOSED E-TEC FACILITY

B.1.1 Pre-Existing Physical Plant

The proposed facility would be located in two interconnected buildings, Buildings 245 and 246. The buildings are approximately 30 years old and are currently in fair condition. Buildings 245 and 246 consist of 160,000 square feet (sq. ft.) and 240,000 square feet of floor space, respectively, and consist of a total of 10 large, open, 200 ft. by 200 ft. bays. The construction of the bays is concrete block fire separation walls with 70 ft. column spacing and a floor-to-ceiling height of 27 ft. The buildings are steel framed, have a raised dock floor (3 ft.-9 in. above grade) and uninsulated concrete block exterior walls.

The structures, constructed by the Department of Defense in the 1950's, were used for warehouse purposes until 1984. Currently, EPA uses Buildings 245 and 246 for ongoing research projects, storage of mobile treatment equipment, shops, and other miscellaneous purposes.

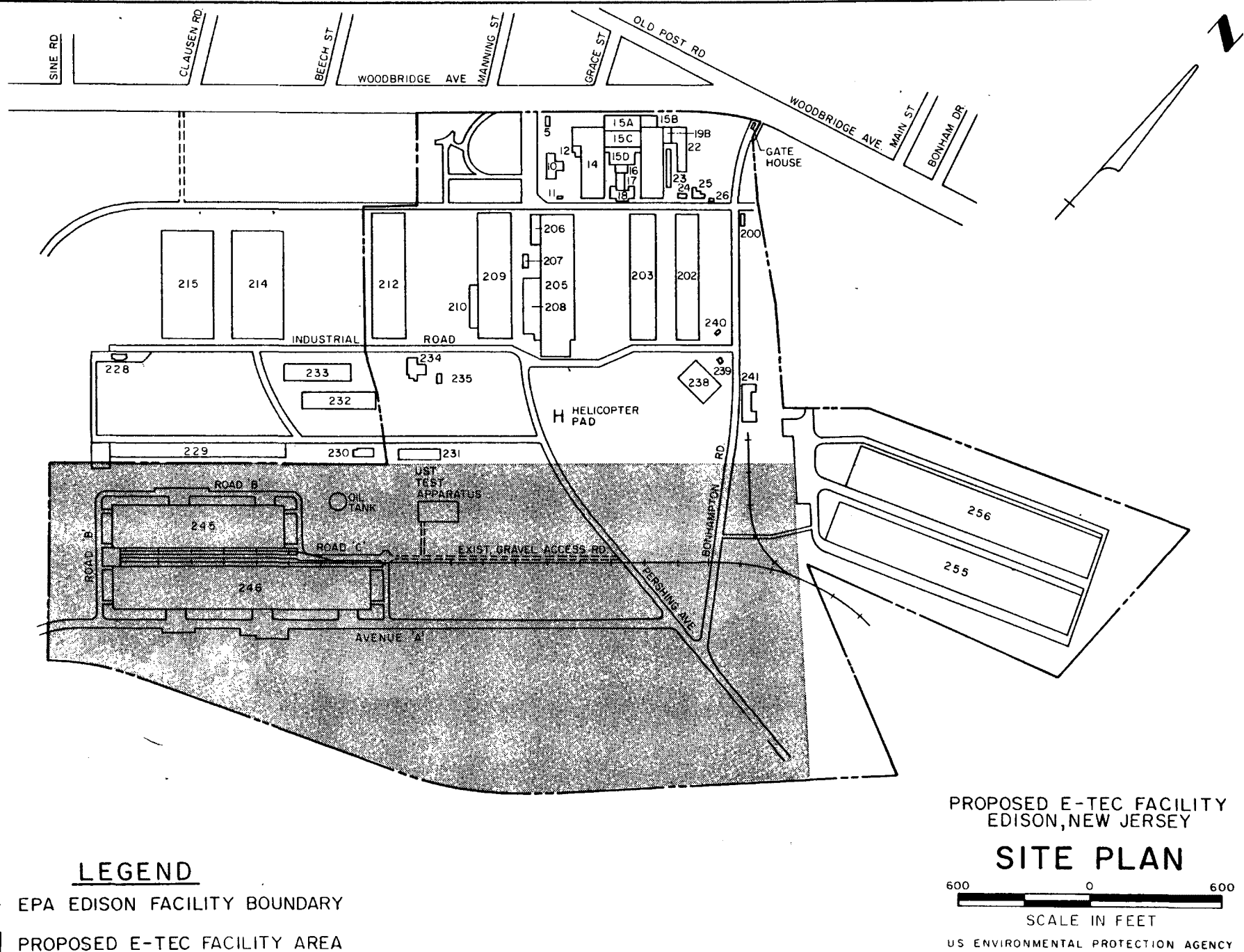
Figure B-1, shows the layout of the existing Raritan Depot site with the proposed 110-acre E-TEC facility site highlighted.

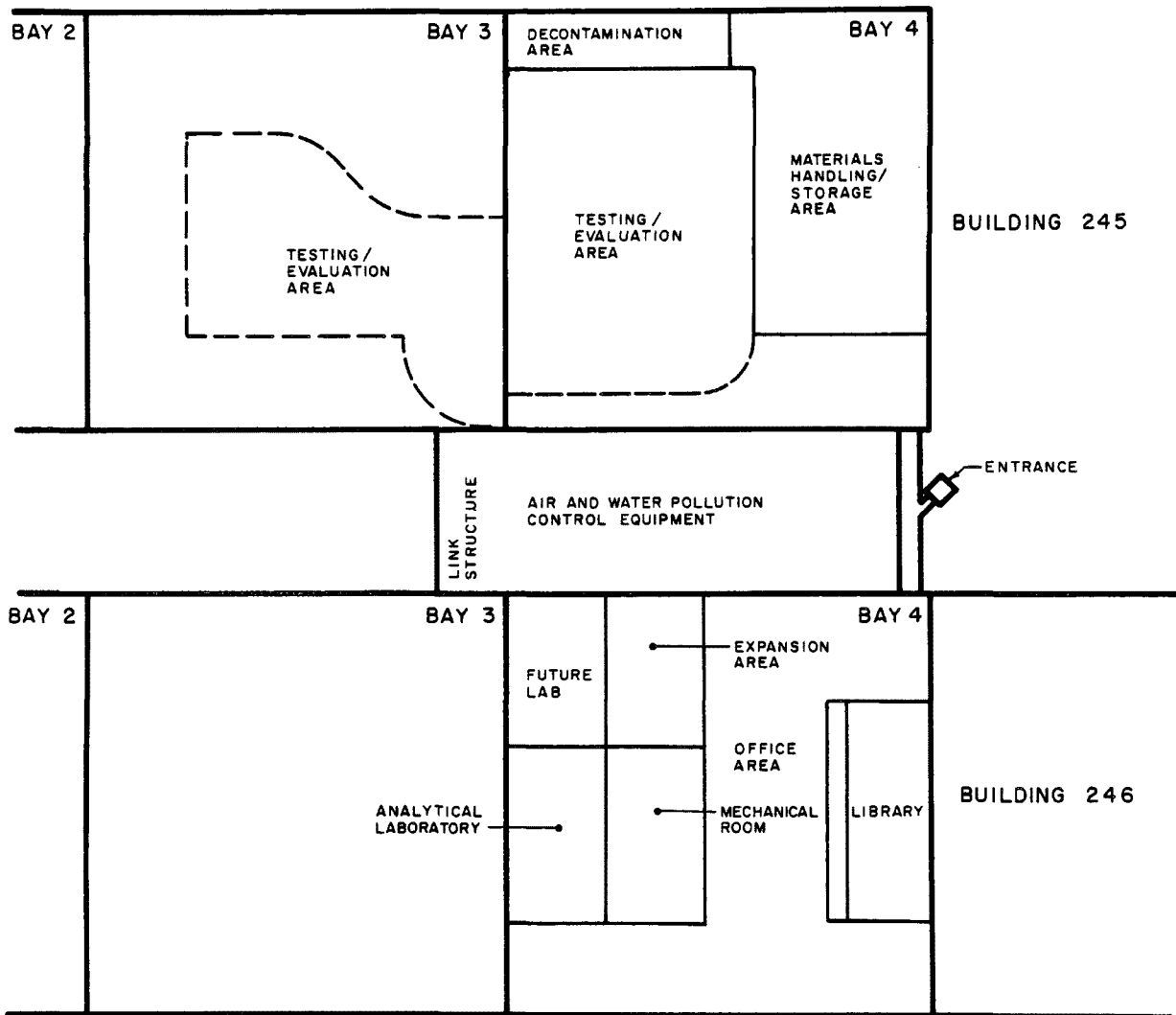
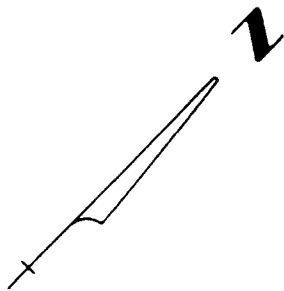
B.1.2 Proposed Modifications to the Facility

In order to meet the goals of the proposed E-TEC facility, renovation and modification of Buildings 245 and 246 would be required. The proposed renovations to the buildings could potentially include the following:

- o Offices and related spaces
- o Technology information library
- o Laboratory areas:
 - A regular analytical laboratory
 - A pilot plant laboratory for small-scale equipment
 - Testing and evaluation (T&E) areas for larger-scale equipment
- o Engineering, fabrication, and maintenance shops
- o Indoor and outdoor personnel training facility
- o Storage space for prefabricated chemical and hazardous waste storage trailers
- o Indoor and potential outdoor areas for storing supplies, materials and equipment
- o Wastewater treatment systems
- o Air pollution control systems

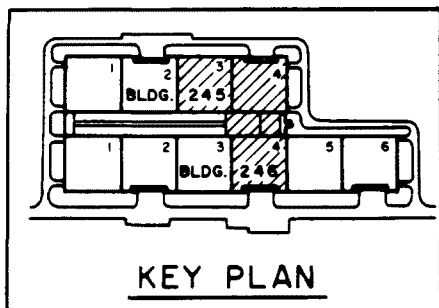
The current design of the proposed modifications calls for three of the existing ten bays in Buildings 245 and 246 to be renovated for use. A schematic of the preliminary layout is shown in Figure B-2 with more detailed layouts of each of the bays to be renovated and the link between the buildings shown in Figures B-3, B-4, B-5 and B-6. The remaining bays would be available for future renovation to provide space for facility expansion, if necessary,





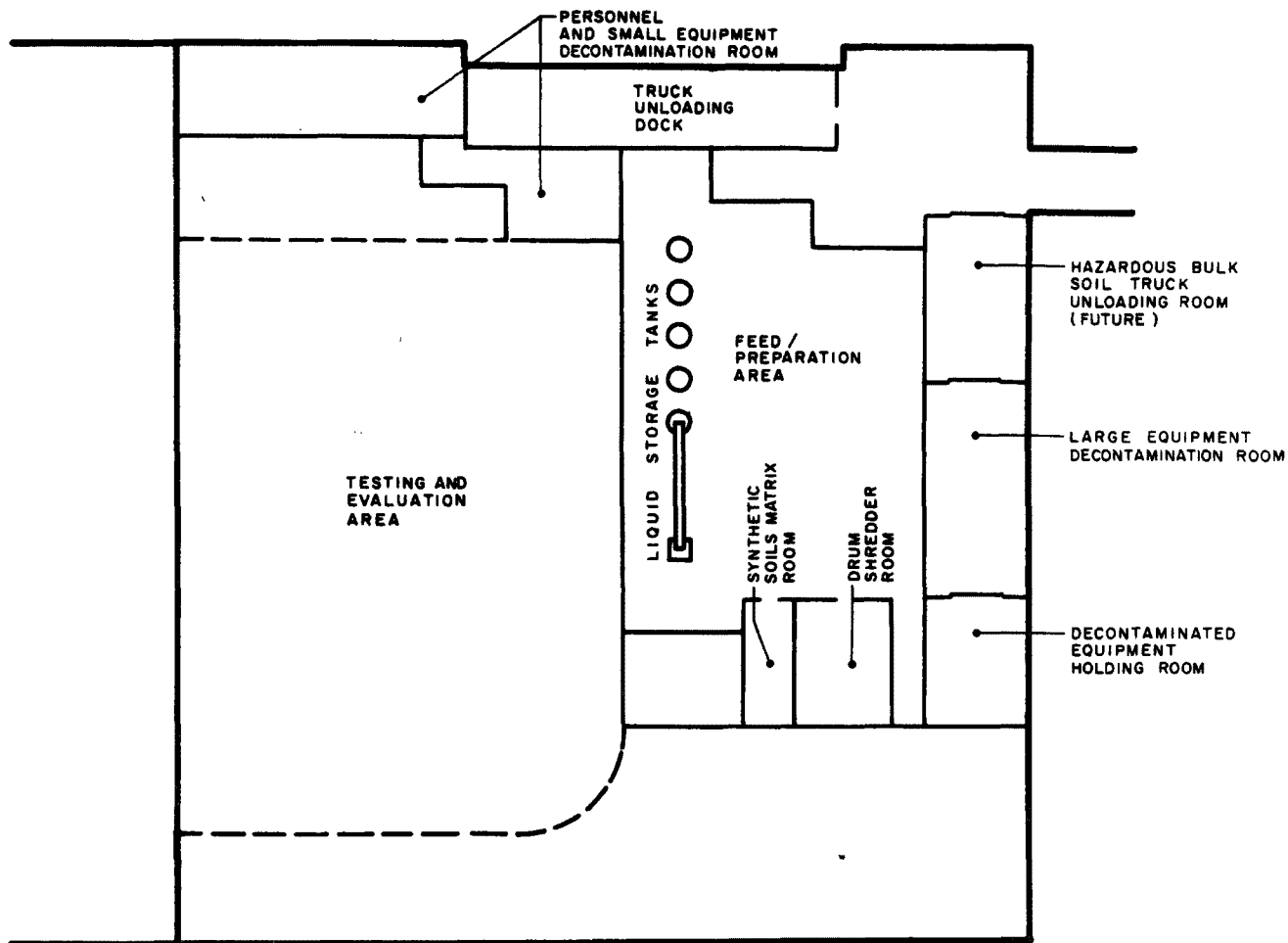
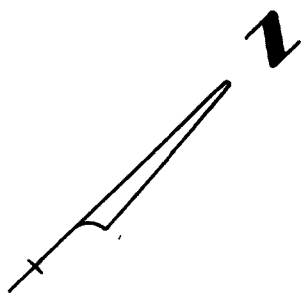
LEGEND

--- 6" SPILL CONTAINMENT CURB



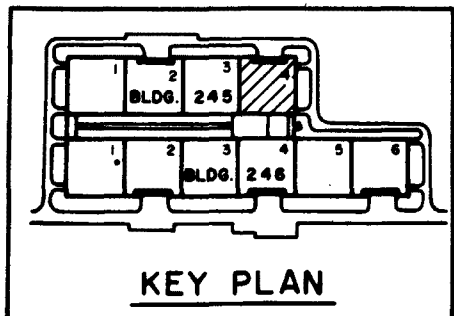
PROPOSED E-TEC FACILITY EDISON, NEW JERSEY PRELIMINARY LAYOUT OF E-TEC FACILITY

U.S. ENVIRONMENTAL PROTECTION AGENCY.



LEGEND

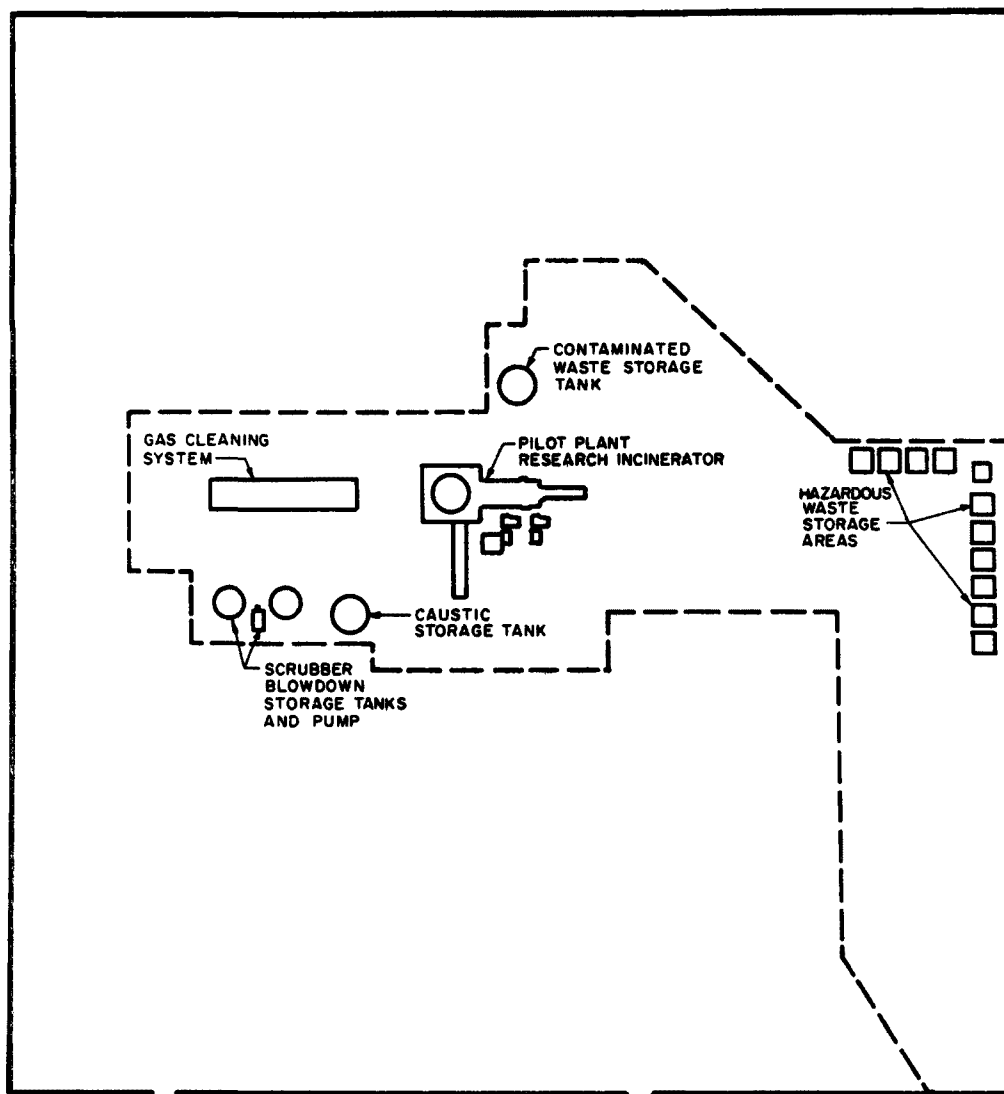
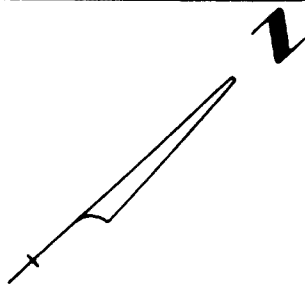
--- 6" SPILL CONTAINMENT CURB



PROPOSED E-TEC FACILITY
EDISON, NEW JERSEY

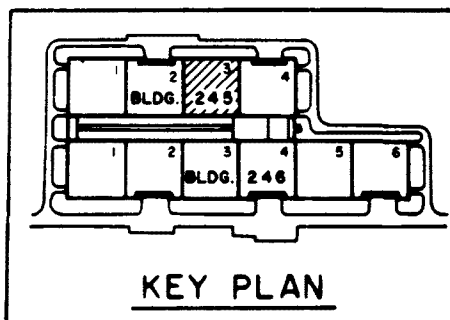
PRELIMINARY LAYOUT BUILDING 245 - BAY 4

U.S. ENVIRONMENTAL PROTECTION AGENCY



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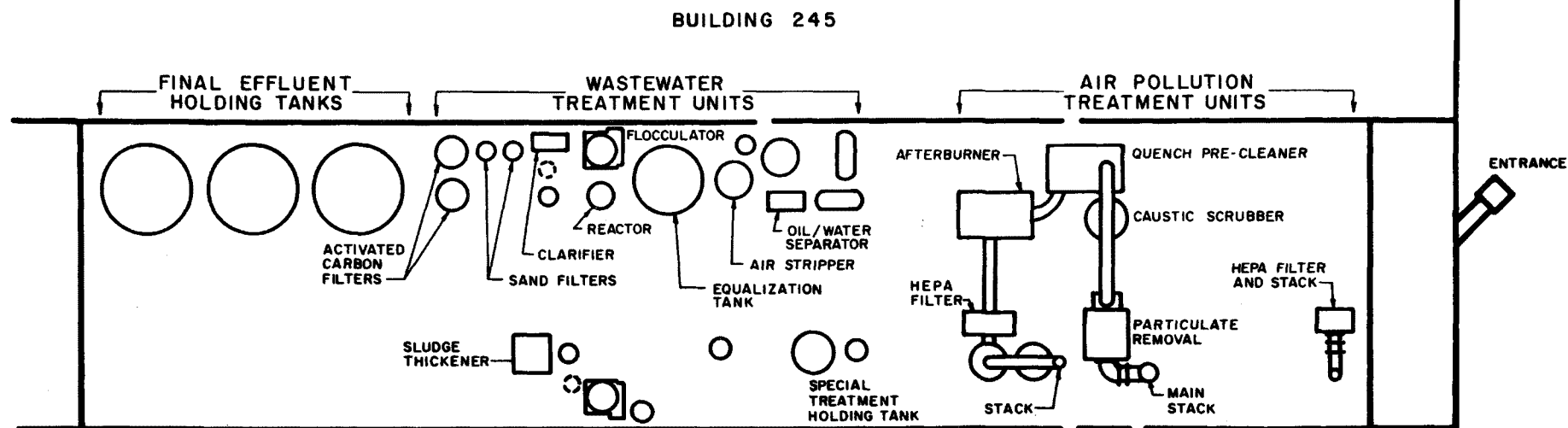
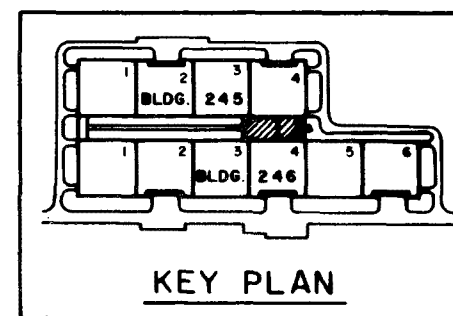


KEY PLAN

PROPOSED E-TEC FACILITY
EDISON, NEW JERSEY

**PRELIMINARY LAYOUT
BUILDING 245 - BAY 3**

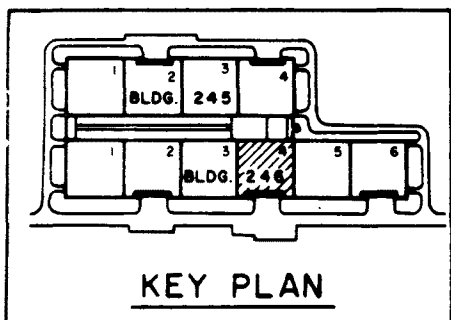
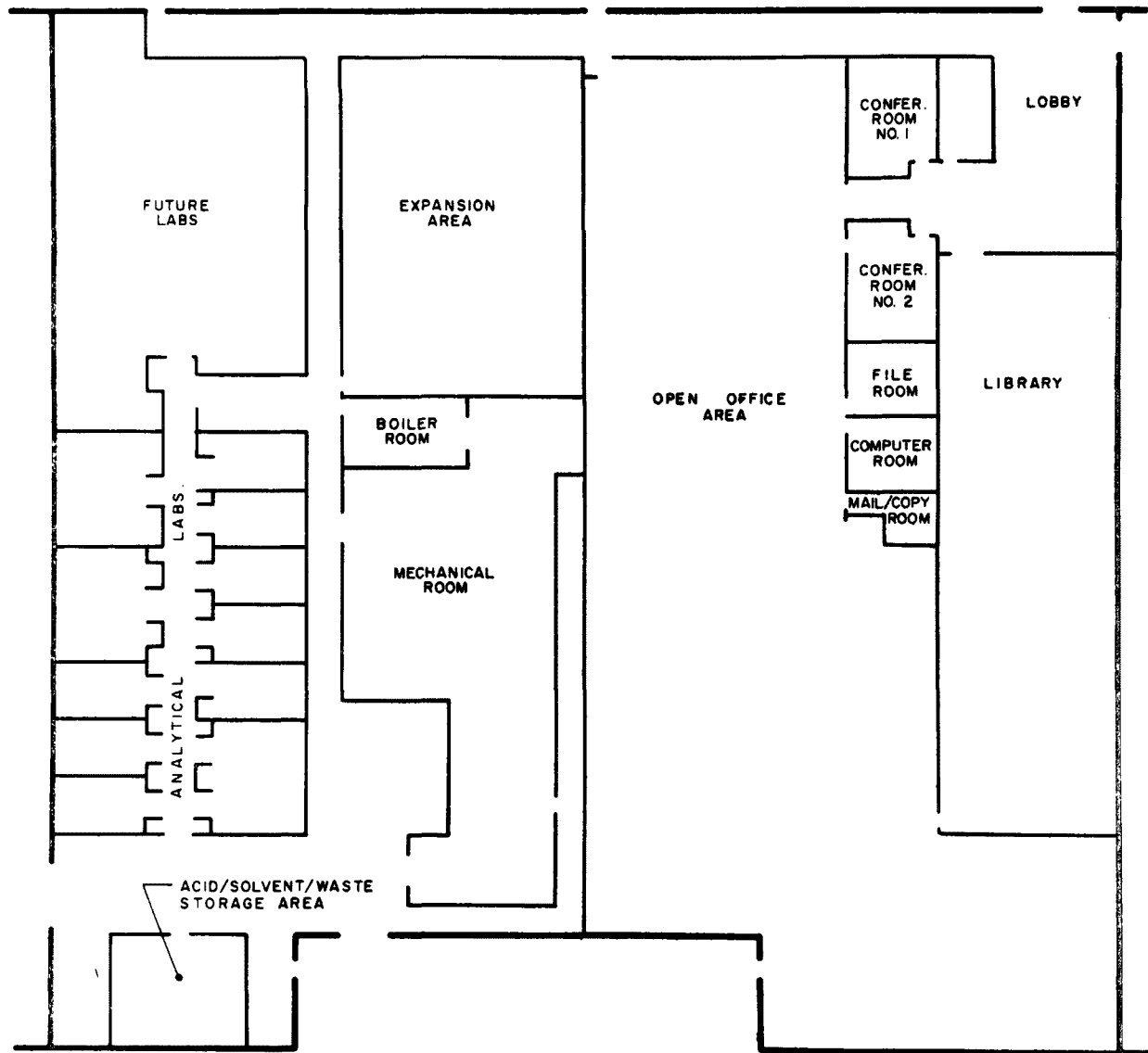
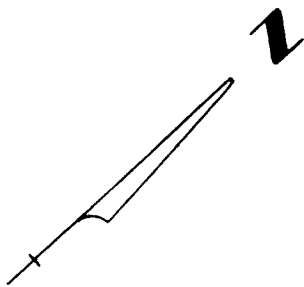
U.S. ENVIRONMENTAL PROTECTION AGENCY

**BUILDING 246**

PROPOSED E-TEC FACILITY
EDISON, NEW JERSEY

**PRELIMINARY LAYOUT
OF POLLUTION
ABATEMENT EQUIPMENT**

U.S. ENVIRONMENTAL PROTECTION AGENCY



PROPOSED E-TEC FACILITY
EDISON, NEW JERSEY
**PRELIMINARY LAYOUT
BUILDING 246-BAY 4**

U.S. ENVIRONMENTAL PROTECTION AGENCY

or could be put to other uses by EPA. The wastewater and air pollution control systems would be housed in a new enclosed "link" area between the two buildings.

B.1.2.1 Laboratories and Testing/Evaluation Bays

Analytical work in support of the functions of the proposed E-TEC facility would take place in analytical laboratories. Also, there will be two testing and evaluation (T and E) bays. These facilities will thus be able to support bench scale experiments and the larger full scale demonstration projects necessary to help decide whether new technologies are valid. The following facilities would be installed to ensure worker safety in all experimental areas where toxic substances might be used.

- o Handwashing facility
- o Shower facility
- o Eye wash facility
- o Exhaust air pollution control equipment
- o Exhaust ventilation system to control laboratory room air movement

In addition, some operational policies of the laboratories are highlighted below.

- o All toxic substance work areas must be identified.
- o Only authorized personnel may enter toxic substance work areas.
- o Work surfaces must be made of a material suitable for use with toxic substances.
- o All procedures generating toxic vapors must take place in a primary containment facility (e.g. fume hood).
- o Gases or vapors generated by analytical instrumentation must be captured.
- o Respirators must be provided as personal protective equipment to all employees who must enter areas with inhalation hazards.
- o The chemicals on-site must be stored in a secured storage area and inventory records must be kept.
- o Hazardous and toxic waste must not remain on site for more than 90 days.

- o Standard transport practices (i.e. unbreakable outside container) must be used when transporting toxic substances.
- o Housekeeping procedures that suppress the formation of aerosols must be followed.
- o Vacuum lines must be protected with an absorbent or a liquid trap and a HEPA filter to prevent the entry of toxic substances into the system.
- o Prior to initiation of laboratory activities, procedures for the handling and disposal of toxic chemicals must be established.

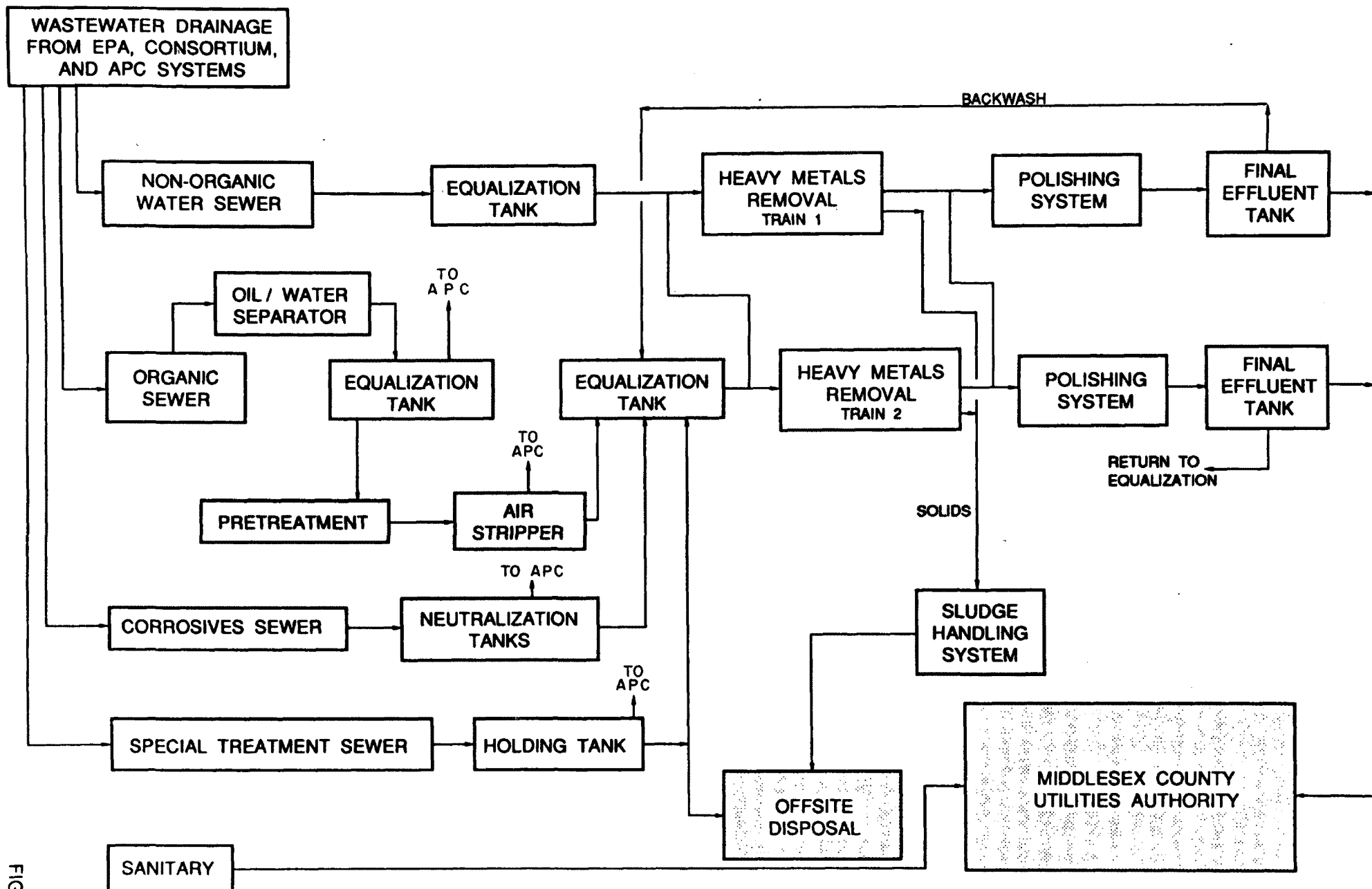
B.1.2.2 Wastewater Treatment Systems

All wastewater generated from the activities at the proposed E-TEC facility, with the exception of the sanitary wastewater (e.g., toilets, handsinks), would be collected in holding tanks after appropriate treatment. The sanitary wastewater would be piped directly to the sanitary sewer system and would flow to the Middlesex County Utilities Authority (MCUA) wastewater treatment plant (WWTP) located in Sayreville, New Jersey.

Samples of the treated wastewater in the holding tank would be analyzed to determine the concentrations of the various pollutants. If these concentrations were below permissible limits (as defined in applicable permits), the water would be discharged to the sewer system and would flow to the MCUA WWTP for further treatment. However, if the concentrations in the wastewater in the holding tank were above permit limits, one of two actions could be taken: 1) on-site pretreatment could be conducted to reduce the concentrations prior to discharge to MCUA or 2) the wastewater could be transported off-site to an approved treatment facility for treatment and disposal.

Four separate wastewater treatment systems are being considered for the E-TEC facility (Figure B-7):

1. The organic water system is meant for wastewaters high in volatile organics (e.g., wastewaters generated in soil washing experiments), and would basically involve: oil-water separation, air



APC = AIR POLLUTION CONTROL SYSTEMS

E-TEC PRELIMINARY WASTEWATER TREATMENT SYSTEMS

stripping, pH adjustment, heavy metals precipitation, pressure filtration, and carbon adsorption.

2. The non-organic water system (primarily from the air pollution control system) would consist of pH adjustment, heavy metals precipitation, pressure filtration, and carbon adsorption.
3. The corrosives water system, which involves a batch mixing tank, would neutralize wastewaters less than pH 3 or greater than pH 11.
4. Wastewaters which cannot be treated in the other systems will be transferred to the special treatment system. It consists primarily of chemical treatment, slurry separation, and holding tank(s).

As stated previously, not all wastewater would be treated on-site. If on-site treatment was determined to be infeasible due to the complexity of the wastewater or the expense of treatment, the wastewater could be transported to an appropriate off-site treatment company. This water would be segregated from the general wastewater and collected in an alternate holding tank. By segregating this water, the volume of water requiring a specific type of removal would be kept to a minimum. If the contaminant was one that was difficult or costly to remove with the processes available at the proposed E-TEC facility, the volume and cost of wastewater that would have to be transported off-site for treatment would be minimized.

Wastewater would be generated only during those times when experiments were going on and the air pollution control systems were being operated. This would not be continuous; the discharge rate, therefore, would not be continuous. Wastewaters could be held within the system until proper levels of treatment are reached.

The average wastewater discharge rate would not exceed 100,000 gallons per day. This flow would allow the entire day's generation of water to be collected, analyzed, and treated, if required, prior to discharge to the MCUA treatment plant or transport off-site for further treatment.

B.1.2.3 Air Pollution Control Systems

The proposed E-TEC facility would be equipped with air pollution control systems (Figure B-8) to reduce the concentrations of contaminants in process off-gases, gases generated during the testing of large-scale equipment. All process off-gases would flow through the facility treatment equipment; any pollution control equipment supplied with the equipment to be tested would be used in tandem with the facility equipment. Therefore, the units to be tested would not be required to have pollution control equipment.

Process off-gases would be treated by components of the following two systems to minimize pollutant concentrations prior to discharge to the atmosphere. The system components selected would depend on the quantity and type of contaminants contained in the off-gas. The final process design would determine the type and capacity of equipment that would be used; however the components of the two systems would most likely be similar to those listed below.

- 1) Afterburner, quench, caustic scrubber, wet electrostatic precipitator, or other particulate removal device, and induced draft (ID) fan in series, or similar treatment system.
- 2) High efficiency particulate adsorption (HEPA) filter, carbon adsorption filter and ID fan in series.

Treated gases (gases containing contaminant concentrations below NJDEP air permit compliance levels) would exit the facility through a stack. The final design of the proposed facility would specify the exact number of stacks and the stack parameters. The stack height and diameter would be determined through air modeling and in accordance with state and federal regulations and would be included in the air permit issued for the proposed E-TEC facility by the State of New Jersey. On a preliminary basis, however, the following is expected:

- a main stack, probably 100 ft. above ground level, for the primary air pollution control system;

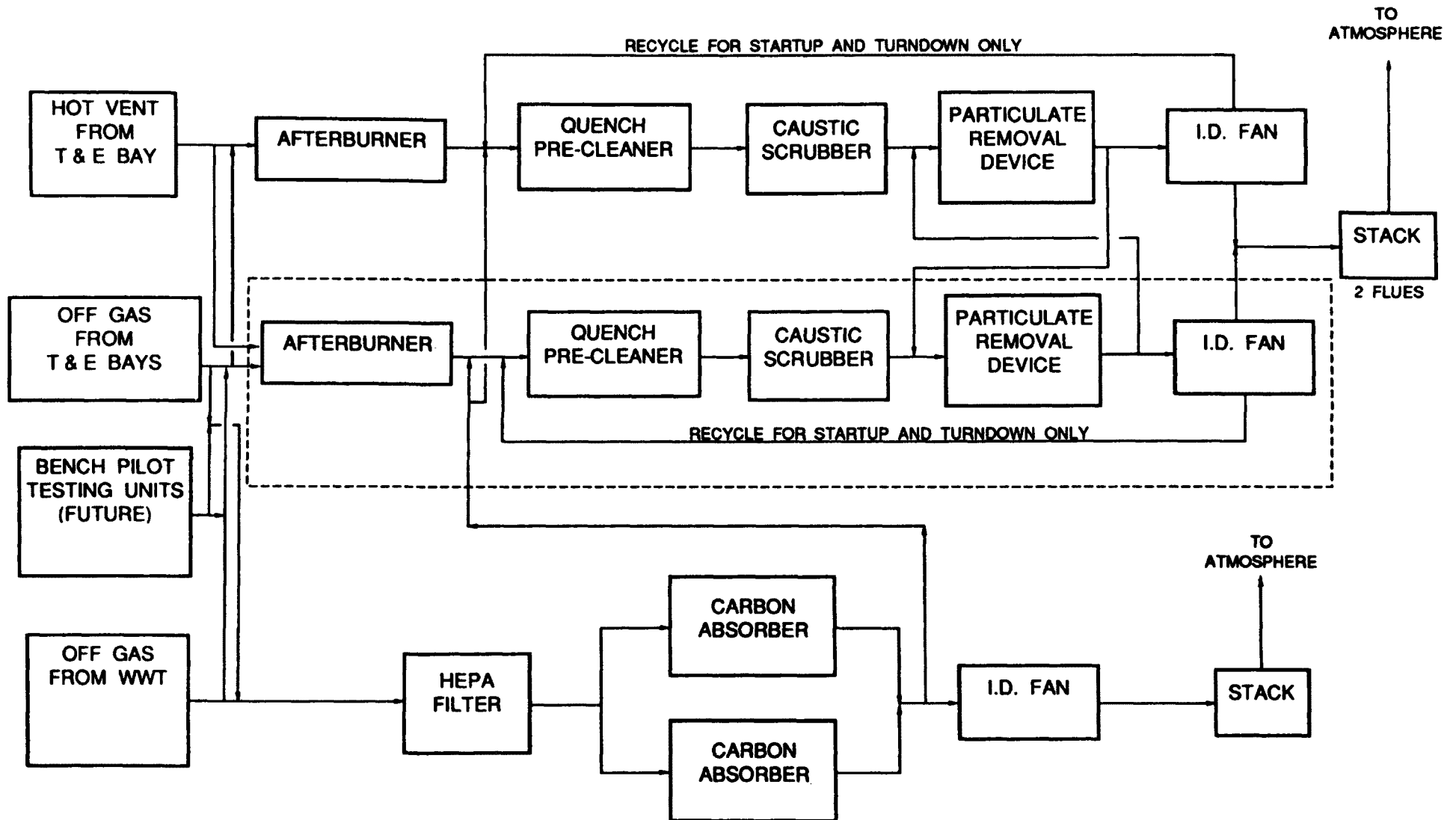


FIGURE B-8

TO BE BUILT IN THE FUTURE

PRELIMINARY AIR POLLUTION CONTROL SYSTEMS FOR E-TEC

- secondary stacks, probably on the range of 40 to 50 ft. above ground, for other treatment units in the facility.

These stacks will each have the treatment system necessary to remove contaminants to meet permit requirements prior to emission.

B.1.2.4 Ventilation Systems

The areas within the E-TEC facility would be maintained as "shirt sleeve" environments. Therefore, the primary ventilation systems would treat the incoming air to maintain the required indoor conditions and then exhaust this air directly to the outdoors without any additional treatment. The "shirt sleeve" environments would be maintained by the application of local containment devices - such as hoods or direct equipment venting - which would capture the air that may contain contaminants. The extent and type of treatment this captured air receives would be dependent on the type and quantity of contaminants.

The containment devices located in the T and E, Pilot Plant, Pollution Abatement and Material Handling areas would be connected to the E-TEC facility air pollution control systems. These systems would provide the needed flexibility for treating the differing contaminants which would result as the specific research efforts change.

The analytical laboratories would be outfitted with laboratory type fume hoods. The types and quantities of chemicals to be used in the analytical laboratories indicate that treatment of this exhaust air would not be needed. This is typical of standard analytical laboratories. The hoods in each individual room within the analytical laboratory area would be connected to an exhaust system dedicated to that room. This would provide the ability for future installation of treatment equipment should this need arise.

B.1.2.5 Storage and Containment Structures

In accordance with Federal regulations, chemical storage areas either inside or outside of the proposed E-TEC facility would be equipped with

impervious floor material and a dike. The diked areas would not contain floor drains; if a spill occurred, the liquid would be contained within the diked area. The collected liquid could then be pumped out, via suction, and treated on-site or transported off-site for treatment and disposal.

The design of the proposed facility calls for inside storage areas and, potentially, limited outside storage. The outside storage areas would have appropriate storage structures that could contain sample material or equipment. Future needs could necessitate the construction of additional outside storage areas. All storage areas would conform to all applicable codes and standards. Such mandates ensure designs that would help prevent and control spills and minimize environmental impacts.

The entire facility would be designed to control spills and minimize releases that could be caused by the storage and processing of hazardous and toxic substances. Equipment for spill clean-up would be readily available and personnel would be trained in its use.

B.1.2.6 Security Systems

Currently, the entire EPA Edison Facility that contains the proposed 110-acre E-TEC facility site is surrounded by a chain link fence with site access controlled through an entrance gate and a gate house. Figure B-1, presented previously, shows the location of this existing gate house. A guard is on duty 24 hours per day. The entrance gate is currently open during normal working hours (7:00 AM to 6:00 PM) and then closed at all other times, with access controlled by the security guard stationed in the guard house. The E-TEC facility buildings would also employ a limited access system to provide further security and limit access to these areas.

B.2 FACILITY USERS

EPA's Office of Research and Development (ORD) Risk Reduction Engineering Laboratory (RREL) Releases Control Branch (RCB) would manage and oversee the operation of the proposed E-TEC facility and support the research program requirements of the facility users.

The groups that would be expected to use the facility are listed below:

1. EPA's Office of Research and Development (ORD) and its contractors.
2. EPA's Office of Solid Waste and Emergency Response (OSWER) and its contractors.
3. Academic and industrial institutions, such as the Hazardous Substance Management Research Center.
4. Technology developers and offerers.

B.3 SCOPE OF EXPERIMENTAL STUDIES

The proposed facility is not a treatment, storage and disposal (TSD) facility under the Resource Conservation and Recovery Act (RCRA) and would not be used for the treatment, disposal or storage of hazardous wastes. The only wastes treated or stored on-site would be those minimal quantities necessary for research purposes.

Evaluation and experimentation would be conducted at all levels from bench scale to full scale and would take place inside the buildings. The proposed facility would evaluate prototype equipment, small-scale units, and full-sized modular treatment units. Development and performance tests would be conducted to determine the effectiveness of the equipment, along with reliability tests that would be used to assess its operating range and safety characteristics. Treatment technologies tested may include chemical, physical, biological or thermal processes which would be operated in either batch, continuous or in-situ mode, in combination or separately, to accomplish extraction, immobilization, destruction, or detoxification of wastes. Examples of specific technologies are presented in Table B-1; however, this table is not intended to be all inclusive.

The technologies tested at the facility generally would be equipped with their own pollution control devices, but this would not be a requirement. The facility would be equipped with its own pollution control systems that would

be operated in tandem with any of the tested equipments devices. In any case, the facility's systems would provide full treatment. Emergency shutdown procedures would be implemented in the event of process irregularities, in accordance with regulatory requirements and sound engineering practices.

The day-to-day operations of the facility may not call for hazardous materials to be on site at all times. There will also be an initial start-up period before intermittent operation begins which may not require hazardous materials to be on-site. Experiments may culminate with the use of hazardous materials, but the projects typically do not use them during all stages of work.

If there is enough interest, a citizens' advisory committee (CAC) will be formed to meet periodically with the facility management to discuss research activities and their impact upon the community, health and safety aspects of the research operations, and other topics of interest or concern.

B.4 EXPERIMENTAL WORK PLANS

Work plans of all experiments would be submitted to EPA for environmental and safety review and approval. No testing or deliveries would be conducted prior to work plan approval, and the work plans would have to include a determination of the quantity of waste material necessary to conduct the research.

The work plans would include the following steps:

1. Planning - Experimental Design (including environmental permit compliance and safety considerations)
 - Quality assurance/quality control objectives
2. Equipment setup and shakedown
3. Equipment performance and reliability testing
4. Decontamination - Equipment and facility
 - Demobilization, removal from site
5. Data reduction and analysis; report preparation

Table B-1

Examples of Treatment Technologies to be Evaluated
in the Proposed E-TEC Facility

<u>Technology</u>	<u>Technology Type</u>				
	<u>Chemical</u> <u>Process</u>	<u>Biological</u> <u>Process</u>	<u>Physical</u> <u>Process</u>	<u>Immobilization</u> <u>Process</u>	<u>Thermal</u> <u>Process</u>
Catalytic Oxidation	X				
Dechlorination	X				
Electrochemical	X				
Neutralization	X				
Precipitation	X				
Aerobic Fixed-Film Fluidized Bed		X			
Anaerobic Fixed-Film Fluidized Bed		X			
In-Situ Bioreclamation		X			
Powdered Activated Carbon			X		
Carbon Adsorption			X		
Centrifugation			X		
Distillation			X		
Evaporation			X		
Filtration			X		
Ion Exchange			X		
Soil Washing			X		
Solvent Extraction			X		
Stripping			X		
In-Situ Vitrification				X	
Stabilization/Solidification				X	
Circulating Fluidized Bed					X
Infrared Incineration					X
Plasma Arc					X
Pyrolysis					X
Rotary Kiln Incineration					X
Supercritical Water Oxidation					X
Wet Air Oxidation					X

Source: EPA, 1988a.

B.5 TYPES OF SUBSTANCES ON SITE

B.5.1 Hazardous Chemicals

The testing and evaluation that would be conducted at the proposed E-TEC facility could potentially involve almost any chemical or compound including those substances classified as hazardous or toxic. A general list of hazardous substances is given below (EPA, 1989c).

- o Halogenated non-polar aromatics
- o Polychlorinated biphenyls (PCBs)
- o Polychlorinated dibenzodioxins
- o Polychlorinated dibenzofurans
- o Halogenated phenols, cresols and other aromatics
- o Halogenated aliphatic compounds
- o Halogenated cyclic aliphates/ethers/esters/ketones
- o Nitrated aromatics and aliphatics
- o Simple non-polar aromatics and heterocyclics
- o Polynuclear aromatic hydrocarbons
- o Other polar organics
- o Non-volatile metals
- o Volatile metals

Along with the chemicals and compounds that would be transported to and temporarily stored in the proposed E-TEC facility for use in research, chemicals necessary to facilitate the efficient operation of the laboratories at the proposed E-TEC (e.g., reagents, solvents) would be stored on site. These chemicals would be stored in relatively small quantities. Table B-2 presents a list of chemicals that could be stored at the proposed facility at some time during the life of the facility to facilitate testing and the quantities at which these chemicals might be stored (EPA 1988a).

B.5.2 Hazardous Wastes

The testing and evaluation of hazardous waste treatment technologies may require the use of clean, uncontaminated soils; surrogate materials; and

actual wastes, in the form of solids (i.e., clean or contaminated soils) or liquids (i.e., contaminated surface water or groundwater). These materials would have to be transported to and stored at the proposed E-TEC facility. Contaminated wastes would most likely be obtained from Superfund sites and would be transported and stored in the minimum quantity necessary to conduct research. In all cases, the amount of hazardous waste on-site would be limited to that quantity that could be safely stored at the proposed facility. The quantity that could be safely stored would be determined by the process outlined in the DEIS Appendix F. That is, a risk assessment based on a catastrophic release scenario would limit the volume and concentration of specific chemicals that could be stored so that in the event of such a release, no significant adverse health effects would be likely to occur. All wastes stored on-site would be kept in appropriate storage containers and would be placed in the diked storage areas.

The process of testing treatment technologies would not only require hazardous waste or substances as an input, but could also generate hazardous waste as a by-product. Any wastewater generated would be collected and treated within the wastewater treatment systems described in Section B.1.2.2. Any solid hazardous wastes generated would be contained and most likely be transported back to the site of origin for disposal. These wastes could also be shipped off-site for further treatment or disposal in appropriate, regulated facilities.

B.6 PROPOSED EFFLUENT STANDARDS

Because of the wide variety of activities that would be conducted at the proposed E-TEC facility, the wastewater generated would vary greatly in its strength and composition. The treated wastewater would have to comply with the effluent limits imposed by the NJDEP and MCUA. These limits, contained in the facility's indirect discharge permit, would represent flows and concentrations established to ensure that no adverse impacts would occur to the operation of the MCUA treatment plant.

Table B-2

Examples of Chemicals that Could be
Stored in the Proposed E-TEC Facility¹

<u>Chemical</u>	<u>Typical Quantity</u>
Acetone	10 gal.
Benzene	2 gal.
Carbon tetrachloride	2 gal.
Chloroform	2 gal.
Ethanol, 95%	20 gal.
Ethylacetate	1 gal.
Formaldehyde solution, 37%	5 gal.
Freon	2 gal.
Hexane	10 gal.
Methanol	10 gal.
Methyl ethyl ketone	2 gal.
Methylene chloride	5 gal.
Mineral spirits	50-gal.
Toluene	10 gal.
Tributyl phosphate	3 gal.
Trichloroethylene	1 gal.
Triisooctylamine	10 gal.
Triton N101	5 gal.
Xylene, mixed isomer	3 gal.
p-xylene	30 gal.
Acetic acid	5 gal.
Hydrochloric acid	20 gal.
Hydrofluoric acid, 37%	5 gal.
Nitric acid, 70%	20 gal.
Perchloric acid, 70%	5 gal.
Phosphoric acid	3 gal.
Sulfuric acid, 95%	5 gal.
Ammonium hydroxide	15 gal.
Sodium hydroxide	50-gal.
Specialty gases	40 cylinders (A-1)
L-ascorbic acid	75 grams avg. (3 bottles)
Boric acid powder	7-8 liters avg. (3 bottles)
Cyclohexane	20 liters avg. (5 bottles)
Ether	2 liters avg. (2 bottles)
Hydrogen peroxide	1 liter avg. (1 bottle)
Monochloroacetic acid	1,500 gm. avg. (3 bottles)
Nitric acid, fuming	500 gm. avg. (1 bottle)
Sodium chloride, granular	50 kg. on hand (5 boxes)

¹ Chemicals that could be stored at the proposed facility at some time during the life of the facility.

Source: EPA, 1988a.

B.7 APPROVALS NECESSARY FOR OPERATION

Based on preliminary discussions with regulatory agencies, there are ten federal, state, and county approvals that could be necessary for E-TEC. An approval could be a permit, a letter of authorization, or an approval certificate. The approvals usually involve several documents which detail the operations, outline reporting requirements, establish emergency procedures, and cover all terms and conditions necessary to operate the facility; they essentially constitute a license to operate.

The permits/approvals being evaluated for the E-TEC facility are:

Federal

1. Resource Conservation and Recovery Act (RCRA), Research, Development, and Demonstration (RD&D) Permit - required for research operations involving hazardous materials.
2. Toxic Substances Control Act (TSCA) Letter of Authorization - required for operations involving polychlorinated biphenyls.

State

3. New Jersey Research, Development, and Demonstration (RD&D) Permit - essentially equivalent to the federal RCRA RD&D permit, this state permit is required for research operations involving hazardous materials.
4. Permit to Construct and Certificate to Operate - Air Pollution Control Permit - this permit is required for operations which involve air discharges.
5. New Jersey Pollution Discharge Elimination System/Significant Indirect User (NJPDES/SIU) Permit - this permit is essentially equivalent to that issued by the MCUA; it requires pretreatment of E-TEC wastewaters prior to discharge to the MCUA sewerage system.
6. Discharge Allocation Certificate - this certificate may be needed to certify that the MCUA has capacity to receive the E-TEC flows.

7. Treatment Works Approval - this approval is required for all wastewater treatment works in the state.
8. Industrial Stormwater Permit - this permit may be needed if there is a stormwater point discharge from the E-TEC facility.
9. Amendment to Areawide Water Quality Management (WQM) Plan - this amendment may be needed since the current areawide WQM plan does not address flow from the E-TEC facility.

County

10. Non-Domestic Wastewater Discharge Permit - this permit is required by the Middlesex County Utilities Authority of all non-domestic users tied into the county sewerage system.

Pages E-11 and E-13 Risk Characterization

EPA updates toxicity data periodically, so to reflect the most current data, Tables E-4 (DEIS page E-11) and E-5 (DEIS page E-13) have been revised and are presented on the following pages. The values for the carcinogenic slope factor have been updated for the chemicals beryllium oxide, dieldrin, 2,4-dinitrotoluene, methyl chloride and trichloroethylene (these chemicals are in bold on the table). For these chemicals, the excess individual lifetime risk estimates changed, but none were greater than one in a million risk and the total excess cancer risk remained unchanged.

Page F-3 Dose-Response Assessment

Please add the following paragraph to the end of the page.

The acute exposure limits (or toxicity limits) that would protect the public (including children and the elderly) from adverse health effects in the event of a catastrophic release were calculated from occupational exposure limits (i.e., threshold limit values - time weighted averages (TLV-TWAs) and short-term exposure limits (STELs) divided by a safety factor of 10 to account for variations in the population's sensitivity. This approach to toxicity limits was used as a screening technique, in lieu of acute inhalation reference doses, and to present the methodology that would be incorporated in the facility's management plan. The management plan would ensure that EPA risk assessment guidance will be followed in the evaluation of acute health risks and part of this guidance prescribes the use of the most current toxicity data.

The EPA is currently developing acute inhalation criteria for various chemicals. These criteria are based on a review by senior agency scientists of the scientific literature to determine the "No Observed Adverse Effects Levels" (NOAELs) or that level to which animals or humans were exposed through inhalation without showing adverse health effects. The NOAELs are further reduced by incorporating factors to reflect the completeness of the data, extrapolation from animal experiments to humans, and protection of sensitive

Table E-4
Toxicity of Indicator Chemicals

<u>Chemical</u>	<u>Carcinogenic Slope Factor, (q₁*)¹ (mg/kg/day)⁻¹</u>	<u>Route of Exposure²</u>	<u>Weight of Evidence³</u>
Arsenic	50.0	I	A
Benzene	2.9 E-2	I	A
Benzidine	2.3 E+2	I	A
Benzo(a)pyrene	ND		B2
Bis(2-chloroethyl)ether	1.1	I	B2
Beryllium oxide	8.4	I	B2
Cadmium	6.1	I	B1
Carbon tetrachloride	0.13	I	B2
Chlordane	1.3	I	B2
Chloroform	8.1 E-2	I	B2
Chromium VI	41	I	A
1,1-Dichloroethylene	1.2	I	C
Dieldrin	16	I	B2
DDT	0.34	I	B2
2,4-Dinitrotoluene	0.68	0	B2
Di-n-octyl phthalate	ND		
Hexachlorobenzene	1.7	0	B2
Hexachloroethane	1.4 E-2	I	C
Methyl chloride	1.26 E-2	I	C
Methylene chloride	1.4 E-2	I	B2
Nickel	0.84	I	A
Polycyclic aromatic hydrocarbons (PAHs)	ND		B2
Polychlorinated biphenyls (PCBs)	7.7	0	B2
2,3,7,8-TCDD	1.56 E+5	0	B2
1,1,2,2-Tetrachloroethane	0.2	I	C
1,1,2-Trichloroethane	5.7 E-2	I	C
Trichloroethylene ⁴	1.7 E-2	I	B2
Vinyl chloride	2.3	I	A

¹ Carcinogenic slope factors represent upper-bound estimates (within 95% confidence estimate) of the slope of the dose - response curve. Slope factors are given for the inhalation route of exposure (I), when available. Values for the oral route of exposure, (0), are listed in the absence of inhalation data. When no information was available, the letters ND, not determined, were entered into the table. Source: EPA, 1989c and the Integrated Risk Information System (IRIS) unless otherwise noted.

² I = inhalation, 0 = oral. Indicates route of exposure to which the carcinogenic potency factor in the table corresponds.

³ The classification system for carcinogens is outlined in the Guidelines for Carcinogen Risk Assessment (EPA, 1989c).

A = Human carcinogen

B1 = Probable human carcinogen, with limited evidence of carcinogenicity in humans

B2 = Probable human carcinogen, with sufficient evidence of carcinogenicity in animals but inadequate evidence of carcinogenicity in humans.

C = Possible human carcinogen

D = Not classified

⁴ Slope factor subject to change based on current EPA Carcinogen Risk Assessment Verification Endeavor (CRAVE) review.

Table E-5

Risk Characterization - Worst-Case Long-Term, Low Level Release

<u>Chemical</u> ¹	<u>Average Daily Lifetime Dose (mg/kg/day)</u>	<u>Carcinogenic Slope Factor², q₁* (mg/kg/day)⁻¹</u>	<u>Excess Individual Lifetime Risk Estimates³</u>
Arsenic	4.49 E-9	50.0	2 E-7 [A]
Benzene	3.97 E-8	2.9 E-2	1 E-9 [A]
Benzidine	5.23 E-9	2.3 E+2	1 E-6 [A]
Bis(2-chloroethyl)ether	1.05 E-9	1.1	1 E-9 [B2]
Beryllium oxide	2.09 E-12	8.4	2 E-11 [B2]
Cadmium	3.14 E-10	6.1	2 E-9 [B1]
Carbon tetrachloride	5.32 E-7	0.13	7 E-8 [B2]
Chlordane	5.23 E-7	1.3	7 E-7 [B2]
Chloroform	1.07 E-8	8.1 E-2	9 E-10 [B2]
Chromium VI	2.09 E-10	41	9 E-9 [A]
1,1-Dichloroethylene	2.61 E-11	1.2	3 E-11 [C]
Dieldrin	5.23 E-9	16	8 E-8 [B2]
DDT	5.23 E-9	0.34	2 E-9 [B2]
Hexachloroethane	1.05 E-9	1.4 E-2	2 E-11 [C]
Methyl chloride	5.23 E-11	1.26 E-2	7 E-13 [C]
Methylene chloride	2.43 E-6	1.4 E-2	3 E-8 [B2]
Nickel	7.97 E-8	0.84	7 E-8 [A]
1,1,2,2-Tetrachloroethane	4.03 E-10	0.2	8 E-11 [C]
1,1,2-Trichloroethane	6.89 E-9	5.7 E-2	4 E-10 [C]
Trichloroethylene	4.49 E-7	1.7 E-2	8 E-9 [B2]
Vinyl chloride	5.23 E-11	2.3	1 E-10 [A]
Total			2 E-6

¹ The chemicals Benzo(a)pyrene, 2,4-Dinitrotoluene, Di-n-octyl phthalate, Hexachlorobenzene, PAH, PCB, and 2,3,7,8-TCDD were not included because an inhalation slope factor was not available.

² Source: EPA, 1989c (Chromium VI and Methyl Chloride potency factors were obtained from EPA, 1986b).

³ Because of risk assessment uncertainties, only one significant digit should be reported with the risk estimate and the weight of evidence to classify the compound as a carcinogen should be reported with each estimate (EPA 1987c). Weight of evidence letters are reported in brackets following the estimate.

A = Human carcinogen.

B1 = Probable human carcinogen, limited evidence of carcinogenicity in humans.

B2 = Probable human carcinogen, sufficient evidence of carcinogenicity in animals but inadequate evidence of carcinogenicity in humans.

C = Possible human carcinogen.

subpopulations (e.g., children, elderly). Because these acute inhalation criteria would represent more up-to-date toxicity information than the occupational numbers, the management plan would ensure that these values would be incorporated into the risk assessment, when they become available. These values would then be used to determine the safe storage levels of the chemicals on-site.

Page F-5 Exposure Assessment - Catastrophic Release

The first sentence should read: "The exposure assessment involves two major components - the determination of release rates associated with a fire and the application of an atmospheric transport model to estimate ambient exposure levels of the subject compounds."

Page G-4 Decontamination Procedures

Add the following information to the end of the write-up on decontamination procedures in Section G.5.

"Personnel as well as small and large equipment decontamination abilities would be installed in the E-TEC facility. The equipment decontamination capability would be installed to ensure ample ability to respond to accidental chemical spills."

CHAPTER 8

8. COMMENT RESPONSES

A Draft Environmental Impact Statement (DEIS) for the establishment of an Environmental Technology and Engineering (E-TEC) facility was issued in January 1990. The notification of the issuance was published in the Federal Register on January 24, 1990. The DEIS presented an in-depth description of the alternatives considered, the affected environment and the environmental impacts associated with the preferred alternative.

A public hearing was held in Edison, New Jersey at the Stelton Community Center on February 27, 1990 in order to allow interested individuals, governmental agencies and other organizations the opportunity to ask questions and comment on the DEIS. On March 31, 1990, the EPA held a public availability session at the Middlesex County College to answer concerns expressed during the hearing and any additional questions. In addition, comments were accepted both during the comment period that followed the issuance of the DEIS (January 24, through April 6, 1990) and even thereafter.

This Final Environmental Impact Statement (FEIS) was prepared to address the verbal and written comments received and to incorporate them into the EIS process. Because of the nature and quantity of comments received, this chapter of the FEIS, which includes a point-by-point discussion of the comments received, was organized in three sections: 1) General Responses, 2) Responses to Comments from the Public Hearing, and 3) Responses to Written Comments Received.

The first section, General Responses, addresses comments regarding the categories of 1) the Facility Location/Alternatives Evaluation, 2) Chronic Risk Assessment, and 3) Acute Risk Assessment/Catastrophic Release. A large number of concerns expressed related to these three areas, so in order to provide a more comprehensive, cohesive response to these concerns, the section was organized to include a general response to each category followed by specific responses to comments that were not fully covered in the general response.

The second section, Responses to Comments from the Public Hearing, contains a chronological listing of comments raised at the public hearing and corresponding responses. The speaker making the comment(s) is identified prior to the list of his/her comments.

The third and final section, Responses to Written Comments Received, lists the comments received, along with applicable responses. The person(s) writing the letter is identified prior to the list of his/her comments. Appendix I contains a copy of all the written comments received.

Copies of the public hearing transcript, DEIS, and FEIS are available for review at four repositories, as follows:

- 1) Edison Township Municipal Building
100 Municipal Boulevard
Edison, New Jersey 08817
- 2) Edison Public Library
340 Plainfield Avenue
Edison, New Jersey 08817
- 3) EPA - Region II
Edison Library
Woodbridge Avenue
Edison, New Jersey 08837
- 4) EPA - Region II
Library
26 Federal Plaza - 4th Floor
New York, New York 10278

8.1 GENERAL RESPONSES

The following section includes general responses to concerns regarding the three categories which constituted the bulk of concern regarding the project, Facility Location/Alternatives Evaluation, Chronic Risk Assessment

and Acute Risk Assessment/Catastrophic Release. Following the general response, additional responses to specific concerns regarding these categories are provided.

8.1.1 Facility Location/Alternatives Evaluation

A number of comments on the E-TEC facility DEIS were directed at some aspect of the alternatives discussion (Chapter 2 of that document). Many of these comments disagreed with the identification of the EPA Edison facility as the recommended alternative for siting of the E-TEC facility. The general response that follows here addresses the bulk of the comments concerning the location of the recommended alternative; in the more specific responses that follow, individual comments not covered under the general response are discussed.

General Response

The Council on Environmental Quality's (CEQ) regulations implementing the National Environmental Policy Act (NEPA) (40 CFR 1500-1508) require that environmental impact statements (EISs) present a full discussion of "the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment". Specifically, 40 CFR 1502.14 provides further guidance for these discussions. As stated in this latter subpart, the purpose of the alternatives discussion is to define the issues and provide a clear basis for choice among options by the decision maker.

The discussion of alternatives in Chapter 2 of the DEIS for the E-TEC facility presents an evaluation of alternative actions in a systematic manner, beginning with the action/no action comparison, moving then to a comparison of alternative ways of implementing the action, and ending with a consideration of siting criteria and the identification of the recommended alternative. This hierarchical method of identifying a recommended preferred alternative from a larger number of alternative actions, including no action, is logically sound and procedurally in conformance with NEPA.

The no action alternative was identified as being qualitatively different from the remaining alternatives, and was found to be undesirable because the construction of such facilities was mandated by federal legislation. All of the remaining alternatives dealt with general ways in which the action alternative could be implemented - by constructing a completely new facility, by leasing space in an existing facility, or by renovating existing space to serve the E-TEC Facility's mission. Three basic criteria, namely environmental soundness, implementability, and cost were used to screen and compare reasonable alternatives.

In the early stages of planning, many attributes of the EPA Edison property appeared to match those desired for an E-TEC facility location. However, the candidacy of the EPA Edison site did not guarantee its selection. The DEIS presents a full evaluation of the EPA property and other federal facilities and alternatives in terms of environmental soundness, implementability, and economics. Had the EPA property in Edison failed or trailed in one or more of these categories, as did other alternatives, it would not have been identified as the recommended alternative.

Specific Responses

Listed below are responses to other specific concerns raised about the Facility Location/Alternatives Analysis. The comments presented have been paraphrased from the various comments received, but retain the nature of the concern.

8.1.1.1 Comment: Disagreement with the results of the alternatives analysis.

Many comments made by letter or at the public hearing generally expressed disagreement with the last step of the alternatives analysis rather than with the alternatives analysis in its entirety or with the preceding steps. No comment was received expressing preference for the no action alternative over the action alternative, and very few comments expressed disagreement with the comparison of various ways to implement

the action alternative. Disagreement with the preferred location of a project does not constitute an invalidation of the alternatives analysis leading to identification of the recommended alternative.

Some commentators expressed the sentiment that, because of the form of the alternatives analysis, the EPA Edison facility received preferential evaluation. That is not the case; the EPA Edison facility would not have been identified and evaluated in detail as the recommended alternative if that alternative posed significant adverse impacts to the surrounding environment, including the citizens living in the vicinity of the location. In fact, several design elements of the proposed facility (e.g., the limitations of materials storage, design of the air-scrubbing system, etc.) will be controlled as a result of the risk analysis outlined in the DEIS. Because the results of the risk analyses have been used to refine the design of the facility, the facility as proposed poses no significant risk to Edison residents.

8.1.1.2 Comment: The alternatives analysis was biased toward the Edison site.

The fact that the EPA Edison property existed as a viable alternative site for the E-TEC facility does not invalidate the alternatives discussion as presented in the DEIS. To anyone familiar with federal landholdings, the EPA Edison Facility would be a clear candidate for the location of the site. The DEIS acknowledged the sense of this, and made use of it in the latter stages of the alternatives analysis by comparing other candidate locations with the EPA Edison site. The fact that the selection of Edison as the preferred location resulted from a systematic consideration of alternatives which showed the highly favorable combination of characteristics exhibited by the Edison location was not because of a predisposition to make such a finding.

8.1.1.3 Comment: A more remote location would have fewer adverse impacts than would the preferred alternative.

Several comments suggested that siting of the E-TEC facility at a more remote location would be more appropriate; the bulk of such comments identified or alluded singularly to health risks attributable to the facility's operation.

The risk assessments, detailed in the DEIS, demonstrated that no significant adverse impacts to human health would result from the project. None of the comments criticizing the locational choice provided empirical data or technical arguments that refuted this conclusion of no significant adverse impact.

None of these comments acknowledged that construction of the E-TEC facility at a remote site could very well entail significant adverse environmental impacts to natural ecosystems or critical environmental resources. By "remote", the comments apparently suggest a property distant from human habitation; however, this very quality would likely require disruption of some existing ecosystem, undeniably an adverse environmental impact. As was noted in the general response on the alternatives discussion, the concerns of the commentators have focused on a very narrow aspect of the alternatives analysis - the specific recommended location - rather than finding fault with the systematic and hierarchical review of alternatives or the logic used in screening and comparing alternatives.

Had the risk assessments for the proposed facility shown some substantial element of risk to human health specific to locating the facility in an urban or suburban setting, the alternatives analysis would appropriately have included a comparison of the kinds and magnitudes of adverse environmental impacts associated with these remote siting alternatives, and a reasoned decision could then have been made.

A remote location, though perhaps perceived as "safer" by the citizens of Edison because of its remoteness, could have resulted in adverse environmental impacts from any one or more of the following categories:

- construction or improvement of roadways
- loss of natural vegetation
- disturbance of wetlands
- displacement of resident wildlife
- stream encroachment
- withdrawal of ground water

In accordance with NEPA procedures, the adverse environmental impacts of such an alternative would necessarily have to be compared with the potential environmental impacts of a facility in a populated area.

8.1.1.4 **Comment:** The siting of the facility was based solely on economics.

In Chapter 2 of the DEIS (page 2-14), the categories of criteria used to evaluate several alternatives were identified. These three categories were environmental soundness, implementability, and cost. The recommended alternative, the EPA Edison location, rated on par with or better than other alternatives in all three of these categories. The favorable cost situation of the EPA Edison site was not used to offset low ratings for environmental soundness or implementability.

8.1.1.5 **Comment:** Property at the EPA Edison Facility could be sold and used to underwrite the costs of locating the E-TEC Facility at an alternate location.

This option, though available to a private landowner, is not feasible with federally-owned properties. EPA cannot sell the Edison property and apply that money to a new site elsewhere. If the property were sold, the money would go into the general fund of the government and could not be "set aside" for use in purchasing or outfitting an E-TEC facility.

8.1.1.6 Comment: The cost comparisons did not use "life-cycle" costing (e.g., inclusion of operations and maintenance costs, liability payments).

The operations/maintenance and other "life-cycle" costs would be essentially the same wherever the facility was located, making the initial cost of the facility the crucial cost differential.

8.1.1.7 Comment: The identification of the EPA-Edison location ignored the recommendations of the Superfund Amendments and Reauthorization Act (SARA).

Although SARA recommends the Gulf Coast and West Coast for E-TEC facilities, it does not preclude the location of such facilities in other areas throughout the country. The legislation mandates that 5 to 10 demonstrations be conducted annually and the E-TEC facility recommended for Edison would be used for these types of demonstrations.

The Superfund Innovative Technology Evaluation (SITE) program that predated SARA, recognized the need for such facilities and the Edison site meets the locational criteria specified in the SITE program. The EPA believes that the recommended E-TEC facility location is in conformance with the research and development (R&D) requirements in the SARA legislation.

The research centers being proposed on the Gulf and West Coasts are distinctly different from that proposed for Edison. The centers involve basic and applied research, but no testing facilities or laboratories as proposed for the E-TEC facility.

The Gulf Coast research center is being headquartered at Lamar University, in Beaumont Texas. It is a consortium of eight universities, located in six Gulf Coast States, that will conduct research on hazardous waste treatment and waste minimization in existing facilities. No testing facilities are associated with this consortium.

The West Coast research center would be located near the Department of Energy center in Hanford, Washington. It also would be a basic research facility, primarily addressing radioactive and mixed (radioactive/hazardous) wastes. There would be no testing facilities associated with this research center.

- 8.1.1.8 Comment: The New Jersey Hazardous Waste Facilities Siting Commission should have been involved in the siting of the proposed E-TEC Facility.

The New Jersey Hazardous Waste Facilities Siting Committee has as its responsibility the siting of commercial treatment and disposal facilities. The proposed E-TEC Facility is not such a facility.

- 8.1.1.9 Comment: The proximity of the Middlesex County College buildings to the proposed facility does not allow a sufficient buffer zone. This aspect of the siting was not considered in the alternatives discussion.

The proposed E-TEC Facility has a minimum of a 200-foot buffer zone separating it from nearby buildings, which exceeds the applicable standard for buffer zones for a facility of this nature.

- 8.1.1.10 Comment: Reconsideration should be given to locating the facility at Fort Dix.

The DEIS listed Fort Dix as one of the federal facilities in the Northeast meeting the 100-acre criterion applied to size of parcels. Fort Dix was not identified as the recommended alternative because the future of the site was uncertain, and because neither Fort Dix or the adjacent McGuire Air Force Base were as well served by transportation networks.

Recently (April 29, 1990), the Commanding Officer of Fort Dix, Major General James W. Wurman, gave an interview to Newark's Star-Ledger, and discussed the future of the facility. Plans to reduce the size of Fort

Dix had been announced on December 31, 1988 with the release of a report by the Federal Commission of Closures and Realignments. However, according to Major General Wurman, "Fort Dix is not now and never was closing" (Wurman, 1990). He indicated further that the base is being realigned to serve a wider and more important training role for National Guard, Army Reserve, and Reserve Officer Training Corps (ROTC) in the northeast. To meet those new missions, the Army is spending approximately \$6 million to upgrade most of the 85 ranges at the Fort - such ranges are used for small arms, rifle, hand-grenade, and machine-gun training. Additional new facilities at Fort Dix include a New Jersey National Guard 50th Armored Division headquarters, a National Guard high-technology training center, a U.S. Army Reserve training center, and a reserve equipment concentration site for storage and maintenance for U.S. Army Reserve units. Fort Dix will also continue to serve as headquarters for the Army's Criminal Investigation Command for the Northeastern United States.

In short, the realignment of Fort Dix may have reduced the basic training missions of the facility, but a variety of specialized missions will continue to be located there.

- 8.1.1.11 **Comment:** The siting of the facility near academic institutions is merely for convenience, and should not dictate the site selection process.

This screening criterion was introduced under "Coordination of Research" in the hierarchical list of criteria used in identifying candidate sites for the E-TEC facility (DEIS, Chapter 2) and was a general consideration in identifying and comparing potential sites. At the level in which it was used in the alternatives analysis, a variety of sites evaluated further in that chapter would have been generally equivalent. This criterion may have given a more urban site an edge over a remote site; however, it was not the crucial criterion in the identification of the recommended alternative. The Edison site was recommended because of the favorable combination of characteristics associated with that location.

8.1.2 Chronic Release Risk Assessment

The potential for health risks from exposure to air releases from the facility has two components - long-term (chronic) health risks and short-term (acute) health risks. Chronic health risks are those that are associated with exposure to air releases from day-to-day, operational activities. The health concerns related to this type of exposure are conditions such as cancer, kidney damage, and liver damage, that develop after years of continued exposure to a contaminant. To address these risks, the DEIS assumed that an individual would be exposed to releases continuously for 70 years at a concentration equal to the maximum predicted ground level concentration. (A detailed write-up of the chronic risk assessment is contained in Appendix E of the DEIS.)

Potential acute health effects, such as lung irritation, gastrointestinal symptoms and coughing, would be associated with exposure to a sudden release of a higher level of contamination. Such a release would have a low probability of occurrence and would not be part of the normal activities of the facility. To evaluate the potential for acute health risks, however, a worst-case release of this type was examined. The worst-case, or catastrophic, release involved a fire in the building that would cause the vaporization of all of the chemicals stored in the building. (A detailed explanation of the catastrophic release scenario and acute risk assessment is contained in Appendix F of the DEIS.)

It is essential to understand the differences between these types of health risks, the health effects associated with each and the conditions that lead to the exposure. The response in this section refers to the chronic risk assessment only. Responses to the acute risk assessment are contained under section 8.1.3.

General Response

Because the final design of the facility is dependent upon the selection of the site and the outcome of the NEPA review process, it will not be available until after the Final EIS is issued. This limitation requires that the risk assessment be based on assumptions and estimates regarding facility

design and operation. Because of this limitation, the information used represents conservative assumptions that would be protective of human health.

The assessment was necessarily based on a limited number of indicator chemicals. It would be neither practical nor possible to conduct a risk assessment on every chemical that could potentially be brought into the facility. It is an accepted procedure to conduct risk assessments using indicator chemicals when dealing with these types of situations. In the DEIS, 28 indicator chemicals were selected based on a review of their potential to be found on site, the toxicity of the chemicals and the chemicals' physical and chemical properties. A list of the specific chemicals used in the analysis can be found on page E-5, Table E-1 of the DEIS.

The excess lifetime cancer risks determined in the risk analysis and presented in the DEIS on page E-13 are based on an individual located at the point of maximum impact and exposed to the maximum ground level concentrations every day for 70 years. The cancer risk for anyone not located at the point of maximum impact, continuously, for 70 years, would be less. Therefore, if the cancer risk to the maximally exposed individual is within an "acceptable" range, no one would be exposed to an unacceptable risk.

In addition to individual excess cancer risks, it is necessary to examine the impact of concurrent exposure to chemicals. Because there is limited information regarding interactions between chemicals, the current theory in risk assessments is that the cancer risk of exposure to different chemicals at the same time is additive (i.e., the cancer risks of each of the chemicals to which the individual would be exposed are added together to determine the individual's total cancer risk). The total, or additive risk, is presented in the DEIS in Appendix E, Table E-5, and a revised Table E-5 is located in the FEIS in Chapter 7 (page 7-33). Because adding the risks of all the chemicals in the assessment would be the most conservative number, it is not necessary to specifically determine the lesser risks associated with combinations of two or three chemicals with each other.

Risk assessment is also a part of the permitting process to which the E-TEC facility would be required to adhere. The risk assessment would define the parameters in which the facility would have to operate. The permit limits would be established on the basis of risk assessment results, to ensure that the public would not be subject to an unacceptable risk from the operation of the E-TEC facility.

Specific Responses

Listed below are responses to other specific concerns raised about the chronic risk assessment. The comments presented have been paraphrased from the various comments received but retain the nature of the concern.

8.1.2.1 Comment: The chronic risk assessment focused on cancer risks, what about non-cancer health effects?

The potential chronic non-cancer health risks from exposure to chemicals would be determined quantitatively by comparing the maximum ground level impact concentrations to inhalation reference doses (RfD). These RfDs are established by the EPA as described on page 7-31. There were only a limited number of RfDs established at the time the DEIS was prepared, and none for the chemicals used in the analysis, so a quantitative non-cancerous health effects risk analysis could not be conducted.

However, in the cancerous risk assessment, the highest lifetime individual excess cancer risk was determined to be one in a million and most of the risks from individual chemical exposures were much lower than one in a million. It was assumed in the study that preventing unacceptable cancer risks would protect the public from non-cancer health effects as well. Because of the current lack of data regarding non-cancer health effects, this is the current standard approach to evaluating public health impacts.

The EPA is developing RfDs for seventeen chemicals; however, additional RfDs are not expected soon. The management plan of the facility ensures that as these RfDs are established, they will be used to assess chronic non-cancer health effects. The facility will be operated to be protective of public health in terms of both cancer and non-cancer health effects.

8.1.2.2 Comment: Local meteorological data were not used.

The closest meteorological station to Edison is the Newark Airport and these data are representative of local conditions. For this type of screening analysis, use of these data are appropriate.

8.1.2.3 Comment: What about risks to sensitive segments of the population?

The value of q_1^* , (the slope factor) used in the quantitative risk analysis includes a consideration of the variation in sensitivity of the general population (e.g., children, elderly). Therefore, the overall analysis using q_1^* , incorporates risks to sensitive subpopulations.

In addition, the RfDs, which will be used to assess potential non-cancer health risks as they become available, also include a factor for variation in sensitivity among the general population.

8.1.3 Catastrophic Release/Acute Risk Assessment

As discussed in Section 8.1.2, acute risks are those associated with short term exposure and are health effects such as gastrointestinal symptoms (nausea, vomiting), dizziness, headaches and lung irritation. Cancer is not a health effect associated with a short-term exposure.

There are various conceivable scenarios that could be conceived that could result in a short-term release of chemicals from the facility. It is not necessary to examine the entire realm of possibilities if the "worst case" event is examined. By definition, no other condition could cause exposures greater than the worst case scenario. In this project, the worst case event

simulated was a fire in the building, of sufficient length and heat, to cause vaporization of all chemicals stored in the buildings.

The general and specific responses to this section refer only to the acute risk assessment and the catastrophic release scenario upon which it is based.

General Response

The potential for acute health effects would be caused by an unlikely event that involved a sudden release of a relatively higher level of contamination. To be protective of human health, the worst-case event (or catastrophic release) was assumed to occur - a fire in the building causing the release of all chemicals stored in the buildings. Such an event would have a very low probability of occurrence; the building is designed to minimize the potential for fires (e.g., cinder block fire separation walls between bays, sprinkler system) and the personnel on site would be trained in emergency procedures so that a fire could be dealt with before it consumed large portions of the building.

Despite the low probability of occurrence, this catastrophic event was modeled, so that, if the results of the worst-case event did not show an unacceptable risk, other smaller releases would not pose unacceptable risks either.

As was the case with the chronic health risk assessment, it was not possible to conduct the acute health risk assessment on all chemicals that could potentially be brought to the facility. Therefore, the acute health affects risk assessment focused on 12 indicator compounds, selected from the overall list of 28 indicator compounds, based on acute toxicity properties.

The acute health risk assessment results indicated that two chemicals would have the potential to cause adverse health effects, if completely released at the concentrations and quantities examined. To eliminate this potential, EPA plans to restrict the quantity (both the concentration and volume) of these chemicals stored in the buildings to levels at which adverse health effects would not be expected if a complete release occurred.

To protect the public from adverse health effects due to exposure to other chemicals used at the facility but not evaluated in the analysis, the procedures involved in the catastrophic release/acute risk assessment would be incorporated into a management control plan for the facility. This plan would incorporate the parameters of concentration and quantity to specify how much material could be safely stored within the buildings to prevent adverse health effects if a catastrophic release occurred.

Specific Responses

Listed below are responses to other specific concerns raised about the acute risk assessment/catastrophic release scenario. The comments presented have been paraphrased from the various comments received but retain the nature of the concern.

8.1.3.1 Comment: An evacuation would be required if the catastrophic release occurred.

Based on the catastrophic release analysis performed and the management control plan established, it was shown that there would be no external adverse impacts caused by a catastrophic release. Therefore, EPA feels that NO evacuation of the area would be required. The facility would be operated in such a manner that the public would not be exposed to an undue risk even if a catastrophic release occurred and no evacuation took place.

8.1.3.2 Comment: Is the event modeled the worst-case event?

Many concerns were raised about the choice of a building fire causing the vaporization of all stored chemicals as the "worst-case scenario". In the development of the DEIS, other scenarios were considered, such as a smoldering fire or an explosion, but were not utilized because they would not present a worse case than what was selected. For example, in the case of an explosion, the building would not remain intact; either the roof or the walls would rupture. Because

there would be more dispersion with this type of release, the maximum ground level concentrations would be less than those experienced with the fire. Similarly, in the case of a smoldering fire, the temperatures would not be as great as the fire modeled. A smoldering fire can range between 533°K (500°F) to 810°K (1000°F), depending on the type of material sustaining the fire and the area covered by the fire. (Generally, small, contained smoldering fires tend to be 533°K or less, while larger fires associated with some flaming would be closer to 810°K.) In the case of a smoldering fire, there would be less volatilization and it would be spread out over a longer period of time. Even if the smoldering fire was hot enough and lasted long enough to volatilize all the material present, the longer release time (a one-hour release time was used with the fire modeled in the DEIS) would dilute the concentration of chemicals being released and would therefore lower the maximum ground level concentrations. Because the event modeled constituted a short, concentrated release of all stored material, it was determined to be the worst-case event.

Some concern was expressed that storage outside of the buildings was not considered in the evaluation of the catastrophic release. Because outside storage would be located away from potential fuel sources, the possibility of a fire would be extremely remote. Also, because a tank fire, if it did occur, would be located outdoors where dispersion would be much greater, maximum ground level impact concentrations would be lower than if the fire occurred inside. The major concern with outside storage is, therefore, not an air release but the potential for a liquid release from the tank caused by a spill or tank rupture. This possibility is negated by the design requirements of outside storage facilities. These requirements include provisions for placement of storage tanks on impervious surfaces and the installation of containment basins around the tank. The containment basin would hold any material discharged from the tank through a leak or rupture. Due to the above considerations EPA feels that outside storage would not pose a greater health risk than the catastrophic event modeled.

8.1.3.3 Comment: The catastrophic release was modeled as steady-state; it was based on many assumptions.

The event was modeled as a steady state phenomenon and, as is the case with all evaluations of this type, assumptions had to be made in order to complete the analysis. However, the assumptions used were conservative to be protective of human health. A list of modeling assumptions is presented below, together with commentary on the conservative nature of these assumptions.

1. All storage facilities in the building would be in use and each would contain every chemical at its maximum expected concentration. The operations at the facility would involve a variety of activities requiring different inputs. It would be unlikely that all storage tanks would be full at once and that the same chemical would be found in every tank. It was assumed that the chemicals would be found at their maximum expected concentrations (the concentrations were determined by ORD in a literature survey), but in actuality they are likely to be found at much lower concentrations.
2. The event would cause the vaporization of all chemicals. It was assumed that the fire would be hot enough to volatilize all chemicals in the liquid storage and the liquid phase of the solid storage. This assumption is conservative because many of the chemicals have low volatilities and thus are difficult to volatilize. It is unlikely that a fire would be so widespread and have enough intensity to cause such a large scale release.
3. The release was assumed to occur within one hour. It was assumed that a very rapid release would occur, but it would most likely take much longer to vaporize all of the material. A rapid release leads to the emission of a more concentrated gas and results in a higher maximum ground level concentration. If the release occurred over a longer time period, the concentration of chemicals in the emitted gas would be lower as would the maximum ground level concentration.

4. The eight-hour occupational exposure limit (threshold limit value - time weighted average [TLV-TWA]) was used as the threshold concentration (acute toxicity limit) and was further reduced by a factor of 10. The eight-hour TLV-TWA represents the concentration to which healthy workers can be exposed for eight hours per day five days per week without experiencing irreversible adverse health effects. It was further reduced by a factor of 10 to account for variations in sensitivity in the population (e.g., the elderly, pregnant women, children, sick individuals). These adjusted values were chosen as the values that should not be exceeded by the maximum ground level concentrations. (For two of the indicator chemicals analyzed, trichloroethylene and methyl chloride, the short-term exposure limit value (STEL) was chosen over the eight-hour TLV-TWA. This value represents a concentration to which healthy workers can be exposed for 15 minutes four times per day, with at least one hour between exposures, without experiencing adverse health effects. These values were also reduced by a factor of 10.)
5. The solids in storage would show no preference to either the solid or liquid phases of the stored soils. This assumption is very conservative because chemicals would show preferences, and in some cases very strong preferences, for one phase over the other. Some chemicals, for example, PCBs, bind very tightly to soils and would be found at much higher concentrations in the solid phase than the liquid phase. Because only the chemicals in the liquid phase would be available to volatilize, the assumption that the chemicals would show no preference meant that a larger quantity of chemicals in solid storage was assumed to be released than would actually be expected to occur.
6. The soil moisture content was assumed to be 25 percent. As described above, only the liquid portion of the soil storage would be available to volatilize so the choice of moisture percentage determines the quantity of chemicals available to volatilize. If a lower number were selected, fewer chemicals would volatilize and lower ground level concentrations would result.

8.1.3.4 Comment: What about variations in sensitivity among members of the population?

The catastrophic release included an additional safety factor of 10 to account for variances in sensitivity to chemical exposures among the human population (i.e., elderly, children, pregnant women). The rationale behind the use of this factor is described on page F-3 and Table F-2 of the DEIS.

Moreover, as acute RfDs become available, these values will be preferentially chosen over the TLV-TWAs used in the DEIS. These values represent estimates of acute exposure levels that will not result in adverse non-cancer effects in humans, including potentially highly sensitive subpopulations (e.g., children).

The use of the most current toxicity data in risk assessment analyses is prescribed by EPA guidance and will be included in the management plan of the facility. This will ensure that, as acute RfDs become available, they will be preferentially chosen over the occupational exposure limit used for the initial screening.

8.1.3.5 Comment: What about the potential for cancer from the catastrophic release?

Cancer is the result of long-term exposure to chemicals. The catastrophic release would result in a very short-term exposure to a relatively high level of chemical. The effects of concern are, therefore, not cancer effects but acute, non-cancer effects (e.g., lung irritation, dizziness, vomiting).

8.1.3.6 Comment: The catastrophic release would cause a toxic plume.

The release of gases from the facility caused by a fire would not form a "toxic plume", because maximum concentrations, which would occur 1.86 miles downwind of the facility, would still be at safe levels.

8.2 RESPONSES TO COMMENTS FROM THE PUBLIC HEARING

A public hearing on the DEIS was held on February 27, 1990 at the Stelton Community Center in Edison, New Jersey. Representatives from the EPA opened the meeting by discussing the background of the project and presenting the format of the hearing. Substantive comments raised at the hearing, and EPA's responses are presented in this section. The individual(s) making the comments are identified.

Thomas Paterniti
Mayor of Edison Township

Comment #1: The State of New Jersey passed legislation to place a toxic waste incinerator in the State of New Jersey. A Raritan Center site was proposed but turned down. On Page B-9 of the DEIS, bench-scale and full-scale experiments are discussed and the DEIS mentioned prototype equipment where EPA stated it will be testing from small-scale units to full-scale modular treatment units. Is it going to be a very small operation or a big operation?

Response: First, EPA would like to stress that the E-TEC facility is a Research and Development (R&D) type operation and not a commercial-type incinerator or waste disposal plant. With regard to the facility's size, although the experiments could involve bench-scale or full-scale, in the context of the question, the operation is considered small. In fact, the EPA does not consider the activities to be substantially different than the types of experiments that have been done at the facility for the past 20 years.

Comment #2: The buildings EPA wants to use for the facility were tested for radioactive material. A report mentioned the use of mustard gas.

Response: As indicated in the DEIS, several years ago, EPA with the assistance of the Army Corps of Engineers (ACOE) conducted surveys to measure the radioactivity of all the buildings on the EPA facility as well as former arsenal buildings on the Middlesex County College and Middlesex County Park property. These surveys identified several buildings that have elevated levels of naturally occurring radium in the gypsum tiles in the roofs. The former arsenal buildings exhibiting these conditions were all constructed prior to 1940. Buildings 245 and 246, which were constructed in the early 1950's, do not contain tiles of the same composition.

Reportedly, the Department of Defense (DOD) operations at the former Raritan Arsenal (which formerly covered 3200 acres) included the disposal of liquid mustard gas and other hazardous substances at various locations on the Arsenal property. Although studies conducted by the EPA and ACOE indicate there is some residual contamination on the EPA facility, there is no evidence that liquid mustard gas was disposed of on the EPA property. As indicated in the DEIS, the proposed E-TEC facility will not affect nor be affected by any residual contamination on the EPA Edison property.

At the present time, EPA is cooperating with ACOE in a complete assessment of the impacts of past DOD disposal activities on the entire 3200 acre former Raritan Arsenal property. This assessment will include an evaluation of appropriate remedial actions.

Comment #3: Thought the maximum amount of toxic material would be a 55 gallon drum, but material would be delivered by truck. Seventy tons of contaminated soil would be brought in.

Response: Not all material brought in by truck would be contaminated materials. Clean soil or equipment would also be brought in. The 70 tons of solid storage capacity would not necessarily be used for contaminated soils. A large portion of the capacity could contain clean, uncontaminated soil. Additionally, storage of any contaminated material would conform to the applicable storage capacities (both concentration and quantity) as defined by the procedures contained in the management control plan and explained in Appendix F of the DEIS.

Comment #4: New Jersey is a very populated state. The northern counties are more populated than southern counties; Edison has five major highways crossing it, three day care centers, many residential houses and Raritan Center that houses between 15,000 and 20,000 people. Why locate in the more populated areas?

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #5: The buildings of the EPA site are deteriorated.

Response: Portions of the Buildings 246 and 246 would be renovated for the E-TEC facility. Any other building renovation would be outside the scope of the E-TEC facility project. The concurrent EPA facility master planning effort will address the buildings on the remainder of the property.

Comment #6: These types of facilities are needed, but not in New Jersey.

Response: Several comments on the DEIS indicated support for the concept of a research effort such as that of the proposed E-TEC facility, and endorsed construction of such a facility, objecting principally and specifically to its location on the EPA Edison Facility property. The alternative locations for the E-TEC facility were examined objectively based on three factors: 1) cost, 2) environmental soundness, and 3) implementability. In satisfying these criteria the location, wherever that might be geographically, is likely to be in the proximity of a transportation hub, an urban center, a suburban area, or all of these developmental features. The DEIS has demonstrated conclusively that the risk to human health posed by operation of the proposed facility is minimal. Use of any location in or near other human activities is bound to generate similar objections from the local residents that the facility should be sited elsewhere.

Comment #7: The EPA only located in Edison because of economics.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.4 (pg. 8-7).

Comment #8: The EPA should sell the land, so that it can be developed for the rateables.

Response: Regardless of whether the E-TEC facility is located in Edison, neither the EPA nor the Federal Government have any plans to dispose of the property. See also Specific Response 8.1.1.5 (pg. 8-7).

John Grun

Edison Township Health Department

Comment #9: The document alluded to alternative sites but downplayed the fact that this is a national effort and could be sited outside of New York or New Jersey. EPA has existing R&D activities in Edison as well as an existing consortium of academia and industry and the cost factor is most favorable, so, therefore, EPA downplayed alternatives. Other national sites, such as Cincinnati, are as appropriate as Edison.

Response: There are no other national sites, including Cincinnati, which are as large as the Edison facility and could accommodate the large scale demonstration projects contemplated for the Edison facility. See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.2 (pg. 8-5) and 8.1.1.7 (pg. 8-8).

Comment #10: Untested "Innovative Programs" testing is by definition inherently dangerous.

Response: The technologies will be carefully examined before testing can begin. Additionally, the facility would be capable of treating all air and water emissions generated during testing operations. All of the facility's pollution abatement equipment will be operated in conformance with established permit requirements. The only experimentation allowed will be that which can be proven to conform to permit conditions and established health and safety policies.

Comment #11: Edison Township supported previous R&D research at this facility because there was an overwhelming public self-interest.

Response: New Jersey has numerous hazardous waste sites, some of which are located in Edison. The development of new technologies could provide alternatives to the currently available clean-up techniques. EPA's goal is to develop technologies that permanently treat, reduce, or render hazardous materials as harmless as reasonably possible. The development and demonstration of cost-effective and environmentally sound technologies will result in the increased use of permanent remedies. These technologies would be developed at the E-TEC facility. Accordingly, Edison Township and New Jersey as a whole would benefit from the development of technologies that could be used in the clean-up of hazardous waste sites.

Comment #12: Edison Township has had more than its share of environmental problems and associated negative impacts including those left by the Department of Defense (DOD) and doesn't want any others.

Response: As indicated in the DEIS, the project will not cause significant adverse environmental impacts.

Comment #13: The three main negative impacts from the facility appear to be: a) transportation of hazardous materials from all over the county; b) sewer capacity, because 100,000 gpd is not insignificant; c) airborne contaminants, both routine and worst-case disaster scenarios.

Response: As indicated in Chapter 4 of the DEIS, adverse environmental impacts associated with the operation of the facility, including those three (3) referenced above, will be minimal or nonexistent. Accordingly, the facility will not result in any significant adverse environmental impact.

Comment #14: Is the facility subject to RCRA or not?

Response: The facility is not a treatment, storage or disposal (TSD) facility under RCRA but is subject to RCRA requirements for research facilities and will have an appropriate Research Development and Demonstration (RD&D) permit.

Comment #15: Insurance coverage is not mentioned and in particular, what funds are set aside for closure and who pays?

Response: The federal government is self-insured and as such, EPA would be responsible for all costs associated with facility closure.

Comment #16: Throughout the document there are inconsistencies in the amounts of materials to be stored on-site or tested. There are statements that 5,000 gallons of liquids and 70 tons of soil may be stored and then Appendix F indicates some other measures.

Response: The planned storage capacity within the buildings would be 5000 gallons of liquid and 70 tons of solids. However, these storage facilities may contain clean, uncontaminated water or soil or portions of the storage capacity may be used for the storage of water or soil containing a particular contaminant or multiple contaminants at low concentrations. It is the storage quantity of each particular chemical that is of concern and not the overall storage capacity of the facility. In Appendix F, a procedure was described to calculate the quantity (expressed in terms of concentration at a particular amount) of a particular chemical that could be stored in the buildings without causing adverse health effects, were a catastrophic release to occur. These "safe" quantities

were calculated for 12 indicator compounds and were expressed as a graph relating concentration and amount. Appendix F does not alter the overall facility storage capacity, it sets guidelines for the safe storage quantity of a particular chemical.

Comment #17: Cannot see the safety of the allowable quantities in the graphs in Appendix F relating to either the operation and testing at the facility or to the presumed protection of public health in the event of a catastrophe.

Response: The procedures described in Appendix F present a methodology by which the catastrophic release air modeling can be used to establish safe levels of storage of particular chemicals, i.e., quantities that could be stored in the buildings that, if completely released, would not cause adverse health effects in exposed individuals. This methodology will be included in the facility's management plan and will be used to determine how much of a particular chemical can be brought on-site prior to the initiation of a new testing operation.

Comment #18: The document alludes to storage inside the buildings only.

Response: As indicated in the DEIS (pg. 4-19, 4-20), outside storage is being considered and would be conducted in accordance with all applicable regulations.

Comment #19: The document focuses on the buildings and not the entire facility. It is not inconceivable that the property outside would be used for testing.

Response: At the current time, EPA does not envision that outside testing would be performed at the EPA Edison location. If it should become part of the operation, it would be subject to appropriate environmental review.

Comment #20: There is the potential for testing of genetically engineered organisms on-site.

Response: The operation does not include experiments with genetically engineered organisms.

Comment #21: The site is inappropriate because of the sensitive land uses near it.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #22: The air modeling predictions show the point of maximum impact on top of the John F. Kenney Child Care Center.

Response: The risk assessment was based on an individual being located at the point of maximum impact for 70 years, 365 days a year and being exposed to the maximum impact concentration throughout this period. Even with this prolonged exposure, at the predicted point of maximum concentration, the lifetime excess individual cancer risks to exposure to a single contaminant would not exceed the acceptable one in one million. See also General Response 8.1.2 (pg. 8-11) and Specific Response 8.1.2.3 (pg. 8-14).

Comment #23: There is a national need for this facility but it is a net negative impact to the community.

Response: See Responses to Comment #6 and Comment #11.

Comment #24: If EPA goes ahead with the project, there should be a closure plan with financial guarantees and a completely open ongoing public process to brief the community.

Response: With regard to closure plan, see Response to Comment #15. With regard to public participation, EPA will continue to conduct an open public process and, if the EPA locates the facility in Edison, EPA will organize a citizens advisory committee (CAC) which would include interested individuals who would be periodically briefed and consulted with respect to facility activities.

Warren Keleman
Middlesex County College

Comment #25: What is presented as the clear best location is just the clear easiest location.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.11 (pg. 8-10).

Comment #26: The EIS is an EPA study, prepared by the EPA for the EPA.

Response: As required by the National Environmental Policy Act (NEPA), all federal agencies are mandated to prepare a document, in this case an EIS, to evaluate the environmental consequences of their actions. It would not be appropriate for another agency to prepare this EIS for EPA.

Comment #27: The proposed location of the E-TEC facility is in the heart of a large, concentrated industrial/educational/residential complex including Middlesex County College. The term "buffer zone" is never defined and the buffer zone criteria was ignored in the study. Is it logical to select a large property and have the buildings hugging the property line?

Response: See General Response 8.1.1 (pg. 8-3) and Specific Responses 8.1.1.3 (pg. 8-6) and 8.1.1.9 (pg. 8-9).

Comment #28: Sketchy population data appears for Edison Township as a whole, but the EIS provides no data at all regarding the population in the area immediately surrounding the proposed site.

Response: The population of Edison was discussed in Chapter 3 of the DEIS (pp. 3-36 and 3-37). This data was not broken out into population within so many miles of the facility because the local population is considered to be the Edison population. Moreover, given the results of the risk assessment (no significant adverse impacts to the surrounding population), such information is unnecessary.

Comment #29: The facility is inconsistent with future growth.

Response: As indicated in the DEIS in Section 4.1.2.1 (pg. 4-4), 4.1.2.4 (pg 4-5 and 4-6) and Section 4.2.1 and 4.2.3 (pg. 4-7), the activities that the EPA is proposing for the E-TEC facility would not significantly affect the land use, either current or future, the population or the economics of the area.

Comment #30: The risk assessment is based on assumptions.

Response: Yes, all risk assessments are based on some assumptions. The assumptions used are presented in the DEIS in Appendices E and F and are reiterated in Sections 8.1.2 and 8.1.3 of this chapter.

Comment #31: The EPA concluded that for two of the twelve indicator compounds there would be adverse health effects.

Response: The EPA did not conclude that two of the chemicals used in the risk assessment would cause adverse health effects. The DEIS, Appendix F, explained that two of the chemicals, if released at the concentrations used in the analysis, could cause adverse health effects. Because of this potential, the quantity of these substances stored in the buildings would be limited so that they would not cause adverse health effects if completely released. Similarly, the safe storage quantities of all chemicals brought to the facility would be determined prior to the time at which they would be needed. In addition, please see General Response 8.1.3 (pg. 8- 14).

Comment #32: The safe operation of the facility is dependent upon management controls. EPA is not assured of good top management. Mistakes and surprises are not only possible; they are likely.

Response: EPA is not denying the possibility that accidents could occur, but adherence to the management plan, as discussed throughout the DEIS document, which includes environmental audits and restrictions on the quantities of chemicals stored, will minimize the potential for accidents. In addition, the further controls on the building (e.g.,

pollution abatement equipment) would minimize the impact of an accident if it was to occur.

Comment #33: What are the expansion possibilities? Are the initial levels of activity and one truckload per week likely to grow? To what limit?

Response: As proposed, the E-TEC facility would utilize three of the ten bays of Buildings 245 and 246. EPA does not currently have any plans for expansion in terms of testing and evaluation capacity, but there would be additional support facilities added as funds become available. These would include facilities such as bench and pilot laboratory areas, shops, and training facilities. Nevertheless, any future expansion would be in conformance with applicable state and federal environmental requirements. The levels of activity and delivery rate would be commensurate with E-TEC operations.

Comment #34: Is "truckload" defined as a single truckload? Might truckloads include 40,000 gallon tanker trucks? Would there be rail delivery?

Response: The size of the delivery trucks to be used is not known at this point but would be appropriate for the needs of the test to be conducted. The management plan would ensure that the quantity of material delivered would conform to the safe storage requirements and that transportation of materials would be in accordance with all state and federal regulations. There would be no rail delivery.

Comment #35: Could the sewer system and the MCUA treatment plant really adequately handle the additional demands of this facility?

Response: Page 4-10 of the DEIS discusses the input of wastewater to the MCUA treatment plant, which would not exceed an average flowrate of 100,000 gpd. The average flow rate from the E-TEC facility would not exceed 100,000 gpd, even when the E-TEC facility is fully operational, because experiments would be done intermittently. Even if the flowrate of 100,000 gpd is reached occasionally, it would only last for a matter of hours or days. On page 4-10, the MCUA wastewater treatment plant (WWTP) capacity is also discussed. EPA believes that the treatment plant has sufficient capacity to handle the E-TEC facility flow. However, the ability of the MCUA WWTP to handle this flow will be formalized through the permitting process, which MCUA and NJDEP must approve.

Comment #36: The EPA could sell the land and apply the revenue to the purchase/construction of a new facility somewhere else.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.5 (pg. 8-7).

Comment #37: The EPA should give more serious consideration to the alternatives.

Response: See General Response 8.1.1 (pg. 8-3).

Dr. John Liskowitz
New Jersey Institute of Technology

Comment #38: There is no research facility like the E-TEC facility that is currently available to academia. There is a need for a facility in New Jersey, which has many problems, but also has the research capability from its academic institutions to deal with them. The facility would allow academia to perform many kinds of studies, and to understand many of the questions that are raised by the public. The facility would provide a safe operation.

Response: The EPA acknowledges this comment.

Richard S. Magee
Executive Director
Hazardous Substance Management Research Center

Comment #39: The research and development capability of the proposed E-TEC will provide a mechanism to focus the technical and creative abilities, not only of the EPA, but also of the academic and industrial communities upon these technical needs.

Response: The EPA acknowledges this comment.

Comment #40: A vigorous increase in the number of new, successfully demonstrated, technological approaches to hazardous management can be anticipated and they can be expected to impact favorably upon the environment of New Jersey and the United States.

Response: The EPA acknowledges this comment.

Comment #41: The facility has the potential to become a major component of the growing research resources of the state.

Response: The EPA acknowledges this comment.

Bob Nasdor
Transitional Housing Project Director
Middlesex Interfaith Partners with the Homeless

Comment #42: The study assumes that the Edison site is the only site that need be seriously considered.

Response: See General Response 8.1.1 (pg. 8-3).

Comment #43: The study assumes that the extent of risk can be determined based on the hypothetical design of the pollution control equipment and the hypothetical range of experiments which will be conducted.

Response: The air emissions values used in the analysis were based on preliminary permit conditions. Because the facility's operation will have to conform to these permit requirements, as will the pollution abatement equipment, the specifics of the pollution control equipment design and the facility operation were not necessary components of the risk assessment.

Comment #44: The study assumes that the effects of air pollution on the at-risk population is the same as the effects on the other segments of the population.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #45: The study assumes that the management controls will always be followed and as such there is no need to consider the environmental consequences of failure to follow these procedures.

Response: See Response to Comment #32.

Comment #46: The study assumes that there is no danger from toxic chemicals which are stored on the site, but not in the buildings.

Response: The danger associated with storage outside the buildings is not fire-related but rather related to the potential for a liquid release. The potential for environmental impacts from outside storage was discussed in the DEIS in Section 4.4, page 4-20. Additionally, the outside storage would not constitute a worst-case event than what was modeled. For a further discussion on this topic, see Specific Response 8.1.3.2 (pg. 8-16).

Comment #47: The study assumes that the environmental sensitivities of the area do not preclude the use of this site and specifically that there is no need to assess the risk from this facility to the sensitive populations that may reside at the transitional housing project, such as pregnant women and children.

Response: The study didn't assume that the environmental sensitivities of the area do not preclude the use of the site, it concluded this based on the results of the DEIS study and the risk assessment which indicated that there would be no significant adverse environmental impacts. While EPA did not specifically address the transitional housing unit in the DEIS, it was considered as part of the overall

population. For additional information, see General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #48: The Fort Dix site was dismissed without ever seriously considering it.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.10 (pg. 8-9).

Comment #49: Why were the SARA recommendations of the Gulf Coast and West Coast ignored?

Response: See General Response 8.1.1 (pg. 8-3) and Specific Responses 8.1.1.7 (pg. 8-8).

Comment #50: The report does not say that there is no impact to the community, only that EPA does not believe that this is a significant one.

Response: The EPA acknowledges that there is some impact but it is not considered significant.

Comment #51: What toxic chemicals will be involved in this research?

Response: See General Response 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14). See also Appendix E and Appendix F of the DEIS.

Comment #52: What will be the experimental research processes and who will conduct these experiments?

Response: EPA is responsible for the operation of the facility. There will be a number of academic institutions, and industrial and other groups but all participants would be required to conform to the management control plan EPA has established for the facility. See also Response to Comment #32 and Comment #10.

Comment #53: The study only discussed the hypothetical design of the pollution control equipment. When would individuals be able to review specifically the design of the equipment?

Response: The EIS was prepared as a decision-making tool to determine the need for and recommend a location for the E-TEC facility. Because it necessarily had to precede final design of the facility, the document could only be based on preliminary information and hypothetical design. The specifics of the pollution abatement equipment would be determined in the design of the facility and would be included in the operating permits. Part of the permitting process includes a public hearing and appropriate comment period which would afford the public the opportunity to review and comment on the equipment design.

Comment #54: It is difficult to have confidence in the results of the study when its conclusions are drawn without the benefit of any specific information regarding the scope of the experiments and the design of the facility.

Response: See General Response 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Response 8.1.3.3 (pg. 8-18).

Comment #55: If different pollution control equipment is for different research experiments, what assurances are there that the the best treatment will be available for the specific experiments that are conducted?

Response: See Response to Comment #10.

Comment #56: The study assumes that many of the environmental hazards can be eliminated through proper management procedures. There are few man-made environmental disasters which have not been blamed on human error. Shouldn't the study have taken into account the environmental impact of human error?

Response: The worst-case analysis that was presented examined the possibility of an environmental disaster and this type of catastrophic release includes the possibility of human error.

Comment #57: No consideration has been given to the environmental consequences of the storage of the toxic wastes which are located in areas other than the storage areas of the bays of the warehouse buildings. Potentially, the chemicals or untreated waste could escape, and in the not so remote possibility that proper management procedures are not followed, groundwater or other wetlands could be contaminated.

Response: See Response to Comment #46. In addition, there will be management and structural controls placed on the outside storage to minimize the potential for environmental impacts, including location of the outside storage on an impervious surface and the construction of a containment facility around the tank.

Comment #58: If management controls fail to contain spilled material, what will be the effect on the sole source aquifer?

Response: This question assumes that the structural and management controls will fail. Although EPA does not believe that this failure is possible, if in the remote possibility this does occur, EPA (as mandated by SARA) would be required to remediate any and all contamination.

Comment #59: Will there be any ozone emitted from the facility and if so, how can EPA justify contributing to a problem that is already in violation of a federal standard?

Response: Ozone is not emitted as a product; it is formed by complex chemical reactions in the presence of sunlight. Nitrogen oxides (NO_x) react with volatile organic compounds (VOCs) in sunlight to produce ozone. The gases produced during treatment technology testing would be treated with the pollution control equipment at the facility so the emissions of NO_x and VOC would be quite low. Significant quantities of ozone would not be caused by the facility.

The operating permits from the State of New Jersey would specify the quantities of NO_x and VOC (as well as other substances) that could be emitted. The limits would be established with the knowledge that these compounds could lead to ozone formation.

The State of New Jersey is in violation of the National Ambient Air Quality Standards (NAAQS) for ozone (i.e., a non-attainment area for ozone) and elevated ozone levels can cause adverse health effects. New Jersey must address this non-attainment issue on a region-wide basis.

Comment #60: Once the study is finished, it should be evaluated by independent environmental experts which are qualified to interpret the study which have been appointed by the local community and the review should be funded by EPA.

Response: Chapter 5 of the DEIS lists individual and governmental agencies from whom comments were requested. The document was reviewed by these groups and their comments have been incorporated into the Final EIS. It is inappropriate for the EPA to fund an independent study, but if an independent study is done, EPA would be glad to assist in the review and would incorporate the results into the EIS process insofar as it believes they are reasonable and timely.

Tio Chen

TWC Realty Partnerships

Comment #61: The EPA's goal of establishing the E-TEC facility to promote the development of innovative treatment technologies for hazardous substances is endorsed but the location of the E-TEC in Edison is opposed.

Response: See Response to Comment #6.

Comment #62: The methodology and assumptions used for the risk assessment are highly simplified and totally unrealistic.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Response 8.1.3.3 (pg. 8-18).

Comment #63: No locally monitored meteorological data are used in the analysis.

Response: See Specific Response 8.1.2.2 (pg. 8-14).

Comment #64: Many sensitive land-use receptors within 0.5 km (1,640 ft) from the proposed facility location are totally ignored and not considered in the air quality study.

Response: The air modeling study chose the closest receptors with elevations above the facility elevation. Because of the stack height and dispersion phenomena, the receptors close to and approximately at the facility elevation would be impacted even less than receptors further out and at higher elevations. Therefore, specific receptors close to the building did not need to be considered independently.

Comment #65: The irregular terrains in the immediate vicinity of the proposed location are not considered in enough detail to reflect realistic pollutant transport phenomena.

Response: As stated in Appendix D of the DEIS, EPA has established a three phased approach for air quality assessments, starting with simple screening and working up to refined modeling, if necessary. The simple screening analysis used the Valley option of the Complex-1 model and did not consider terrain (all receptors were assumed to be located at sea level) or varying wind conditions (only one speed and one wind direction were used). This analysis indicated that the second phase, detailed screening, needed to be conducted. This phase involved the use of two models - Complex-1 and ISCST - and incorporated terrain features and varying wind conditions. The results of the more conservative of these models were used to

estimate air quality impacts. In this case, Complex-1 yielded the higher results. The results of the detailed screening indicated that no further analysis was required and thus for the air quality assessment, refined modeling techniques did not need to be used.

Comment #66: The highly complicated explosion phenomena for the facility was treated in the draft EIS as a simple, steady state dispersion phenomenon.

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.3 (pg. 8-18).

Comment #67: The state-of-the-art cost comparison analysis for the capital project based on a life-cycle costing was not used in the draft EIS in assessing the cost of the facility at alternative sites.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.6 (pg. 8-8).

Comment #68: The buffer zone is not defined and considered in the siting comparison for the alternative sites.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.9 (pg. 8-9).

Comment #69: An emergency evacuation plan for students and faculty, residents, office and factory workers in the event of a fire, an explosion, or truck accident was not addressed.

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Dee Brugwyer
Private Citizen

Comment #70: The facility is surrounded by Middlesex County College, the elementary school, the day care centers, the senior citizens, Edison Glen, Edison Woods, the major complexes on Mill Road opposite the Middlesex County College, Raritan Center, Heller Park, the Kaplar Development. What will be the impact on these locations?

Response: See General Response 8.1.1 (pg. 8-3), 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #71: Woodbridge Avenue is very busy when schools and industries are entering or leaving.

Response: The majority of the people who would operate the E-TEC facility currently work at the EPA Edison Facility and therefore, would not represent a significant addition of traffic to the area. Similarly, the delivery rate of one truckload per week would not contribute significantly to the existing traffic volume.

Comment #72: The EIS was prepared by EPA officials for EPA.

Response: See Response to Comment #26.

Comment #73: What is considered a small amount? Five thousand gallons is considerable.

Response: See Response to Comment #1.

Comment #74: Didn't see any plan for evacuation.

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Comment #75: Location was picked because EPA had it and it was the least-cost alternative.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.2 (pg. 8-5) and 8.1.1.4 (pg. 8-7).

Diane Tuchmatulin
Private Citizen

Comment #76 How will the public be notified if there is an emergency?

Response: As indicated on page 4-21 of the DEIS, the E-TEC facility would comply with the requirements of the Federal Emergency Planning and Community Right to Know Act of 1986 (SARA Title III). These requirements include provisions for public notification in case of an emergency. In Edison Township, the Fire Department would be notified.

Comment #77: Once the testing is completed in this area and EPA has the technology, will this become a permanent toxic waste cleanup site?

Response: The E-TEC facility is not a treatment, storage and disposal (TSD) facility and never would be. Any material brought in for testing would be disposed of off-site after testing. Wastewater would be treated as generated and discharged to the MCUA WWTP or, if it couldn't be treated, transported off-site for disposal at an approved facility. EPA Edison will not become a Superfund site from E-TEC activities. Appendix B of the DEIS explains these operating procedures. A revised Appendix B is contained in Chapter 7 of this document.

Comment #78: A committee of concerned citizens should oversee everything the EPA does.

Response: See Response to Comment #24.

Comment #79: A large bond issue should be posted in Edison so that the people of Edison will be assured that if something does happen, Edison won't have to wait for Superfund dollars to help.

Response: See Response to Comment #15.

Peter Cerrato
Private Citizen

Comment #80: What does residential street mean? There were 13 truck accidents at the ramp into Raritan Center since last meeting.

Response: Trucks would travel on major highways (the Garden State Parkway, the NJ Turnpike, Rte. 1, Rte. 287) to Woodbridge Avenue directly to the facility. All transportation would be in accordance with federal and state requirements as discussed in Section 4.2.8 of the DEIS. If any transportation accidents were to occur, emergency procedures specified in EPA's contingency plan (which would be incorporated into the permits for the facility) would be followed.

Comment #81: How much dioxin would be tested and where would it be disposed?

Response: Dioxin is one of the numerous hazardous materials that may be used in evaluating new treatment technologies at the E-TEC facility. The quantity to be used, however, cannot be determined at this time. All hazardous materials brought to the facility would either be returned to their point of origin (e.g., the Superfund site) or sent off-site to a commercial disposal facility.

Comment #82: Would Edison police and fire department receive EPA or other agency subsidies?

Response: The E-TEC facility project does not provide for any subsidies to local emergency response agencies. There are other programs (e.g., Title III) that may have grants available for similar purposes. The Township may wish to pursue these funds independent of this project.

Comment #83: Use Kin-Buc as a research facility.

Response: The technologies developed through research efforts at the proposed E-TEC facility may be directly or indirectly applicable to the cleanup problems at Kin-Buc and at other landfills in the Edison vicinity. However, the proposed E-TEC facility is a small research operation, not a full-scale treatment facility, and will not be capable of treating large volumes of waste from Kin-Buc or any other landfill.

Comment #84: There is a major lawsuit against the New Jersey Institute of Technology because of a chemical spill; is that the kind of protection that can be expected?

Response: EPA is responsible for the facility operation, which will be in accordance with the management plan. EPA has referred the specific allegations to the New Jersey Institute of Technology (NJIT). NJIT may wish to provide an independent response directly to the commentor.

Jane Tousman
Private Citizen

Comment #85: Concerned about the incinerator and combination hazardous waste site that is being put next to a college and other sensitive land uses.

Response: The project is not an incinerator or combination hazardous waste site, nor is it a treatment, storage and disposal (TSD) facility under RCRA. The E-TEC facility is for research purposes only. See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #86: Don't know if the facility will have scrubbers and if so, what type.

Response: As discussed in Appendix B of the DEIS, reprinted in Chapter 7 of this document (pg 7-19) there would be two air pollution control systems consisting, as currently envisioned, of the components below:

- 1) Afterburner, quench, caustic scrubber, wet electrostatic precipitator (or other particulate removal device) and induced draft (ID) fan in series.
- 2) High efficiency particulate absorption filter, carbon adsorption filter and ID fan in series.

The air permit required by the State of New Jersey would specify the type of equipment used at the facility and the discharge requirements.

Comment #87: New Jersey is in a state of non-attainment as far as pollutant ozone is concerned; how much ozone will the facility throw into the air?

Response: See Response to Comment #59.

Comment #88: The private industry role in the facility is a concern.

Response: EPA is responsible for the operations of the facility and all activities, including any involvement of private industry. All activities would be in compliance with EPA's direction and the management plan.

Comment #89: Not being told what impact such things as benzene, PCBs and chlordane will have on the health of the residents.

Response: An evaluation of health impacts was conducted and the results are contained in Chapter 4, Appendix E and Appendix F of the DEIS. See also General Response 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14).

Comment #90: If there is a spill of some kind, will it get into the wetlands south of the buildings?

Response: See Response to Comments # 57 and #58.

Comment #91: Who is liable is there is a problem at the facility?

Response: See Response to Comment #15.

Comment #92: Who would Edison go to if there is an explosion, a fire or other problem?

Response: The EPA Edison Facility currently has a contingency plan to handle emergency situations. If the E-TEC facility is located in Edison, the existing contingency plan would be modified to incorporate the emergency procedures for the E-TEC facility. This contingency plan is required by RCRA and was discussed in the DEIS in Appendix G.

The current procedure in the event of an emergency, is to call the local emergency response agencies (e.g., police, fire) in Edison. These people would provide the first response. If the situation required, the EPA Region II Emergency Response team could be called upon to assist. The EPA Region II team could call upon the national

Environmental Response Team stationed in Edison to lend assistance.

This procedure has served the facility for many years and, thus far, has not been used. If the local emergency response personnel can no longer continue to service the facility, EPA will consider revising its contingency plan to have its own response personnel on site.

Comment #93: Will the facility pay any taxes to Edison Township?

Response: The federal government is not subject to taxation by state and local entities.

Comment #94: Why doesn't the facility come under the purview of the New Jersey Hazardous Siting Commission with all of its guidelines?

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.8 (pg. 8-9).

Comment #95: Because companies are dealing with their own hazardous waste and practicing waste minimization, why is such a facility needed?

Response: Waste reduction and proper handling of chemicals helps prevent additional environmental problems but does not do anything toward cleaning up the problems that already exist (i.e., Superfund sites). New technology must be developed to address these existing problems and it is this technology that the E-TEC facility would be developing.

Comment #96: What type of training are personnel on-site going to have?

Response: The E-TEC training program will provide personnel with the skills necessary to deal with hazardous waste management and emergency situations and is designed to be in compliance with all state and federal regulations. The training program will be under the direction of the Branch Chief of the Release Control Branch of EPA's Office of Research and Development (ORD). The specific training topics addressed will include: first aid, personal protective equipment, hazardous waste handling, facility emergency and monitoring equipment, waste/treatment/containment systems, communications and alarms, emergency response, standard operating procedures, applicable laws and regulations. Training records will be maintained on each employee indicating that the appropriate level of training or job experience has been given to, and completed by facility personnel.

Comment #97: Who would monitor the facility and what kind of expertise would be at the facility at all times?

Response: EPA in their operation would monitor the facility. In addition, there would be periodic inspections by permitting authorities (e.g., NJDEP), as with all permitted operations. The expertise on-site would include engineers, scientists, chemists and various other appropriate disciplines.

Sgt. Robert Ellmyer
Edison Emergency Management Group

Comment #98: Who is responsible for the load coming into the facility if it doesn't reach the facility? EPA says there are response people available; are they available by telephone or will there be a body to help?

Response: The licensed waste hauler would be responsible for any transportation accident or spill. See also Response to Comment #92.

Comment #99: The facility is totally unsecure.

Response: The security procedures are outlined in Revised Appendix B (pg 7-22). EPA feels that this is an appropriate level of security for a facility of this nature.

Comment #100: There is only one method of ingress and egress from the facility.

Response: The EPA has been operating the EPA Edison Facility with only one entrance/exit gate for over 20 years and feels that this system is adequate for the type of facility recommended. However, there is an ongoing master planning effort that may result in a modification of this procedure.

Unidentified Audience Member

Edison Environmental Commission Member

Comment #101: There are other sites in New Jersey, for example, Fort Dix, that could do the research.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.10 (pg. 8-9).

Comment #102: What are the risks of exposure to a combination of chemicals, any two, three or four?

Response: See General Response 8.1.2 (pg. 8-11).

Unidentified Audience Member

Comment #103: Why weren't questions answered at the public hearing?

Response: The purpose of public hearing was to receive public comments and questions that would be incorporated into the EIS process, rather than to publicly debate the issues. There was ample opportunity to address comments and questions at the public availability session on March 31, 1990. In addition, all substantive comments and concerns are addressed in this FEIS document.

Unidentified Audience Member

Comment #104: Middlesex County is the fastest growing county in the state. The site was chosen for reasons of dollars not people.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Responses 8.1.1.3 (pg. 8-6) and 8.1.1.4 (pg. 8-7).

Comment #105: How does EPA know if it can treat the results of an experiment safely if the purpose of the experiment is to treat the results safely?

Response: Experiments in various treatment technologies at the E-TEC facility will be conducted in research bays fully equipped with state-of-the-art air and water pollution control equipment. Any air or water emissions not captured by control equipment built into the experimental apparatus itself will be captured by the control equipment installed throughout the facility. This multi-layered control design is analogous to what is commonly referred to as "box-within-a-box" emissions control. Thus, the maintenance of safe working conditions will not rely solely on the experimental apparatus itself, but rather on the control equipment that is an integral part of the overall facility. EPA's goal is to create a "shirt-sleeves" working environment within the facility.

Comment #106: EPA does not believe it will generate adverse environmental impact, but the EPA people who are saying this came from all over and are not the people who will be living next door.

Response: Regardless of the location of the EPA personnel, the entire DEIS indicates that there will be no significant adverse environmental impacts.

Comment #107: People can travel to research labs; so the lab doesn't have to be close by schools.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.11 (pg. 8-10).

Comment #108: Tested twelve chemicals and two had adverse effects. How many other chemicals might be released?

Response: See Response to Comment # 31. See General Response 8.1.3 (pg. 8-14).

Comment #109: What is the risk of exposure to more than one chemical?

Response: See General Response 8.1.2 (pg. 8-11).

Comment #110: One truckload per week is a minimum. What would the maximum number be limited to?

Response: One truckload per week was not indicated as a minimum, it was indicated as and meant to be an average. Some weeks would have no deliveries, some more than one. There is no specific maximum delivery rate; the rate would be commensurate with the activity level of the facility. See also Response to Comment #33.

Comment #111: Agree with the need for the facility, but it needs to be in an area not so heavily populated, that is not growing so fast, that is not so near people.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6). See also Response to Comment #6.

Unidentified Audience Member

Comment #112: Regarding health risks, senior citizens are a concern, but young people are a greater concern.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #113: Who would fight fires on the property? Only Edison paid firemen (4 people) are allowed on-site.

Response: EPA knows of nothing that would preclude volunteer fire fighters from entering the property to respond to a fire alarm. In fact, volunteer fire fighters have reportedly responded to fire alarms at the EPA Edison facility for the past 20 years.

Comment #114: Will the constituents of the waste coming into the facility be known or mixed batches of unknowns?

Response: The constituents would be known.

Comment #115: Do the air pollution statistics include the statistics from the New Jersey Turnpike?

Response: New Jersey Turnpike statistics were generally considered in that they would be a part of the background air quality data that were used in the analysis.

Comment #116: What radius of the residential areas or any of the out-lying area will a toxic plume extend if there is an explosion? Was there a calculation done to show if the incinerator exploded and the toxic plume goes out, how far out would the toxic plume go and what will be the incidence of acute and chronic exposure to those people living a half mile away and so forth, depending on the winds?

Response: See General Response 8.1.3 (pg. 8-14) and Specific Responses 8.1.3.5 (pg. 8-20) and 8.1.3.6 (pg. 8-20).

Comment #117: Does EPA have any evacuation plans to go along with the area?

Response: See General Response to 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Ms. de la Cruz
Private Citizen

Comment #118: Oppose the facility as a taxpayer, resident, neighbor.

Response: See Response to Comment #6.

Unidentified Audience Member

Comment #119: In the presentation about transportation of this hazardous material, did EPA say there would be open trucks?

Response: No, there will be no open trucks; all trucks will be enclosed.

Unidentified Audience Member

Comment #120: There are remote areas that logistically would seem to be more appropriate for the E-TEC facility.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Ms. Ebernback
Private Citizen

Comment #121: What was the reasoning for picking the Edison location?

Response: See General Response 8.1.1 (pg. 8-3).

8.3 RESPONSES TO WRITTEN COMMENTS RECEIVED

The following section highlights and responds to comments received in writing during the comment period following the issuance of the draft EIS. Some written comments were received after the close of comment period, but these letters have been addressed in the document as well. The comments have been included here as direct quotes, wherever possible, and in other cases the comments were paraphrased, while retaining the nature and tone of the comments. To review the exact context and phrasing of the comments, copies of

the complete comments are included in Appendix I. The comment numbers listed in this section have also been placed next to the specific comment in the letters to aid in the identification of the comments from each letter.

Bernard J. Dwyer
House of Representatives
Congress of the United States
Letter Dated March 12, 1990

Comment #122: The proposed facility would border the Middlesex County College, the Thomas Edison County Park, and several residential neighborhoods.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #123: The site under consideration is inappropriate and EPA should investigate more suitable alternative sites.

Response: See General Response 8.1.1 (pg. 8-3).

Jonathan P. Deason
Office of Environmental Affairs
United States Department of the Interior
Letter Dated April 9, 1990

Comment #124: Future environmental documents should address the possibility of additional sand and gravel resources on the recommended site. If such resources are exhausted or if the materials are so widespread in the region that denial of any future production from the site would not affect supply, then the document should so state.

Response: The warehouses proposed for renovation stand on the northern portion of the site on land that has been extensively reworked, filled and leveled. It is unlikely that this history of repeated reworking of the site, as documented in aerial photographs of the site, would have left significant deposits of commercially valuable mineral resources in the area to be occupied by the facility. In any event, the facility would be located in existing buildings and would not disturb resources, if they exist.

Comment #125: It is unclear whether the facility emergency alarm would sound only in the immediate facility or whether it would be connected to a remote sensing facility.

Response: The design of the facility will determine where alarms will sound.

Lawrence Schmidt
Director
Office of Program Coordination
New Jersey Department of Environmental Protection
Letter Dated April 6, 1990

Comment #126: It is the conclusion of the Department that the Draft EIS does not provide an accurate description of the intended purpose, scale and nature of the proposed E-TEC facility as compared to the Research, Development and Demonstration (RD&D) permit application submitted.

Response: EPA disagrees with this comment that the DEIS and preliminary RD&D permit application are inconsistent. Accordingly, EPA met with NJDEP on April 26, 1990 to discuss the situation. The perceived inconsistencies have been resolved as identified in NJDEP's follow-up letter dated May 4, 1990. (Appendix I, pg. I-29).

Comment #127: The Executive Summary makes no mention of hazardous waste.

Response: Hazardous substances, waste, and materials are discussed in depth throughout the document; no distinction between them was intended in the executive summary.

Comment #128: The Draft EIS portrays the facility as one dedicated to the development of new and innovative technologies for the clean-up of Superfund and other contaminated sites. This contrasts with the hazardous waste Research, Development and Demonstration permit application submitted.

Response: The E-TEC facility will handle these wastes as well as "manufactured" wastes made specifically from clean materials to test a new technology. Typically, the latter are made by combining a contaminant with clean soil, as is currently done by EPA under the Synthetic Soil Matrix (SSM) program.

Comment #129: Page 1-4 of the Draft EIS describes that the EPA has existing testing and evaluation facilities dedicated to improving conventional technologies, but no dedicated facility where innovative technologies can be evaluated. This appears to conflict with the current RD&D facility permit application, under which one-half of the planned facility will be devoted to the consortium of New Jersey colleges and universities, whose plans for the space are to build a hazardous waste incineration evaluation facility.

Response: While the initial activity being proposed by the consortium is testing of a rotary kiln incinerator; this is not to imply that it will be their sole research activity. As the need for and feasibility of other technologies becomes apparent, the consortium may choose to modify its work agenda.

Comment #130: The storage quantities in Appendix F of the DEIS contradict the RD&D permit application, which proposes substantially higher storage capacities (not yet fully clarified, but in the range of 100,000 gallons) and no limits on concentrations of waste constituents. Table B-2 on page B-13 of the DEIS provides examples of chemicals that could be stored at the facility and "typical quantities" for each. No basis for these "typical quantities" is provided, and the RD&D permit application does not propose any such limited scale.

Response: For the purpose of the catastrophic health risk assessment, EPA assumed that 5000 gallons of liquid and 70 tons of soil would be stored in the building at the same time. The risk assessment showed, however, that in some cases, more materials could be safely stored and in other cases, less. In any event, only safe levels of hazardous materials would be stored on site. See also Response to Comment #16.

Comment #131: The ability of the MCUA wastewater treatment plant to accept an additional 100,000 gpd should be substantiated, as well as the need for an industrial pretreatment application.

Response: See Response to Comment #35.

Comment #132: The DEIS addresses only the planned renovation of buildings and does not address the repair of roads or the clean-up of the site.

Response: The priority for funding is to renovate the buildings, provide state-of-the-art water and air pollution control equipment, and provide a first-class research facility. Repair of roads or the cleanup of the site are ancillary items which are being considered by EPA in the concurrent facility master planning effort.

Comment #133: The DEIS does not address the specific local road(s) to be used by traffic to and from the facility.

Response: See Response to Comment #80.

Comment #134: The DEIS states that the SARA legislation identifies some specific locations where facilities should be sited. The DEIS does not present a clear discussion of whether the USEPA is also siting similar facilities in these other regions, and if not, then why were they ruled out as candidate sites in apparent contradiction of the legislation.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.7 (pg. 8-8).

Comment #135: The disposal of wastes, including asbestos, generated during the renovation of the existing buildings must conform to existing rules and regulations administered by the Division of Solid Waste Management. In the event solid wastes are removed from the site, they must be classified as either solid waste or hazardous waste prior to disposal.

Response: EPA agrees with this comment and will comply with all applicable disposal requirements.

Comment #136: Prior to the disposal of any solid waste from this site, source separation and recycling of many of the on site materials should be thoroughly investigated.

Response: EPA agrees and will comply with all waste minimization and waste recycling requirements.

Lawrence Schmidt
Director
Office of Program Coordination
New Jersey Department of Environmental Protection
Letter Dated April 26, 1990

Comment #137: There is to be no discharge of untreated process water from the facility.

Response: This statement is correct; except for sanitary sewage, there will be no discharge of untreated wastewater as explained in Section B.1.2.2 of Appendix B of the DEIS and the Revised Appendix B of this document.

Comment #138: An Industrial Stormwater permit, a Significant Indirect User (SIU) permit and a Treatment Works Approval (TWA) are required for the E-TEC facility.

Response: See Revised Appendix B of the FEIS, Section B.7 (pgs. 7-29 and 7-30).

Comment #139: The project site is located within the sewer service area of the MCUA STP. As such, the conveyance of the wastewater to the MCUA STP is consistent with the areawide and statewide Water Quality Management (WQM) Plans. However, should the pretreatment system or the holding tanks require a TWA and have design capacity of 2000 gpd or larger, the project would be inconsistent with the above cited WQM Plans. This inconsistency would require an amendment to the areawide WQM Plan in order to proceed with the project.

Response: EPA is currently pursuing action with the WQM planning agency to amend the areawide plan.

Comment #140: Any underground storage tanks at the facility must be registered with the Department and must meet construction, design and operating standards of these rules.

Response: The proposed E-TEC facility operations will not include underground storage tanks. If they were required in the future, they would be installed in accordance with all applicable regulations.

Lawrence Schmidt
Director
Office of Program Coordination
New Jersey Department of Environmental Protection
Letter Dated May 4, 1990

Comment #141: The meeting between EPA and NJDEP of April 26, 1990 clarified the intended purpose, scale, nature, and scope of activities proposed for the E-TEC facility. NJDEP hopes that the valuable discussion will enable USEPA to proceed with this important project through the Final EIS process and permitting.

Response: EPA acknowledges this comment.

Sidney Sewitch
Vice-Chairman
Middlesex County Planning Board
Letter Dated March 13, 1990

Comment #142: It is the Middlesex County Planning Board's position that the proposal by the USEPA to conduct tests and experiments for the disposal of even small quantities of toxic and hazardous waste materials at a location close to the Middlesex County College,

Edison County Park, and homes in the township poses an unacceptable risk to the health and welfare of the students, park users and residents.

Response: The E-TEC facility is not a TSD facility and would not be used for the disposal of toxic and hazardous waste. See General Response 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14).

Comment #143: The Middlesex County Planning Board concurs with and supports the objections to the proposed location of the E-TEC facility at the Raritan Arsenal site as expressed by the Township of Edison and the Middlesex County College Board of Trustees at the public hearing held on February 27, 1990.

Response: Please see Responses to Comments from Mayor Paterniti (Comments #1 through #8), from John Grun (Comments #9 through #24) and from Warren Keleman (comment #25 through #37).

Comment #144: The EIS minimizes the possibility of groundwater contamination to the sole source aquifer. The assertions presented in the EIS are insufficient to guarantee that no contamination will occur.

Response: See Responses to Comments #57 and #58.

Comment #145: Given the statement that no level of exposure to carcinogenic substances is completely safe, and given the location of the facility so close to day and night activity centers, the Edison site should be dropped from consideration.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #146: Does the worst-case release represented by a fire conflict with the release rates associated with an explosion? Would a gas explosion cause greater harm than a gas fed fire?

Response: The reference to release rates associated with an explosion was an error and has been corrected. See page 7-34 of this FEIS. See also General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.2 (pg. 8-16).

Comment #147: The EIS, on page F-14, states that for two of the chemicals evaluated in the catastrophic release scenario, it was determined that there could be adverse health effects due to the catastrophic release.

Response: See Response to Comment #31 and General Response 8.1.3 (pg. 8-14).

John H. Klock

Crummy, Del Deo, Dolan, Griffenger & Vecchione

Letter Dated March 19, 1990

Comment #148: The EIS is result driven and not the result of choosing the best location based upon risks.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.1 (pg. 8-4) and 8.1.1.2 (pg. 8-5).

Comment #149: The E-TEC facility should be located in an area where there is no population.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #150: The fact that New Jersey is in a non-attainment area for ozone precludes locating the E-TEC facility.

Response: The fact that New Jersey is in non-attainment for ozone does not in itself preclude construction of the facility. However, the E-TEC facility would have to meet applicable federal and state emission limits and control requirements. As stated in the EIS, the E-TEC facility will acquire all applicable permits, including an air permit from the New Jersey Department of Environmental Protection, prior to operation of the facility.

Comment #151: The data compiled for the opposition to the Hazardous Waste Facilities Siting Commissions' proposal to locate an incinerator in Raritan Center apply to the E-TEC facility.

Response: This E-TEC facility is not a hazardous waste incinerator and the projects are NOT similar. EPA believes the projects are so divergent that comments raised in opposition to the incinerator are not germane to this project.

Julian Capik
Member of
Middlesex County Environmental Coalition
Letter Dated March 31, 1990

Comment #152: Although the environmental impact could not be compared to an industrial size incinerator, the same criteria for rejection of a hazardous-waste research center would be valid.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.8 (pg. 8-9). See also Response to Comment #151.

Comment #153: This facility would be sited close to Middlesex College and the Raritan Center office complex, and any air emissions would have an adverse effect on the environment and health of the people in this densely populated area.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14).

Comment #154: This area is in a non-attainment location for priority pollutants of the atmosphere, and any addition of pollutants into the air, will cause further problems and deterioration.

Response: As indicated in the DEIS, the Edison area is non-attainment for ozone only and complies with the other National Ambient Air Quality Standards (NAAQS) for primary pollutants. See also Response to Comment #59.

Comment #155: The EPA already has other hazardous-waste research centers on line in other parts of the country, which can produce the same technological information as this site, and therefore should abandon the idea of building one in this highly populated area.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Bob Nasdor

Middlesex Interfaith Partners with the Homeless

Homeless Outreach Center

Letter Dated April 19, 1990

Comment #156: A full and open discussion of the plan will provide the community with the information needed to understand the risks of the

project. The EPA is commended for its support of this continuing process.

Response: The EPA acknowledges this comment.

Walter R. Stochel, Jr.

Private Citizen

Letter Dated March 3, 1990

Comment #157: Has there been an agreement between Edison and the EPA about this facility? Was Edison supposed to give local approval in exchange for the use of two warehouses on the site?

Response: No. The EPA has discussed the possibility of offering Edison the use of two warehouse buildings (Buildings 255 and 256) for storage of heavy equipment. These discussions, however, are independent of the Township's position on this project.

Comment #158: Has the Army conducted part of their Defense Environmental Restoration Program (DERP) confirmation study on the site where the E-TEC facility will be built?

Response: Yes; additionally, EPA has conducted studies on the site. See also Response to Comment #2.

Comment #159: Has the Letterkenny Army Depot contamination study of 1961 been released to the public?

Response: The study conducted by Letterkenny Army Depot in 1961 was an initial screening of 17 sites. This study merely formed the basis for later studies and would not be as pertinent as the results of the on-going DERP confirmation study. It was mentioned in the DEIS for historical and background purposes only. To the best of EPA's knowledge, the study was released

to the public and can be obtained by writing to: Commander, U.S. Army Corps of Engineers, Huntsville Division Office, Box 1600, Huntsville, AL.

Comment #160: Since this site is a former Army Arsenal, it is best to wait until the release of the confirmation study and wait until a cleanup plan is enacted.

Response: See Response to Comment #2.

Comment #161: This facility would attract all kinds of research and development companies to this area. The EPA cannot guarantee that these companies will not test their own toxic waste clean-up equipment in their own industrial buildings and not at the E-TEC.

Response: The presence of the facility would be expected to attract other research facilities to the area. However, such facilities would be required to obtain applicable operating permits and would have to comply with all state and federal regulations. In the process of issuing permits to other companies conducting this type of research, the appropriate regulatory agencies would ensure that the design and operation of these facilities would not pose undue risk to the public.

Comment #162: The DEIS mentions that any waste generated on the site will be sent to a proper disposal site. What about the soil and water that have gone through a test process and come out clean? Will this material be disposed in Edison?

Response: Soil that comes out clean could be disposed of in Edison. Process water that comes out clean would be sent to the MCUA treatment plant.

Mr. and Mrs. Edward de la Cruz
Private Citizens
Letter Dated March 7, 1990

Comment #163: The vast need for creating the proposed E-TEC facility in Edison is understood but it is objected to on the basis of having lives endangered, addresses stigmatized, and properties devalued.

Response: See Response to Comment #6.

Comment #164: No one can predict the risks to pregnant women, to the unborn, and to children from long term exposure to the emissions from the "small burner".

Response: See General Response 8.1.2 (pg. 8-11) and Specific Response 8.1.2.3 (pg. 8-14).

Comment #165: The area is too densely populated, there are too many schools and day care centers in the vicinity, the traffic is too congested, and the risks to the quality of lives and the environment are too great even without taking into account how probable a truck accident could be.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.1.3 (pg. 8-6), 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #166: Choose a less populated location that can be evacuated, with a better fire fighting force and less traffic.

Response: See General Responses 8.1.1 (pg. 8-3) and 8.1.3. (pg. 8-14) and Specific Responses 8.1.1.3 (pg. 8-6) and 8.1.3.1 (pg. 8-16).

Irene Pearse
Private Citizen
Letter Dated March 27, 1990

Comment #167: The proposed toxic waste site near Middlesex County College is opposed.

Response: The E-TEC facility is not a "toxic waste site" or a treatment, storage or disposal (TSD) facility; it is a research facility dedicated to innovative hazardous waste treatment techniques.

Comment #168: Cannot afford to expose this large community to toxins so close to campus.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Jane Tousman
Private Citizen
Letter Dated April 2, 1990

Comment #169: How would evacuations be carried out and who would be responsible?

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Comment #170: The emergency concerns to be addressed when dealing with such substances as PCBs, chlordane, benzene, chlorobenzene, trichloroethylene, cadmium, DDT and other chemicals need to be fully explained.

Response: See Response to Comment #92.

Comment #171: Scrubbers should be mandated on the proposed incinerator no matter what its size. Also there should be an afterburner, not only the baghouse mentioned in the text of the EIS.

Response: See Response to Comment #86.

Comment #172: State Law will apply to the facility as well as federal regulations.

Response: The facility will comply with all applicable state and federal regulations.

Comment #173: Would there be a Right-to-Know by the Citizens of the area if there is some tell tale sign? Would there be an audit of these materials available to the public annually?

Response: Yes, the facility would comply with the Federal Emergency Planning and Community Right to Know Act of 1986 (SARA Title III). This compliance is explained in the DEIS on page 4-21. See also Response to Comment #24.

Comment #174: The closest air monitoring equipment is in New Brunswick and Perth Amboy. Also, there has never been air monitoring equipment on or near this site. How accurate can off-site equipment be concerning emissions coming from the Sayerville (MCUA) Edgeboro landfill plus the 3 landfills (Kin-Buc, Edison, ILR) currently in existence?

Response: There are no monitoring stations in Edison, so EPA used the data from the closest stations in the analyses presented in the DEIS. These data represent the best available information.

Comment #175: Does Edison qualify as an area of non-attainment?

Response: As stated in the DEIS on Page 3-19, Edison, as is all of New Jersey, is not in compliance with the NAAQS for ozone. It is in compliance with the other primary NAAQS standards.

Comment #176: How will the facility contribute to the ozone problem the state is experiencing?

Response: See Response to Comment #59.

Comment #177: Would like to be a part of the public hearing process the DEP might conduct on this facility.

Response: As part of the permit process, the facility will go through public hearings. This stage of the process would involve the New Jersey DEP. These hearings would be open to the public and would be announced in local papers.

Comment #178: The two groups who would be at greatest risk are the very young and the very old.

Response: See General Responses 8.1.2 (pg. 8-11) and 8.1.3 (pg. 8-14) and Specific Responses 8.1.2.3 (pg. 8-14) and 8.1.3.4 (pg. 8-20).

Comment #179: What type of plantings would be offered in the buffer zone of the facility? The research at Rutgers (i.e., plantings to reduce air pollution) should be reviewed.

Response: EPA has checked with Rutgers University and at the present time there is no ongoing research that is applicable to the proposed facility. The buffer zone is currently vegetated. The concurrent facility master planning effort may address the vegetation of the site.

Comment #180: Are there field studies being done on the toxicity of the soil beneath the site?

Response: See Response to Comment #2.

Comment #181: How will personnel on site be trained?

Response: See Response to Comment #96.

Comment #182: Will there be a chemical specialist on-site at all times? Will there be a computer tied into the DEP and EPA so that any irregularities will be picked up early by a qualified chemical specialist?

Response: There will be a chemical specialist on-site at all times of facility operation. There will be no direct tie-in to EPA and DEP computers but they are not needed. The operation will comply with permit requirements.

Comment #183: What are the details of how materials would be stored on site?

Response: The details of storage will be developed as part of the facility design. Storage would be in conformance with all applicable permit requirements.

Comment #184: What will be done to protect the wetlands on the southern portion of the site? Will there be buffers around these wetlands so that they can continue to function?

Response: The DEIS indicates (pg. 3.21 et seq.) that the wetland areas on the site have been characterized and their boundaries approximated; descriptions of these characteristics are included in the DEIS Chapter 3. The proposed renovation of the existing warehouse buildings would not affect the wetlands; these wetland areas lie to the south of the site of renovation and no operations are proposed for that southern portion of the parcel.

Comment #185: Is there any sort of stormwater management plan being put forth?

Response: Stormwater management will be dealt with in the context of the overall EPA Edison Facility master planning effort and will not be done as a separate effort for the E-TEC facility. Additionally, EPA is evaluating NJDEP's comment (Comment #138) regarding the requirement of a stormwater permit for the facility. If needed, a stormwater permit would be dealt with in the permitting phase of the facility design.

Comment #186: How does the indoor spill plan work?

Response: There is not a specific document entitled "the indoor spill plan". Spills are considered emergency situations and as such are considered in the facility's contingency plan. For additional discussion of contingency plan refer to Response to Comment #92.

Comment #187: Regarding the risk assessment, the cancer problems are mentioned but how about the effects on the wildlife of the area?

Response: EPA evaluated the impacts to the wildlife of the area and concluded there will be no significant adverse impacts. This discussion is contained in Section 4.2.7 of the DEIS.

Comment #188: How about the health effect connected with birthweights, miscarriage, and in general unborn children?

Response: See General Response 8.1.2 (pg. 8-11) and Specific Response 8.1.2.1 (pg. 8-13) and 8.1.2.3 (pg. 8-14).

Comment #189: The vendors carrying out the work and their skills and backgrounds is something that certainly demands scrutiny.

Response: See Response to Comment #88.

Comment #190: Who would be liable if there was an accident on site? Are there any "no risk agreements"?

Response: EPA is responsible. See Response to Comment #15.

Comment #191 Who would assume the costs of insurance for this facility? Through the process of privatization, which this facility uses, how will this be carried out?

Response: The facility will be owned and operated by the EPA and does not involve privatization. With respect to insurance, see Response to Comment #15.

Comment #192: Will the New Jersey Hazardous Waste Siting Commission be reviewing this proposal?

Response: The commission was on the mailing list and received a copy of the DEIS. However, they have not contributed any verbal or written comments to date. See Specific Response 8.1.1.8 (pg. 8-9).

Aimee and John Szilagyi
Private Citizens
Letter Dated April 3, 1990

Comment #193: There will be emissions of nitrogen and sulfur compounds.

Response: The emissions of these compounds would be below the limits specified in the facility's air permit. The limits would be established to be protective of public health.

Comment #194: Accidental spills or accidents including the trucks carrying hazardous wastes shall result in dangerous exposure to area police and other governmental employees who would be called upon to respond to the emergency situations which would exist in the event of a spill or truck accident.

Response: The emergency responders are trained to handle these types of emergencies. See also Response to Comment #92.

Joseph and Eleanore Both
Private Citizens
Letter Dated April 4, 1990

Comment #195: The lab is set up for experimental purposes only because of EPA's limited budget. What is to stop growth when EPA gets a larger budget?

Response: The facility was set up for research purposes only, not because of the budget, but because of the great need for information in the area of hazardous waste treatment. The EPA does not intend to change the scope of the facility if additional money were to become available. See also Response to Comment #1.

Comment #196: This type of project should not be located in a heavily populated area. Look for a remote site.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Georgia S. Cohen, Ph.D.
Private Citizen
Letter Dated April 4, 1990

Comment #197: The EPA chose the Edison site for monetary reasons and because it appeared to be the most cost-effective.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.4 (pg. 8-7).

Comment #198: The facility is to be a full-scale toxic research facility, storing continually at least 5000 gallons of liquid toxic waste and 70,000 tons of solid toxic waste, with weekly shipments of at least one major truckload of toxic waste from anywhere and everywhere in the country.

Response: The proposed storage in the facility buildings is 5,000 gallons of liquid and 70 tons of solids (not 70,000 tons). These facilities would not necessarily be full at all times and could also contain uncontaminated soils or liquids. The delivery rate of one truckload per week was intended to be representative of average conditions. Some weeks may have no truckloads, while other weeks may have two or three. Not all truckloads would contain toxic materials; trucks could contain equipment and supplies or uncontaminated solids or liquids.

Comment #199: Out of the 12 chemicals (and only 12 were tested or examined) tested in the catastrophic release, two of the chemicals tested would be toxic to human beings.

Response: See Response to Comment #31. Also, see General Response 8.1.3 (pg. 8-14).

Comment #200: The city does not have the capacity for handling any such emergency, were it to occur. It also does not have the tax base it would need in order to make the necessary emergency personnel available.

Response: See Response to Comment #92.

Comment #201: In the event of a needed evacuation, evacuation would be nearly impossible in time to prevent serious health damage.

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Comment #202: The installation of such a facility in this particular highly populated area could result in a meaningful decline in the population and tax base of Edison and of Middlesex County.

Response: EPA disagrees with this comment. The operation would not be significantly different than the type of operation of the EPA Edison Facility for the past 20 years and would not result in a population decline or a tax decline. These impacts were discussed in the DEIS on page 4-7.

Comment #203: The EPA should sell the land and use the money to buy a facility somewhere else.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.5 (pg. 8-7).

Comment #204: No one disputes the need for such a research facility. What is adamantly opposed is the placement of such a facility in a highly populated area.

Response: See Response to Comment #6.

Joy R. Grafton

Private Citizen

Letter Dated April 4, 1990

Comment #205: If the facility was to be used to clean up the Kin-Buc or ILR dumps it might serve some purpose to the local community and justify its location in Edison.

Response: See Responses to Comments #11 and #83.

Comment #206: As proposed the E-TEC will only serve to create a new "dirty" site in town.

Response: The E-TEC facility will obtain all applicable permits and comply with environmental regulations. As such, it will not create a "dirty site".

Comment #207: The industrial locations producing the hazardous materials should be asked to be the sites of research on a rotating basis. These locations are already "dirty" and have the financial and technical support for such research on site.

Response: These industries would not be equipped for this type of research and would not have the built in safeguards of the E-TEC facility (e.g., air pollution control equipment, wastewater treatment systems). Also, this type of decentralization of testing would not be as productive.

Elvira Ruskai
Private Citizen
Letter Dated April 25, 1990

Comment #208: "If" there is a disaster such as a fire, it will be too late to decry your action. This "if" is a strong possibility which can destroy lives, property, etc.

Response: See General Response 8.1.3 (pg. 8-14).

Comment #209 The property should be sold, the profits taken and land bought in the South or Southwest of the U.S.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.5 (pg. 8-7).

Louis and Claire Bisgay
Private Citizens
Letter Dated May 2, 1990

Comment #210: The lab is being located on land close to a college and day care centers and traffic is heavy in the area, making evacuation difficult.

Response: See General Response 8.1.3 (pg. 8-14) and Specific Response 8.1.3.1 (pg. 8-16).

Comment #211: No rational person questions the need for such a facility but placing it in the heart of a heavily populated area, with the attendant effects on safety and property values, seems ill-advised and inequitable.

Response: See Response to Comment #6.

Comment #212: The EPA should sell the land and purchase land in a less populated area.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.5 (pg. 8-7).

Louis Fuzall, Sr.
Private Citizen
Letter Not Dated

Comment #213: Has a decision been reached about the E-TEC facility?

Response: The decision regarding the location of the E-TEC facility will be made after the issuance of this FEIS and a careful review of comments received during the comment period of the FEIS. Following the comment period, the EPA will issue a Record of Decision (ROD), which will contain EPA's final decision regarding the project.

Joe Debler
Private Citizen
Letter Not Dated

Comment #214: The index is missing.

Response: The agency's regulations recommend an index commensurate with the complexity of the DEIS. Because the document was not particularly voluminous, the Table of Contents adequately describes the location of material in the DEIS.

Comment #215: On the cover page add Middlesex County and the actual date comment is due.

Response: The cover page has been revised to include Middlesex County as the location of the project and is included in the FEIS. With respect to the actual comment due date, the date is included in the abstract and the cover letter that accompany this document.

Comment #216: The areas of controversy, issues raised by public/agencies and unresolved issues should be included in the Executive Summary.

Response: These issues have been included in the FEIS Executive Summary.

Comment #217: The need for the placement of the facility in the northeast, specifically a densely populated area of New Jersey should be explained.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

Comment #218: Since the potential for vehicle accidents is a prime concern, alternate approach routes should be discussed and evaluated. This should include a water approach using the Raritan River.

Response: The quantity of vehicular traffic would not be significant (one truckload per week on average) and not all trucks would contain hazardous materials. The rail lines are being removed from the facility so no deliveries will be made using the railroad. A water approach using the Raritan River is not a very viable approach, considering the low volume of material to be transported and the economics of truck transportation. Also, the recommended E-TEC facility site does not have direct access to the river.

Comment #219: None of the constraints appear very limiting or even pinpoint the Northeast, specifically Edison as the best site.

Response: See General Response 8.1.1 (pg. 8-3).

Comment #220: The alternatives analysis is supposed to present comparative environmental impacts. It doesn't.

Response: EPA believes it does. See General Response 8.1.1 (pg. 8-3).

Comment #221: Based on alternatives section there was no reasonable alternative to Edison. This is hard to believe.

Response: See General Response 8.1.1 (pg. 8-3).

Comment #222: No apparent mitigation presented.

Response: Mitigation is discussed in the DEIS in Chapter 4, section 4.4.

Comment #223: Overall appearance of alternative section rather than objective, seems to eliminate other alternatives from a pre-selected site (Edison).

Response: See General Response 8.1.1 (pg. 8-3) and Specific Responses 8.1.1.1 (pg. 8-4) and 8.1.1.2 (pg. 8-5).

Comment #224: Fort Dix's change in mission and reduction in use may provide facilities and personnel to accomplish the E-TEC facility's tasks.

Response: See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.10 (pg. 8-9).

Comment #225: Selection of Arkansas facility goes contrary to all arguments in the EIS. Why was the Arkansas site selected?

Response: EPA's combustion research facility located in Pine Bluff, Arkansas (mentioned on page 2-3 of the DEIS) is different from the proposed E-TEC facility and, therefore, would be subject to a different set of selection criteria and a separate EIS process. The selection of the Arkansas site is not a pertinent consideration in this EIS process.

Comment #226: The cost of new construction is estimated. Appendix B details proposed action but omits construction costs for comparison. Why?

Response: The construction costs are part of the alternatives evaluation presented in Chapter 2 of the DEIS. Appendix B presents a detailed description of the type of facility that would be located in Edison. Construction costs are not applicable to that discussion.

Comment #227: Based on requirements in 1502.15 and lack of impacts in section 3, it is not clear why paragraph 3.1.1 through 3.1.6, 3.1.10.1 and .2, 3.2.4.1 and .2 are needed for just rehabing existing structures and subsequent operation.

Response: These sections were included for completeness of the document.

Comment #228: A figure should also be presented depicting present and future land use in relation to proposed facility.

Response: Such a figure has been prepared as an amendment to Chapter 3. This figure would become Figure 3-6 of the DEIS and is presented in Chapter 7 of this document.

Comment #229: It is not clear what route material will take to get to the facility. This section should be expanded to detail probable delivery routes.

Response: See Response to Comment #80.

Comment #230: Delivery between midnight and 6 AM, period of low traffic, could reduce the potential for accidents.

Response: Because the facility would operate during normal working hours, this type of delivery would be difficult to implement.

AFSCME Local 2269
Middlesex County College
Letter Dated April 18, 1990

Comment #231: The placement of the waste disposal plant on the proposed site has not been thought out properly. Adjacent to the proposed site is Middlesex County College, with an enrollment of over 11,000 students and workers.

Response: The E-TEC facility is NOT a waste disposal plant; it is a research and development facility. See General Response 8.1.1 (pg. 8-3) and Specific Response 8.1.1.3 (pg. 8-6).

APPENDIX I

DEPARTMENT OF HEALTH AND HUMAN RESOURCES

ADMINISTRATIVE OFFICES: 100 MUNICIPAL BOULEVARD, EDISON, N.J. 08817

MEDICAL FACILITY: Dr. WILLIAM TOTH MEMORIAL HEALTH CENTER
80 IDLEWILD ROAD, EDISON, NEW JERSEY 08817

EDISON
New Jersey

201 - 287 - 0900



JOHN O. GRUN, M.S., Director

February 27, 1990

Mr. Robert W. Hargrove, Chief
Environmental Impacts Branch
U. S. Environmental Protection Agency
26 Federal Plaza, Room 500
New York, New York 10278

Dear Mr. Hargrove:

**Draft Environmental Impact Statement on the Development of
an Environmental Technology and Engineering (E-TEC) Facility
in Edison, New Jersey**

I am the Director of Health and Human Resources and Health Officer for the Township of Edison. In that capacity I am charged with protecting both the health of the residents and the environment as well. For brevity, I will list my comments.

1. The document alluded to alternative sites, but played down the fact that this is a national effort and could be sited outside of New York or New Jersey. As we all know this was due to the fact that EPA has an existing R & D facility in Edison, a consortium of academia and industry existed, and the cost factor is cheapest under your proposed alternative. Based on federal desirability factors this was included in the new Super Fund legislation. I submit that Cicinnati or other sites are just as appropriate as Edison. - 9
2. This is a Research and Development facility for untested "innovative programs" and I submit by definition that it is inherently dangerous. - 10
3. Edison Township supported previous R & D research at this facility because there was an overwhelming public self-interest. I am referring to the "Dragon" as it was nicknamed because this technology was a contingency for use at the infamous Kin-Buc Landfill in Edison Township. - 11

February 27, 1990

Mr. Robert W. Hargrove, Chief
Environmental Impacts Branch
U. S. Environmental Protection Agency

4. Edison township has had more than their share of environmental problems and associated negative impacts including these left by the Department of Defense and we don't want any others.] - 12
5. The three main negative impacts from this facility appear to be: (a) Transportation of hazardous materials from all over the country, (b) Sewer capacity, because 100,000 gallons a day is not insignificant, (c) Airborne contaminants both routine and worst case disaster scenarios. Both are unacceptable.] - 13
6. Is this facility subject to RCRA or not? I was suprised to see statement on page B-9 that it is not a TSD facility pursuant to RCRA.] - 14
7. That raises another very significant issue, namely eventual closure of this facility after its useful life. Insurance coverage is not mentioned although it is very germane to the shared facilities. What funds are set aside for closure and who pays? Are you going to leave another problem just like the Department of Defense did?] - 15
8. Throughout the document there are terrible inconsistencies in the amounts of materials to be stored on-site or tested. Is this a case of "smoke and mirrors"? I am referring to the statements that 5,000 gallons of liquid and 70 tons of soil may be stored there and then Appendix F indicates some other measures. Please explain?] - 16

February 27, 1990

Mr. Robert W. Hargrove, Chief
Environmental Impact Branch
U. S. Environmental Protection Agency

9. Further Appendix F is a joke, isn't it? If I missed the point I apologize. However, I do not see the safety of the allowable quantities in your graphs relating to either the operation and testing at this facility or to the presumed protection of public health in the event of a catastrophe. It also alludes to storage inside the buildings, only. Another case of "smoke and mirrors"? These inconsistencies bother me. - 17
- 18
10. Your document focuses on the buildings and not the entire facility. Currently R & D studies such as the UST facility are operating on the grounds. It is not inconceivable that the property outside would be used for other testing. I am much concerned about the potential testing of genetically engineered organisms at this site and am vehemently against it. This is a possibility due to the listing of in-situ bioreclamation on page B-10. - 19
- 20
11. The site is inappropriate in total because of the sensitive land uses near it. I am referring to the County College, the apartment complexes, the senior citizens in Bonhamtown and most importantly the young children in the three day care centers in the immediate neighborhood. Did you realize that your air modeling predictions on page E-15, Figure E-1 show the point of maximum impact on top of the John F. Kenny Child Care Center? I have a problem with that. - 21
- 22

February 27, 1990

Mr. Robert W. Hargrove, Chief
Environmental Impacts Branch
U. S. Environmental Protection Agency

12. To avoid rambling I decided to step back and look at the positive and negative impacts from this facility on Edison and our residents. As Health Officer, I could accept zero impact and certainly any positive impacts. But I can't find one positive aspect as far as Edison is concerned. I don't question the national need for this facility; however, you are a net negative impact to my community and I cannot and will not support you in this endeavor.

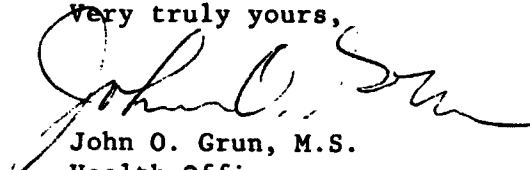
- 23

13. In spite of our objections, if USEPA proceeds with this endeavor then I insist on both a closure plan with financial guarantees and a completely open ongoing public process to brief the community of your studies as was discussed in your scoping meetings.

- 24

Thank you.

Very truly yours,



John O. Grun, M.S.
Health Officer

**MIDDLESEX COUNTY COLLEGE
EDISON, NEW JERSEY**

February 27, 1990

**Position Statement: Proposed Location of the EPA's E-TEC Facility
 in Edison, New Jersey.**

**Prepared by: Donald Drost, Plant Engineer
 Warren Kelemen, Dean of Continuing Education and
 Instructional Resources
 Dr. Francis Spano, Dean of Engineering Technologies
 and Science**

**On behalf of the Middlesex County College Board of Trustees,
President Flora Mancuso Edwards, our staff and our students, we come
before you this evening to express very mixed emotions about the
E-TEC facility. We consider ourselves an environmentally
enlightened institution, one that has long been a leader in the
education and training of environmental, chemical, and engineering
technicians. As such, we heartily endorse the objectives of the
E-TEC Program; and we applaud the involvement of a number of
institutions of higher education. We are proud of our own history
of cooperation both with the EPA and with several of those
cooperating colleges and universities.**

**We are also keenly aware of the ever-present "fine, but not in my
backyard" syndrome, and mindful of the fact that any such innovative
endeavor is bound to face opposition from various sectors of the
public who fear a detrimental impact on their quality of life.**

To find ourselves in opposition to a much needed environmental program such as this is, frankly, very much out of character for this institution; yet, following a careful review of the Environmental Impact Statement (EIS), we are indeed opposed to this project at this location.

It is our contention that what is presented as the clear best location is, in truth, just the clear easiest location--easy in that the EPA already has access to the land and buildings; and we must remember that the EIS is an EPA study, prepared by the EPA for the EPA.

The proposed location of the E-TEC facility is in the heart of a large, concentrated industrial/educational/residential complex that, by all projections, will only grow more so. To select this as the ideal location simply does not fit with what any of us who know this area and this community can so plainly see.

The EIS begins with a discussion of alternatives and addresses three basic siting criteria. The third of those reads, "locating the facility on a property large enough to house a large warehouse type building(s) and provide a buffer zone." While the term "buffer zone" is never defined, would it not seem illogical to select a suitably large property only to have the buildings virtually hugging the property line? And would it not seem doubly illogical, even ludicrous, if the neighbor on the other side of that property line were a college campus serving more students than any other campus in the State of New Jersey?

Middlesex County College is second in institutional enrollment to Rutgers and actually exceeds the enrollment of any single campus of our State University. We have a present student population of 11,000, a full- and part-time staff of nearly a 1,000, a large Child Care Center and a variety of major special events that bring thousands more to the campus. The building that houses our maintenance and custodial staff is less than 100 yards from one of the proposed E-TEC buildings. Two of our largest classroom buildings (L'Hommedieu Hall and Main Hall) are located within two hundred yards of that same building. We submit that the buffer zone criterion, considered important in developing an alternate site, was ignored entirely in selecting the primary site.

-27

But our concern does not stop at our gates. We share the greater Raritan Arsenal region with one of the largest industrial/commercial concentrations in the State--over 15,000 employees in the two major industrial parks; and with hotels; and with single family homes; and with high density apartment dwellings. It is noteworthy that, while sketchy population data appears for Edison Township as a whole, the EIS provides no data at all regarding the population in the area immediately surrounding the proposed site.

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And what of the future? As the EIS indicates, the area will include a major facility for the homeless; a planned urban development to house between 8,000 and 14,000 residents on the banks of a cleaner, more recreationally productive Raritan River; and continued growth

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in the industrial sector. In addition, a major exposition center, recently opened in Raritan Center will be bringing thousands to the Center for special events. This is not an appropriate location for the E-TEC facility now and it will become even less so in the years ahead.

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What do we learn from the EIS about the actual risk to these many thousands of neighbors. Clearly, the document attempts to minimize risk and presents page after page of supporting data; but on what is all that data based? Perhaps, two statements directly from Appendix E of the EIS best express our own concerns about this data:

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"The detailed operational and design information (e.g., stack design parameters, air pollution control design) was not available at this stage of consideration of the proposed E-TEC facility, so the risk assessment had to be conducted based on the limited information available and realistic assumptions."

AND

"Potential emission rates of chemicals from the facility to the atmosphere were not known. Therefore, feed rates of contaminants to the air emission control system were estimated from the information compiled by ORD during a literature review of possible testing activities and quantities of chemicals that may be handled on site."

In addition, the catastrophic release analysis evaluated twelve indicator compounds. Even if they did look at all potentially dangerous compounds, and even if the modeling and the assumptions used were all one hundred percent accurate (and these are very big "ifs"), the EPA still concluded that for two of the twelve, chlordane and PCBs, there could be "adverse health effects due to catastrophic release."

-31

To counter any concerns for the inherent risk, the EIS presents an image of an extremely controlled, superbly managed, virtually fail-safe facility. If we could feel secure in that characterization, perhaps our concerns regarding proximity would be moot. However, history teaches us that much can go wrong. Plans to manage the facility with the utmost concern for safety are only as effective as the managers in charge, and the EPA is no more assured of top management nor immune from poor management than any other organization of its size and complexity.

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This is also a field fraught with unknowns. Things are not always as they seem and the scientific community has much yet to learn--hence the need for such a facility in the first place. In such an environment, even with effective management, mistakes and surprises are not only possible; they are likely. All of this is not to say, "abandon the project." Rather, be prudent in site selection--even if it means the job will be a bit more complex, will take a bit longer to implement, and may lead to a bit greater traveling distances for some of the users.

We wonder, too, about expansion possibilities. The extra space in the existing structures is suggested as meeting any future expansion needs. Are we to assume that the initial levels of activity and the "average of approximately one truckload per week" are likely to grow? To what limit? And is that "truckload" to be defined as a single truckload, or a number of smaller loads per week equaling, on average, one full truckload? Might truckloads include 40,000 gallon tanker trucks? Will materials also arrive by rail? We do not believe the volume issues and possible expansion considerations have been adequately addressed. All scenarios were based on a level of activity that we fear could just be a starting point.

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The EIS suggests that the present sewer system will adequately handle the additional demands of this facility. We believe that not to be the case in at least one respect. The County of Middlesex installed a lift station in the early 1980s to resolve sewer system problems that then existed at the College. The agreement at that time was for the College to maintain the lift station. Our staff tells us that there is already a capacity and maintenance problem, and the system could certainly not accept a major additional burden. It appears from available drawings that the buildings included in the E-TEC proposal are tied in to that same system, necessitating modifications and costs not considered in this study.

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Finally, we find the financial reasoning incorporated into the alternate siting discussions to be flawed. The study compares a \$5.6 million renovation/upgrading cost for the Edison facility with a \$16-36 million cost for the purchase of land and construction of a

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new facility. However, even accepting those figures as accurate, there is a key piece missing from this equation. Nowhere does the EIS consider the value of the 110-acre site in Edison. Selling that land and applying the revenue to this project would change the earlier comparison dramatically. In fact, a 23-acre tract very near the proposed E-TEC facility sold within this past year for about \$175,000 an acre. A similar rate would yield about \$19 million from the sale of the 110-acre proposed site. Deducting that \$19 million from the purchase/build option estimate of \$16-36 million yields a net cost range of minus \$3 million to plus \$15 million.

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Assuming that the site actually selected would be more removed from population concentrations so as to address what we see as the most significant flaw of the EPA-proposed site, we expect that the net cost would fall toward the lower end of that range, probably bringing it below the \$5.6 million renovation estimate for the Edison site.

* * * * *

Ladies and gentlemen, we are not looking for quick answers from the EPA. We are asking for a true reconsideration of the issues we have raised. We are asking that you give far more serious consideration to alternate sitings--to the costs and to the benefits. And please, think about this community; think about the many thousands of employees and residents at your borders; and, finally, think about our students. Thank you for that consideration.

-37

**Comments for the E-Tec Environmental Impact Statement Hearing
February 27, 1990**

I am Dr. Richard S. Magee, Executive Director of the Hazardous Substance Management Research Center, an Advanced Technology Center of the New Jersey Commission on Science and Technology and a National Science Foundation Industry/University Cooperative Research Center, and Director of the Northeast Hazardous Substance Research Center, a United States Environmental Protection Agency Research Center for Federal Regions 1 & 2, both with headquarters at the New Jersey Institute of Technology. Both Centers are actively involved in research programs designed to develop and evaluate new technologies for more effective and efficient management of hazardous materials. Particular attention is also paid in the research activities to potential health effects and to the public policy and education aspects of hazardous material management. I would like to discuss the implications of the proposed E-TEC facility upon meeting the research and development needs in this nation in the environmental area.

We are here tonight to address the possible environmental impacts of this facility proposed for the EPA site in Edison. Much has been said already about the possible impact of this initiative on the environment adjacent to the site. It is also important to consider the potential impact on the environment of New Jersey and the nation. There is a widespread agreement that major efforts need to be made to continue the growth and improvement of the types, and numbers, of technological approaches available to solve the problems of waste reduction, waste stream treatment and management, and contaminated site clean-up. The research and development capability of the proposed E-Tech will provide a mechanism to focus the technical and creative abilities not only of the EPA but also of the academic and industrial communities upon these technological needs. Through this focus, a vigorous increase in the number of new successfully demonstrated, technological approaches to hazardous waste management can be anticipated and they can be expected to impact favorably upon the environment of New Jersey and the United States.

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The concept of this proposed facility, i.e. making possible research combining the regulatory and national-scope perspective of the EPA with the fundamental and broad research interests of the academic community, coupled with the ability of the industrial community to move quickly into the field and utilize the technology developed here, makes it unique. The facility has the potential to become a major component of the growing research resource of the state---another "jewel in the crown" in the words of former Governor Kean.

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Every individual in this state and this nation stands to benefit from a cleaner environment as a result of the research proposed for this facility.

MARCH 16 2:00

My name is Bob Nasdor and I am the Transitional Housing Project Director for the Middlesex Interfaith Partners with the Homeless. I would like to say at the outset that the environmental impact statement is a very impressive looking document. After reading the study, and after discussing it with various health professionals, I have several concerns which I hope that you will be able to address.

Impressive report & slide show, but I can't help but feel that we are being subjected to a sales pitch

I. Assumptions

My overall problem with the study was the assumptions on which its conclusions were based. In many respects, these assumptions predetermined the results of the study. ~~These assumptions include:~~

SITE THAT NEED BE SERIOUSLY CONSIDERED

The study assumes:

- A. that the Edison site is the only ~~feasible~~ alternative]-42
- B. that the extent of risk can be determined based on a hypothetical design of the pollution control equipment and a hypothetical range of experiments which will be conducted]-43
- C. that the effects of air pollution on the at-risk population is the same as the effect on other segments of the population]-44
- D. that management controls will always be followed and as such there is no need to consider the environmental consequences of failure to follow these procedures]-45
- E. that there is no danger from toxic chemicals which are stored on-site but not in the buildings]-46
- F. that environmental sensitivities do not preclude use of the site]-47
- G. that there is no need to assess the risk to our facility

I would like to challenge each of these assumptions

TRANSITIONAL HOUSING

II. Site Selection *individually, and the conclusions which follow*

- A. You make an assumption at the outset that the facility should be located in an area close to transportation, industry, research institutes, and superfund sites. By definition, these attributes are only present in densely populated areas. The effect of these prerequisites are that you exclude every other viable site without serious consideration. To what extent did you decide that this was the most appropriate site in advance of conducting the study?
- My* B. The proposed site was assigned to the EPA in July 1988 in anticipation of this facility being built. It seems odd that you would study the feasibility of the site only after you acquired it. Isn't this putting the cart before the horse?
- C. You dismiss the Fort Dix site without ever seriously considering it, stating only that it has an uncertain future. The uncertainty of its future seems to suggest that some of the property may well be placed on the government's excess property list, and in which case, it would be available to the EPA at no cost. In the event that the Fort Dix site was available, wouldn't this be preferable in that it is a less densely populated region of the state and would have a larger buffer zone?]-48
- D. I understand that SARA identifies the Gulf Coast and the West Coast as preferable regions for this facility. Why have you ignored these recommendations?]-49
- E. It seems obvious to me that the reason that you want this site has little to do with this very impressive looking Environmental Impact Statement, but rather is based on the convenience of siting the facility adjacent to your existing operation and the availability of

the abandoned warehouse buildings on the site. While I can understand this from the point of view of convenience and a hypothetical cost savings, I cannot understand how you can put your desire for convenience and economy above the health of the people of Edison. Your report does not say that there is no impact on the community, only that you do not believe that it is a significant one. How do you justify your sense of priorities?

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III. Specificity of the Study

- A. The study was certainly thorough in its catalogue of the shrubs, herbs, and weeds. But I don't think it would be presumptuous of me to say that none of the people who are here tonight are concerned about the weeds. The concerns of people here are for their own health, for the health of their co-workers, for the health of the members of their families. In this respect, the study exhibits a disturbing lack of specificity with regard to the effect of this facility on them. In this entire study, you give no specific information with regard to the research which will be conducted on the site. Instead, the study provides only a limited hypothetical variety. Specifically, what toxic chemicals will be involved in this research, what will be the research process, and who will be conducting the experiments?
- B. The study only discusses a hypothetical design of the pollution control equipment. When are you going to reveal specifically the design of this equipment?
- C. How are we supposed to have confidence in the results of the study when its conclusions are drawn without the benefit of any specific information regarding the scope of the experiments and the design of the facility? If different pollution control equipment is recommended for different research experiments, what assurances do we have that the best treatment will be available for the specific experiments that are conducted?

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This box is a box, aren't they actually two sets by side boxes

IV. Effects on Children and Pregnant Women

- A. The results of your study is based on the effect of a long term and catastrophic release of the toxic waste on a 154 lb individual. What will be the effects on a newborn infant? What about the effects on pregnant women and their unborn children? Based on body weight, a fetus might weigh 1/100th of an adult. Why is there no mention of the effects of this facility on this at-risk population?
- B. Isn't the effects of air pollution on infants and pregnant women difficult to measure, and as such, haven't you made some optimistic assumptions about the effects on the population?

V. Management Controls

- A. Throughout the study, you assume that many of the environmental hazards can be eliminated through proper management procedures. I can think of few man made environmental disasters which have not been blamed on human error. Why has this not been taken into account in this study? This seems to be a best case scenario which creates a false sense of security about the facility? Shouldn't

56

this study have taken into account the environmental impact of human error?

VI. Storage of Toxics Outside of Building

- A. As I understand your study, you have only considered the effects from a catastrophic release of only those toxic chemicals which are used in the experiments or are located in the storage containment areas of the bays of the warehouse building. No consideration has been given to the environmental consequences of the storage of toxic wastes which are located elsewhere on the property. While an explosion or other environmental disaster involving these chemicals may be more remote, the study is incomplete in that it does not appear to consider any environmental consequences from these chemicals. Potentially, these chemicals or untreated waste could escape, and in the not so remote possibility that proper management procedures are not followed, groundwater or other wetlands could be contaminated. Why have you not taken this into account?

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VII. Environmental Sensitivities

- A. You state that the area is located over a sole source aquifer, and state that in the event of a disaster, proper management controls will prevent this water from being contaminated. If these management controls fail to contain the disaster, what will be the effect on the sole source aquifer?
- B. I understand that New Jersey is already in violation of the federal ozone standard. Will there be any ozone emitted from the facility, and if so, how can you justify contributing to a problem which is already in violation of a Federal standard?

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VIII. Effect on Our Facility

- A. Only once does this study mention our transitional housing project in its discussion on the impact on its neighbors, only to say that we have not been taken into account. What will be the specific effect on our program and on the pregnant women and children who will reside in our housing facility? Why has this not been addressed in this report?

VIII. Recommendations

- A. The impact statement must be completed before any further consideration is given to this project. Specifically, other feasible sites should also be considered in detail and not simply tossed aside. Additionally, the assessment of risks should be based on the actual experiments which will be conducted using the actual pollution control equipment which will be used. Also, the study should take into account the effects of the facility on children and pregnant women in the area. Furthermore, the study should take into account the environmental consequences in the event that the management procedures that it recommends are not followed, and in particular, the effect on the sole source aquifer. Also, the catastrophic accident risk assessment should take into account all chemicals on the site whether they are inside the building or not,

and finally, the study should specifically take into account the effects on our transitional housing project.

- B. Once the environmental study has been completed, it should be evaluated by independant environmental experts which are qualified to interpret the study and which have been appointed by the local community. This independant review, which I would liken to a second medical opinion prior to surgery, should be funded by the EPA.] -60
- C. After completing both the environmental impact statement and the independnat review, the results should be presented for public comment. At this point in time, the public has not been provided with sufficient information to enable it to make meaningful public comment. Otherwise, the EPA will not have met its requirement of providing the public with a meaningful opportunity to comment on the plan.

TWC ESTATE
EDISON, NEW JERSEY

February 27, 1990

Position Statement: Proposed Location of the EPA's E-TEC
Facility in Edison, New Jersey

Prepared by: Dr. Tio Chen, President
Sogo Technology Inc.
P.O.Box 49, Metuchen, New Jersey

On behalf of TWC Realty Partnerships, the owner of TWC Estate that is located about 130 feet from the the proposed E-TEC Facility, I come before you this evening to express our position on the proposed E-TEC Facility.

We appreciate for giving us the opportunity to review and comment on the EPA's Draft Environmental Impact Statement (EIS) for the Edison E-TEC Facility dated January 1990.

We endorse the EPA's goal to establish a E-TEC Facility to promote the development of innovative treatment technologies for harzardous substances. However, upon a careful review of the Draft EIS, we are opposed to the proposed location of the E-TEC Facility.

-61

(1) The methodologies and assumptions used for the risk assessments for chronic exposures and catastrophic releases of fugitive toxic gases into the lower atomosphere and its impacts on public health in the surrounding communities are highly simplified and totally unrealistic. For examples,

-62

- No locally monitored meteorological data are used in the analysis. The so-called "worst case" meteorological conditions contained in the Draft EIS are a conjecture.

-63

- Many sensitive land-use receptors within 0.5 KM (or 1640 Feet) from the proposed facility location that include Middlesex County College, residential and commercial areas are totally ignored and not considered for air quality study.

-64

- Irregular terrains in the immediate vicinity of the proposed location are not considered in details to reflect realistic pollutant transport phenomena;

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- A highly complicated explosion phenomena for the Facility was treated in the Draft EIS as a simple, steady dispersion phenomenon. The entire analysis for catastrophic release of

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fugitive toxic gases in the event of a fire or an explosion of the proposed Facility is unfounded.

The conclusions contained in those Sections involving air quality and risk assessments of the Draft EIS are thus misleading.

(2) The state-of-art cost comparison analysis for a capital project based on a life-cycle costing was not used in the Draft EIS in assessing the costs of the facility at alternative sites. The cost for the proposed Edison site would be highest among alternative sites if the life-cycle method is used in light of the proposed location of the E-TEC facility in a highly populated education/residential/industrial area.

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The draft EIS considers the cost comparison analysis only for the land acquisition, renovation of the existing building, and/or construction of a new facility. The taxpayers would be misled by this costing analysis.

The life-cycle cost comparison will include, in addition to those items considered in the Draft EIS, maintenance of the facility, installation and operation of continued air, water, soil monitoring stations inside and outside the EPA property, and, most importantly, potential compensation costs for loss of lives and injuries inside and outside the EPA property in the event of chronic releases and catastrophic releases. One cannot forget the cost of settlement for a recent chemical plant tragedy in India.

(3) A buffer zone is mentioned as one of the three basic siting criteria. However, the buffer zone is not defined and considered in the siting comparison for the alternative sites.

-68

A pilot plant for demonstration of innovative technologies for toxic waste substances is a development process. The technologies are not proven. Many unknowns associated with operation and management of the demonstration facilities. As a result, accidents associated with developing technologies would be high. Thus, a sufficient buffer zone must be provided for each of the alternative sites based on their sensitive land-use characteristics in the Draft EIS.

(4) An emergency evacuation plan for students and faculty, residents, office and factory workers in the event of a fire, an explosion, or truck accidents was not addressed in the Draft EIS in the siting selection of the E-TEC facility. The area in the immediate vicinity of the proposed Edison facility is highly populated. A realistic and workable emergency evacuation plan is needed in facility siting.

-69

BERNARD J. DWYER
6TH DISTRICT NEW JERSEY

COMMITTEES
APPROPRIATIONS

SUBCOMMITTEES
LABOR, HHS AND EDUCATION

COMMERCE, JUSTICE, STATE
AND THE JUDICIARY

BUDGET

PERMANENT SELECT COMMITTEE
ON INTELLIGENCE

Congress of the United States
House of Representatives
Washington, DC 20515

WASHINGTON OFFICE:
2428 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3008
(202) 225-6301

DISTRICT OFFICES:
214 SMITH STREET
PERTH AMBOY, NJ 08861-4338
(201) 826-4610

628 WOOD AVENUE, NORTH
LINDEN, NJ 07036-4162
(201) 486-4600

86 BAYARD STREET
NEW BRUNSWICK, NJ 08901-2115
(201) 545-5655

March 12, 1990

Mr. Constantine Sidamon-Eristoff
Administrator, Region II
Environmental Protection Agency
26 Federal Plaza
New York City, New York 10278

Dear Mr. Sidamon-Eristoff:

I wish to register my opposition to the decision of the Environmental Protection Agency to locate its proposed Environmental Technology and Engineering facility (E-TEC) on the grounds of the former Raritan Arsenal in Edison, New Jersey.

The recent public hearings on the EPA's preliminary environmental impact statement have brought to light numerous substantive concerns regarding the operation of the facility, its proposed safety and containment features, and its potential risks to the health and environment of the surrounding communities. As you know, this property is situated in a densely populated area within a municipality which already has more than its share of environmental concerns.

In fact, the proposed facility would border the Middlesex County College, an institution which matriculates 11,000 students; the Thomas Edison County Park, a popular recreational area; and several residential neighborhoods. It is my understanding that the Middlesex County College has several buildings in active use, including two major classrooms, in close proximity of the proposed facility.]-122

Notwithstanding the need to research and develop effective treatment methods to reduce hazardous waste, I believe that the site under consideration is inappropriate and would recommend that your office investigate more suitable, alternative sites.]-123

I thank you for your attention to this matter and look forward to hearing from you in the near future.

Sincerely,


Bernard J. Dwyer
Member of Congress

BJD/jjf



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240



ER 90/71

APR 9 1990

Chief, Environmental Impacts Branch
Environmental Protection Agency-Region II
26 Federal Plaza, Room 500
New York, New York 10278

Dear Sir:

The Department of the Interior has reviewed the draft environmental impact statement for the Development of an Environmental Technology and Engineering (E-TEC) Facility, Middlesex County, New Jersey, and has the following comments.

Mineral Resources

Several abandoned sand and gravel pits are present on the preferred 110-acre site. The pits are mentioned in the document, but the possibility of remaining sand and gravel resources on the property is not addressed. There is also a remote possibility that the coastal sands on the property could contain deposits of heavy minerals. Because the preferred land parcel is in a highly urbanized setting and its use would entail only the renovation of an existing EPA facility, impacts to mineral resources are unlikely. We recommend, however, that any future environmental documents address the possibility of additional sand and gravel resources on the recommended site. If such resources are exhausted or if the materials are so widespread in the region that denial of any future production from the site would not affect supply, then the document should so state.

-124

Appendix G. Mitigation Procedures

The draft statement notes that the contingency plan will be coordinated with local police, fire, and emergency response groups. In section G.3, it further states that the facility would have an automatic fire protection system that would detect a fire, sound an alarm and initiate an extinguishing process.

It is unclear whether the alarm would sound only in the immediate facility or whether it would be connected to a remote sensing facility.

In addition to the local building alarm, we recommend the alarm system also be linked to a remote, manned sensing site within the Raritan facility and/or linked to the local fire department. This would provide fire alert notice during off duty hours and direct notice to the fire department.

-125

We hope these comments will be helpful to you.

Sincerely,

Jonathan P. Deason
Director

Office of Environmental Affairs



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUDITH A. YASKIN, COMMISSIONER
CN 402
TRENTON, N.J. 08625-0402
(609) 292-2885
Fax: (609) 984-3962

April 6, 1990

Mr. Robert Hargrove, Chief
Environmental Impacts Branch
U.S. Environmental Protection Agency
26 Federal Plaza, Room 500
New York, NY 10278

RE: E-TEC Facility
DEIS Comments

Dear Mr. Hargrove:

The Office of Program Coordination of the New Jersey Department of Environmental Protection has completed its initial Departmental review of the Draft Environmental Impact Statement (EIS) on the Development of an Environmental Technology and Engineering (E-TEC) Facility in Edison, New Jersey. It is the conclusion of the Department that the Draft EIS does not provide an accurate description of the intended purpose, scale and nature of the proposed E-TEC facility as compared to the Research, Development and Demonstration (RD&D) permit application submitted by the EPA to our Department's Division of Hazardous Waste Management and to the Hazardous Waste Facilities Branch of your agency. Many impacts appear to be rationalized as negligible without substantiation of assumptions made. The avoidance of the term "hazardous waste", the overemphasis on contaminated site cleanup and contaminated soil and groundwater treatment testing, the stated small quantities of storage, typical quantities, maximum anticipated concentrations, and lack of discussion of the plans of the Consortium of New Jersey Colleges and Universities appear to downplay the scope of activity.

-126

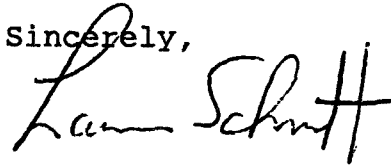
The DEP therefore recommends that the EIS be revised to portray the proposed facility consistent with what the EPA is requesting through the RD&D permit application.

Additional comments and concerns are attached as an addendum.

The Department will forward comments from our Division of Water Resources, as soon as the comments are finalized.

Thank you for the opportunity to provide comments. We hope that our comments will be addressed in any future documents, and that permitting activities will be well coordinated between our two agencies.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lawrence Schmidt". The signature is written in black ink and is positioned below the word "Sincerely,".

Lawrence Schmidt
Director
Office of Program Coordination

Attachment

ADDENDUM
DRAFT ENVIRONMENTAL IMPACT STATEMENT
ENVIRONMENTAL TECHNOLOGY AND ENGINEERING FACILITY
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
MARCH 1990

HAZARDOUS WASTE MANAGEMENT

1) The executive summary makes no mention of hazardous waste; it instead mentions only hazardous substances, products and chemicals. Although the body of the Draft EIS does mention hazardous waste, it does so elusively, interchanging it with the terms hazardous substances, products and chemicals.

-127

2) The Draft EIS portrays the proposed facility as one dedicated to development of new and innovative technologies for the cleanup of Superfund and other contaminated sites, testing principally soils and leachates, testing and evaluating hazardous substances control technologies, and environmental contamination control technologies. Page B-12 of the Draft EIS states that the facility may require the use of actual hazardous wastes in the form of solids (i.e., clean or uncontaminated soils) or liquids (i.e., contaminated surface water or ground water). This contrasts with the hazardous waste Research, Development and Demonstration (RD&D) permit application submitted to the Department's Division of Hazardous Waste Management and the EPA Region II, Hazardous Waste Facilities Branch, which proposes a facility for testing the effectiveness of new and existing hazardous waste treatment technologies on currently generated hazardous wastes.

-128

3) Page 1-4 of the Draft EIS (Need for the Proposed Facility), describes that the EPA has existing testing and evaluation facilities dedicated to improving conventional technologies (e.g., incineration, sludge disposal), but no dedicated facility where innovative technologies can be evaluated. This appears to conflict with the current RD&D facility permit application, under which one-half of the planned facility will be devoted to the Consortium of New Jersey Colleges and Universities, whose plans for the space is to build a hazardous waste incineration evaluation facility.

-129

4) Page 4-16 of the Draft EIS describes the worst case catastrophic release health risk assessment, whose results are presented in Appendix F. This assessment was based on what is identified as "the planned storage capacity of 5,000 gallons of liquids and 70 tons of soil" and what are identified as "the maximum concentrations of these chemicals expected to be stored at the facility" (of which

-130

half of the 12 parameters range from 0.02 to 3 ppm). This contradicts the RD&D permit application, which proposes substantially higher storage capacities (not yet fully clarified, but in the range of 100,000 gallons), and no limits on concentrations of waste constituents.

5) Table B-2 on page B-13 of the Draft EIS provides examples of chemicals that could be stored at the facility, and "typical quantities" for each, which range from 500 grams to 50 gallons. No basis for these "typical quantities" is provided, and the RD&D permit application does not propose any such limited scale. Indeed, the EPA advised the staff of the Department's Division of Hazardous Waste Management (Bureau of Hazardous Waste Engineering) that the Consortium's incineration test facility may receive 4,000 gallon tank wagon shipments in certain tests.

-130

6) On page 4-10 the Draft EIS states that the wastewater discharge to the Middlesex County Utility Authority (MCUA) will not exceed 100,000 gpd, and since the capacity of the MCUA is 110,000,000 gpd, this flow from the proposed E-TEC facility will be negligible. The ability of the MCUA to accept an additional 100,000 gpd should be substantiated, as well as the need for an industrial pretreatment permit. Also, the 100,000 gpd figure appears large in context of the small scale of activity portrayed by the Draft EIS. The RD&D permit application provides for effluent wastewater storage capacity of 300,000 gallons, which suggests a potentially greater wastewater generation rate.

-131

7) Page ES-5 of the executive summary describes the site as a view of abandonment. However, the Draft EIS addresses only the planned renovation of buildings, and does not address the repair of roads or the cleanup of the site.

-132

8) The Draft EIS identifies the major highways of the Edison area, but does not address the specific local road(s) to be utilized by traffic to and from the facility. The Draft EIS also projects an anticipated truck traffic of one (1) per week; the basis for this number should be provided in future documents.

-133

9) Page 2-3 of the Draft EIS states that the SARA legislation identifies some specific locations (i.e., the Gulf Coast and West Coast) where facilities should be sited. The Draft EIS does not present a clear discussion of whether the USEPA is also siting similar facilities in these other regions, and if not, then why they were ruled out as candidate sites in apparent contradiction of the legislation.

-134

SOLID WASTE MANAGEMENT

1) The renovation of the existing buildings could generate significant amounts of solid waste. Accordingly, disposal of these wastes must conform to existing rules and regulations administered by the Division of Solid Waste Management. In this regard, the type of solid waste generated from construction and or renovation projects would generally be classified as ID 13 or ID 27 solid waste. These waste types must be disposed of at the facility designated in the Interdistrict and Intradistrict Waste Flow rules in N.J.A.C. 7:26 et seq. In this case, solid waste types 13 and 27 generated within Edison Township must be disposed of at the Edison Landfill. However, in the event that the proposed construction or renovation activities take place following the closure of the Edison Landfill, then the solid waste must be directed to the Edgeboro Landfill operated by the Middlesex County Utilities Authority and located in East Brunswick Township.

-135

2) The renovation projects may result in the generations of asbestos. This material, which is classified as an ID 27 waste type, must also be disposed of at the Edison Landfill and managed in accordance with 40 CFR 61 and N.J.A.C. 7:26-1 et seq. Further, upon closure of the Edison Landfill, the Middlesex County Department of Solid Waste must determine an alternate disposal site for asbestos, since the Edgeboro Landfill has petitioned the New Jersey Board of Public Utilities to delete asbestos waste from their tariff.

3) In the event any contaminated soils are removed from the site, they must be classified as either solid waste or hazardous waste prior to disposal. Following classification of this waste by the Department's Division of Hazardous Waste Management, any soil classified as ID 27 solid waste must be directed to the designated disposal facility.

4) Prior to the disposal of any solid waste from this site, source separation and recycling of many of the on site materials should be thoroughly investigated. Aletha Spang, Administrator of the Department's Office of Recycling within the Division of Solid Waste Management may be contacted for detailed information concerning existing recycling programs and requirements.

-136



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

LAWRENCE SCHMIDT

Director

Office of Program Coordination

CN 102

Trenton, NJ 08625 0102

(609) 292 2662

Fax (609) 292 0988

April 26, 1990

Mr. Robert Hargrove, Chief
Environmental Impacts Branch
U.S. Environmental Protection Agency
26 Federal Plaza, Room 500
New York, NY 10278

RE: E-TEC Facility
DEIS Comments

Dear Mr. Hargrove:

The Office of Program Coordination of the New Jersey Department of Environmental Protection is forwarding, for your consideration, the following additional review comments on the Draft Environmental Impact Statement on the Development of an Environmental Technology and Engineering (E-TEC) Facility in Edison, New Jersey.

The Draft EIS states that the process water would be at most 100,000 gpd, this would be treated in a holding facility before discharge to the Middlesex County Utilities Authority (MCUA). There is to be no discharge of untreated process water from the facility. The MCUA is nearing capacity and may need a Discharge Allocation Certificate for increase in flow. An Industrial Stormwater permit, a Significant Indirect User (SIU) permit and a Treatment Works Approval (TWA) are required for the E-TEC facility.

-137
-138

The project has been informally reviewed for consistency with the provisions of the areawide and statewide Water Quality Management (WQM) Plans. The project site is located within the sewer service area of the MCUA STP. As such, the conveyance of the wastewater to the MCUA STP is consistent with these WQM Plans. However, should the pretreatment system or the holding tanks require a TWA and have a design capacity of 2000 gpd or larger, the project would be inconsistent with the above cited WQM Plans. This would require an amendment to the areawide WQM Plan in order to proceed with the project. Please contact the Department's Bureau of Water Quality Planning of the

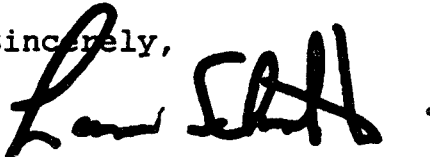
-139

Division of Water Resources with additional information regarding the specific proposal.

Additionally, any underground storage tanks, as defined by NJAC 7:14B-1 et seq., at the facility must be registered with the Department and must meet construction, design and operating standards of these rules.] -140

Thank you again for the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Law Schmidt", followed by a period.

Lawrence Schmidt
Director
Office of Program Coordination



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

LAWRENCE SCHMIDT
Director
Office of Program Coordination

CN-402
Trenton, NJ 08625-0402
(609) 292-2662
Fax (609) 292-0988

May 4, 1990

Mr. Daniel Sullivan
Release Control Branch
U.S. Environmental Protection Agency
Woodbridge Avenue (MS-104)
Edison, NJ 08837-3679

RE: E-TEC Facility

Dear Mr. Sullivan:

The Office of Program Coordination of the New Jersey Department of Environmental Protection thanks you for organizing the recent, very productive meeting (April 27, 1990) between members of our Department and members of your Agency. The meeting was held to discuss the April 6, 1990 and April 26, 1990 comment letters from our Office to your Agency on the Draft Environmental Impact Statement on the Development of an Environmental Technology and Engineering (E-TEC) Facility in Edison, New Jersey.

The meeting has clarified the intended purpose, scale, nature, and scope of activities proposed for the E-TEC facility. We hope that the valuable discussion will enable the U.S. EPA to proceed with this important project through the Final EIS process and permitting.] -141

Sincerely,

Lawrence Schmidt
Director
Office of Program Coordination

c: Robert Hargrove
William P. Lawler

MIDDLESEX COUNTY PLANNING BOARD

40 LIVINGSTON AVENUE
NEW BRUNSWICK, NEW JERSEY 08901
(201) 745-3062
FAX: (201)745-3960 FAX: (201)745-3201

MEMBERS

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GEORGE M. VERVERIDES
Director of County Planning

FRANK J. RUBIN
Counsel

RHODA HYMAN
Secretary

March 13, 1990

Mr. Robert W. Hargrove, Chief
Environmental Impacts Branch
U.S. Environmental Protection Agency
26 Federal Plaza, Room 500
New York, N.Y. 10278

Re: Draft Environmental Impact Statement on the Development of an
Environmental Technology and Engineering (E-Tec) Facility in
Edison, New Jersey dated January 1990

Dear Mr. Hargrove:

The Middlesex County Planning Board has received the above
noted document and has the following comments:

1. The Middlesex County Planning Board has in the past opposed the location of hazardous and toxic waste disposal facilities in the Raritan Center area of Edison Township. A copy of the Board's position dated December 8, 1987 regarding the proposed siting of a commercial hazardous waste facility by the New Jersey Hazardous Waste Facilities Siting Commission is attached hereto and outlines in detail the County Planning Board's concerns. It is the Board's position that the proposal by the U.S.E.P.A. to conduct tests and experiments for the disposal of even small quantities of toxic and hazardous waste materials at a location closer to the Middlesex County College, the major active recreation facility at Edison County Park, and homes in the Township of Edison poses an unacceptable risk to the health and welfare of the students, park users and residents.

-142

The Middlesex County Planning Board concurs with, and supports the objections to the proposed location of the "E-Tec" facility at the Raritan Arsenal site in Edison Township as expressed by the Township of Edison and the Middlesex County College Board of Trustees at the public hearing held on February 27, 1990.

-143

I-30

CENSUS '90



Answer the Census
April 1, 1990

2. The Middlesex County Planning Board has the following specific comments regarding the Environmental Impact Statement:

- A. The EIS (page ES-6 and ES-7) minimizes the possibility of groundwater contamination to the sole source Farrington Sand aquifer at the site. The EIS asserts that "Product handling would occur on impervious areas", soils at the site would retain contaminants before they would enter the aquifer, materials transported to the site would be "packaged according to the codes and standards established by State and Federal regulations"; the facility staff would be trained to deal with spills and "the closest groundwater wells in the area are upgradient from the proposed facility".

These assertions, however, are insufficient to guarantee that no contamination will occur. The EIS later on (pages 3-2 to 3-5) identifies that substantial portions of the site have regraded or unrestored former sand and gravel pits or borrow areas which are well drained or with groundwater close to the surface. These areas, as well as an area of sassafras loam with well drained characteristics, are adjacent to the proposed E-Tec buildings. It can be reasonably expected that although the buildings are in disturbed land the soil characteristics at the buildings may be similar to the surrounding soils. These conditions suggest that contamination that comes into contact with the soils will pass quickly to the aquifer. In addition the Farrington Sand aquifer contains wells downgradient, south of the Raritan River. The aquifer may be hydraulically connected beneath the Raritan River. Adequate information to respond to this concern has not been provided. In fact the Geological Cross-Section shown on page 3-6 shows the Farrington Sand aquifer extending under and north of the Raritan River. In addition the fact that hazardous or toxic materials may be packaged properly or that personnel may be trained to deal with spills does not preclude an accident or spill situation in which human error or insufficient resources may allow pollution of the aquifer, especially if the facility remains in operation for a long term period.

- B. The EIS indicates on page ES-8 that public health impacts would be minimal due to restrictions to be placed on "the quantity of chemicals within the buildings to that quantity that would prevent exposure to contaminant concentrations above the threshold concentration...".

Again, later on the EIS states (page 4-14) that "There is no level of exposure to carcinogenic substances that is considered to be completely safe...The risk is minimized by the installation of appropriate air pollution control systems, the use of least quantity of chemicals possible on the testing activities, and management controls." In light of this statement, and given the location of this facility so close to day and night activity centers with a significant population density, the Edison site should be dropped from consideration.

145

It is also noted that the "worst case" catastrophic release event simulated to determine health impacts was "a fire at the proposed facility causing vaporization of all stored chemicals." (page 4-16). Appendix F (page F-1) indicates that the fire evaluated was assumed to be the result of a natural gas line leak. However, page F-5 indicates that the assessment of public exposure to carcinogens considered "release rates associated with an explosion and the application of an atmospheric transport model to estimate ambient exposure levels..." The question raised by this statement is whether or not a "worst case" represented by a fire conflicts with the release from "an explosion" at the facility. Would a gas explosion cause greater harm than a gas fed fire?

146

Finally, we note that the EIS, on page F-14, states that "However, for 2 of the chemicals [evaluated in the catastrophic release scenario], chlordane and PCB's it was determined that there could be adverse health effects due to the catastrophic release." This statement underscores our concern.

147

This letter and comments are sent pursuant to your letter inviting comments dated January 5, 1990. The position of the Planning Board set forth in the letter is without prejudice to any further action this Board is permitted or required to take as otherwise provided by law.

Mr. Robert W. Hargrove
March 13, 1990
Page Four

Thank you for giving us the opportunity to review the EIS for the E-TEC facility and for your consideration of our comments.

Sincerely yours,
MIDDLESEX COUNTY PLANNING BOARD

A handwritten signature in cursive script, appearing to read "Sidney Sewitch", written over the printed name.

Sidney Sewitch, Vice-Chairman

SS/WJK/dpk

cc: Mayor Thomas Paterniti, Edison
Dr. Flora Mancuso Edwards, President
Middlesex County College

MIDDLESEX COUNTY PLANNING BOARD

40 LIVINGSTON AVENUE
NEW BRUNSWICK, NEW JERSEY 08901
(201) 745-3082

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GEORGE M. VERVERIDES
Director of County Planning

FRANK J. RUBIN
Counsel

RHODA HYMAN
Secretary

December 8, 1987

Mr. Frank Dodd, Chairman
New Jersey Hazardous Waste Facilities
Siting Commission
CN-406
Trenton, N.J. 08625

Dear Chairman Dodd:

The Middlesex County Planning Board continues to monitor the activities of the Hazardous Waste Facilities Siting Commission.

At its meeting of December 8, 1987 the Board acted to endorse the attached Review of the Siting Commission Proposal of an Edison Township Hazardous Waste Facility Site and authorized that the Review be submitted to the commission for its consideration.

The Middlesex County Planning Board opposes the location of a Hazardous Waste Disposal facility at the site proposed in Raritan Center, Edison Township. We concur with the Planning Board staff's findings as described in the attached report dated November 19, 1987.

There are significant risks to the public health and safety and to the environment that would result from such a facility at this location. These risks are sufficient to mandate that the Commission drop this site from consideration.

We also find that there are questions raised in our staff's review regarding the "Task 3 Report" dated September, 1987, and prepared by Rogers, Golden and Halpern for the Commission which warrant response before that report should be fully accepted by the Commission.

Thank you for the opportunity to comment on this matter. Middlesex County Planning Board staff are available to discuss our review with you. You may contact Mr. William Kruse at 201-745-3016.

Sincerely yours,


Hyman Center
Chairman

**cc: Anthony Yelencsics, Mayor of Edison
Summit Associates**

**REVIEW OF
THE NEW JERSEY
HAZARDOUS WASTE FACILITY SITING
COMMISSION PROPOSAL FOR AN
HAZARDOUS WASTE INCINERATION FACILITY SITE
BLOCK 390-DD, LOT 8-B,
RARITAN CENTER, EDISON
TOWNSHIP, MIDDLESEX COUNTY,
NEW JERSEY**

**Prepared by
Environmental and Land Use Planning
Division Staff
Middlesex County Planning Board
New Brunswick, New Jersey**

November 19, 1987

37

36

35

0

14

U.S. ROUTE ONE

ROUTE 440

NEW JERSEY TURNPIKE

RARITAN CENTER

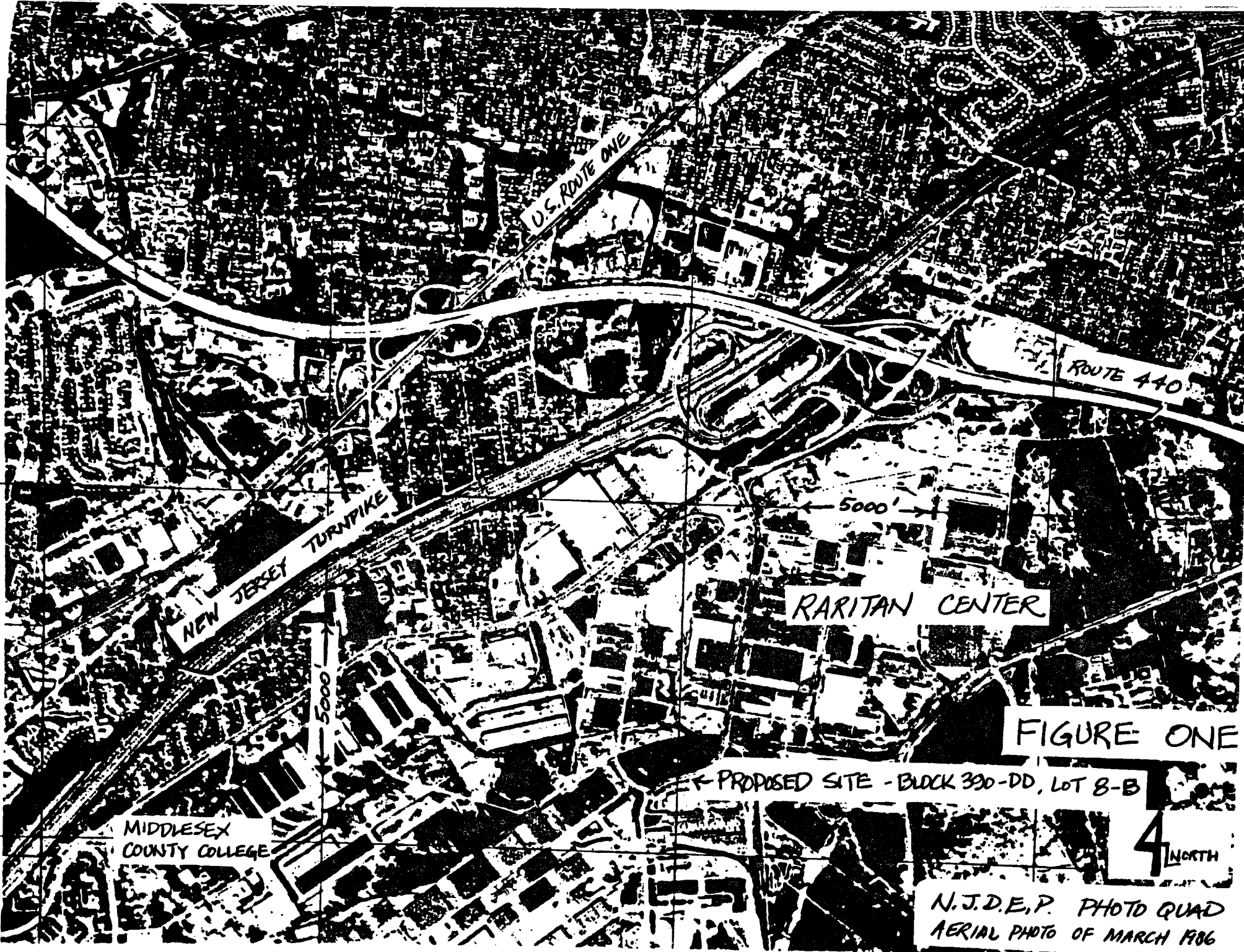
MIDDLESEX COUNTY COLLEGE

← PROPOSED SITE - BLOCK 390-DD, LOT 8-B

FIGURE ONE

4 NORTH

N.J.D.E.P. PHOTO QUAD
AERIAL PHOTO OF MARCH 1986



SUMMARY OF FINDINGS

The Middlesex County Planning Board staff has reviewed all available information regarding the Raritan Center, Edison Township site (Block 390-DD, Lot 8-B; see Figure One), proposed by the New Jersey Hazardous Waste Facility Siting Commission for a incineration facility for disposal of hazardous waste materials.

The staff finds that the proposed site:

1. Is in close proximity to a major concentration of employment.
2. Is within approximately one mile of the Middlesex County College.
3. Is in close proximity to residential areas and two major hotels.
4. Would place hazardous waste shipments delivered predominantly by truck in conflict with large volumes of truck and commuter traffic already generated by existing Raritan Center development. In addition, safety problems created at the existing complex intersection of Woodbridge Avenue and Raritan Center Drive would pose a risk from accidents involving hazardous waste shipments.
5. May pose air quality risks, including particulate and toxic and hazardous pollutant emissions, to residents and employees in the area, and;
6. May contaminate groundwater supplies which while not presently used for potable supply purposes may be used for landscape irrigation or industrial purposes given the nature of surrounding development patterns.

In light of these findings the proposed site is not suitable for a commercial hazardous waste disposal facility. A more detailed discussion of staff findings is contained in the followings sections.

SITE CONDITIONS

The site is a 13.8 acre tract bounded by Fieldcrest Avenue, the Lehigh Valley Railroad tracks, and the Raritan Center Parkway. The site is partially wooded and appears to contain seasonally wet areas.

SURROUNDING POPULATION

According to Peter Cook, Vice President of Summit Association, 9,000 people hold permanent jobs within 3,000 feet of the site. The businesses include offices, computer operations, banks, hotels, restaurants, and warehouses. A number of the activities in the area of the site are in operation beyond a normal eight hour day and many extend over a 24 hour period. Middlesex County College has both day and evening classes.

The residential population from the 1980 Census indicates that 14,350 people reside within two miles of the site. There are 2,735 residents within 1.5 miles and 456 within 1 mile. The site is also within 2 miles of population and employment concentrations in Sayreville Borough.

SENSITIVE RECEPTORS

1. The Township reports that there is a Senior Citizens Center on Woodbridge Avenue within 3,000 feet of the site.
2. A new Holiday Inn is located within 2,500 feet of the site.
3. The Ramada Inn is within 4,000 feet.
4. Within 1 mile of the site, there are Senior Citizen Apartments, a day care center and Middlesex County College.

TRAFFIC

Road Network

The crucial area of concern is that the Raritan Center (Drive) Parkway is the only egress from the general area. This will be a major problem in case of an emergency. Truck access to this area would occur primarily through Route 287 and 440 as the major east-west highway and other connecting north-south regional highways as Route 9-35, the New Jersey Turnpike, U.S. Route 1, and County Route 514 (Woodbridge Avenue). In addition, other routes such as Route 529, Route 531 and Route 501 provide indirect access to this site as secondary arterials. All of these routes will continue to experience traffic growth and increased peak hour congestion, especially so for Route 440-287, U.S. Route 1 North to 287 South, and Route 9-35 which have already far exceeded their capacity limits.

Accidents

The Middlesex County Planning Board did a study of the number of accidents on those roads servicing a potential hazardous waste facility in Raritan Center. The study was based on data provided by the New Jersey Department of Transportation for the period from January 1982 through December 1984.

If there are more than 10 accidents per year at a particular location, it is considered a dangerous intersection. (Gambilonghi - Route 130 Study). The following locations are judged dangerous by this criterion. The average number of accidents per year are listed at each location.

ROUTE 440

<u>INTERSECTION</u>	<u>AVERAGE NUMBER OF ACCIDENTS PER YEAR FOR 3 YEAR PERIOD 1981, 1982, 1983</u>
Route 514 (Milepost 00.26)	18
Smith Street Ramp (Milepost 01.50)	12

ROUTE 1

Plainfield Road	36 at 29.11 milepost (Many more in the general area)
Wood Avenue	27
Old Post Road	50
Prince Street	18
Grandview Avenue	41
Parsonage Road	40
Ford Avenue	19

AIR QUALITY

Criteria Pollutants:

Ozone

The area (as is all of New Jersey) is in non-attainment of ozone. Should the proposed facility emit over 50 tons per year of hydrocarbons, offsets will be required. The ratio of offsets for a hazardous waste facility is more stringent than for other types of facilities.

Particulates

Edison is in attainment for particulates. However, modelling will probably indicate that particulate levels will increase in Perth Amboy and South Amboy which are in non-attainment of the secondary particulate standard. While this fact alone would not eliminate a site from consideration by the Commission under its siting criteria, particulate emissions should be carefully considered as a health risk.

Hazardous Pollutants

The real issue in air quality are the levels of hazardous air pollutants emitted. While the Commission has not included specific standards for this in its siting criteria, the risk of impacting population and unprotected, non-facility employees in the area of the site should be given high priority consideration in the siting process.

Emergency Evacuation

William P. Fortier, County Coordinator for Office of Emergency Management reviewed this site and finds that in the event of a major hazardous materials release or accident "Timely evacuation in such a high population area is, at best, infeasible, owing to the time necessary to prepare traffic control and to initiate the evacuation order, let alone carry it out. Roadway gridlock would be a real outcome of spontaneous evacuations which are impossible to prevent and difficult to control".

GROUNDWATER CONTAMINATION

Rogers, Golden & Halpern (R.G.H.) conducted on-site testing at the Raritan Center Industrial Park in order to characterize existing conditions in the field. The tests were intended to establish conformance with a variety of siting criteria previously set forth by the Siting Commission. The R.G.H. "Task 3 Report" dated September 1987, concluded that "The Edison Township site remain under consideration as a potential major commercial hazardous waste incineration facility site".

Detailed review of the "Task 3 Report" reveals however that this finding cannot be substantiated by the information provided in the report. Specifically, it is not correct to say that on the basis of the "hydrogeologic evaluation, this site meets all of the existing hydrogeologic siting criteria".

It is therefore possible that groundwater recharge does occur to deeper potable water aquifer formations at this site. The following findings demonstrate that the site's conformance with the hydrogeologic criteria cannot be drawn from the data presented:

1. The area in question is influenced by tidal action in the Raritan Bay and the Lower Raritan River estuary.

Tidal action can directly influence water table elevations.

The R.G.H. investigation did not document tidal stage in relation to the water table measurements or groundwater movement determinations. No attempt has been made to correct for this most significant influence on water table behavior.

2. A seasonal high water table less than 1 foot from the surface has been reported for 25 percent of the site. The well logs do not clearly indicate otherwise. Under the Commission's own criteria a site is "prohibited in areas where the depth to the seasonally, high water table in the uppermost saturated unit will rise to within one foot of the ground surface". (7:26-13.12)
3. The well logs for 6 of the 8 borings are either incomplete or in conflict with other descriptions of the subsurface found elsewhere in the report. (i.e., well log 1-5 shows 15 feet of " K_f ", and no fill while the cross section on page 16 shows 13' of fill and 7' of K_f).
4. Cross sectional displays of the subsurface do not correspond with the well log information (see #3).
5. The graph (page 21) used to display static water levels over time is faulty as it does not maintain a standard time unit on the X-axis.
6. The effect of precipitation on the unconfined system has not been evaluated especially in regard to the water levels in the uppermost saturated unit.
7. A downward hydraulic gradient exists from the Farrington formation aquifer into the Brunswick shale. This movement downward may be more likely during the summer months. The regulations require that dominant movement in the opposite direction be the only acceptable criteria.
8. The role of the subsurface diabase sill in transmitting or obstructing flows within the Farrington is far from certain. The R.G.H. report does not provide sufficient data to justify a finding that groundwater from this site will not eventually reach wellfields south of the Raritan River.

CRUMMY, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW
ONE RIVERFRONT PLAZA

NEWARK, N.J. 07102-5497

201-596-4500

AVENUE LOUISE 475, BTE. 8

8-1050 BRUSSELS, BELGIUM

011-322-646-0019

TELECOPIER

011-322-646-0152

March 19, 1990

TELECOPIER

201-596-0545

CABLE/TELEX

138154

JOHN H. KLOCK

VIA HAND DELIVERY

Chief
Environmental Impacts Branch
EPA-Region II
26 Federal Plaza
Room 500
New York, NY 10278

Re: Draft Environmental Impact Statement
on the Environmental Technology
on Engineering Facility ("E-TEC")

Dear Chief:

This firm represents Garden State Buildings, an adjoining land owner to the United States Environmental Protection Agency (EPA) at Edison, New Jersey, where EPA proposes to construct the E-TEC facility.

The E-TEC facility appears to be chosen because the land is there, and the people who would staff the facility are already present. The EIS is result driven and not the result of choosing the best site based upon risks.

No one, despite an EIS, could contest the following logic: where there is no population, there is no risk in injury to the public; where there are people, a risk of injury arises. Quite simply, choosing to locate the E-TEC facility where over 17,500 people live within two miles creates a risk that harm will befall some because the facility exists.

The EIS indicates that the area is non-attainment for ozone. There can be no doubt that the E-TEC facility will increase the level of ozone. More trucks, more transportation, more experimenting with volatile organic substances will increase the ozone levels. Increased ozone in the air is a known threat to human health. The fact that New Jersey is in a non-attainment area for ozone alone precludes locating the E-TEC facility.

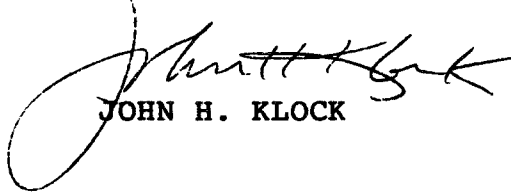
CRUMMY, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE

VIA HAND DELIVERY

Chief
Environmental Impacts Branch
March 19, 1990
Page Two

I enclose herewith the data compiled for the opposition
to the Hazardous Waste Facilities Siting Commissions' proposal
to locate an incinerator in Raritan Center. The same considerations
apply herein.] 151

Very truly yours,



JOHN H. KLOCK

JHK:gmw
Enclosures

This is the outline from the referenced document. The entire report could not be reprinted in this document.

GARDEN STATE BUILDINGS
LIST OF EXHIBITS
TO NOMINAL GROUP TECHNIQUE

1. Map of residences within .5 miles with population figures in rings.
2. Middlesex County population figures (1980 Census).
3. Camp, Dresser & McKee Report (May 1988).
4. Memorandum of March 31, 1986 concerning safety.
5. Map of special land uses, development plan for Thomas Edison County Park, hospital/nursing home beds.
6. Letter of William Kruse, Middlesex County Planning Board dated May 16, 1988.
7. Letter from Middlesex Water Company dated May 19, 1988 with map of water distribution in the Center.
8. Map of access routes to Raritan Center.
9. Report of Abbington-Ney Associates.
10. Data on bridge and roadway structural conditions for County road system.
11. Potable wells within one mile of site. (Edison)
12. Industrial well data.
13. Employment estimate by ring prepared by Middlesex County Planning Board.
14. Student population by ring and day care and nursery school by ring, prepared by Middlesex County Planning Board.

REC'D per
session
3/31/90

March 31, 1990

My name is Julian Capik, I reside at 76 Roosevelt Blvd., Parlin, N.J. 08859
I am retired from the Chevron oil Co. where I worked as a control operator.
I am a member of the Middlesex County Environmental Coalition.

Mr. Chairman:

The New Jersey Hazardous-waste Citing Commission considered siting a hazardous waste incinerator in the same area that the Federal Environmental Protection Agency proposes to build a Hazardous-Waste Research Center. After carefully deliberating for a long period of time, this site was eliminated.

Although the environmental impact could not be compared to an industrial size incinerator, the same criteria for rejection of a hazardous-waste research center would be valid.

152

This facility would be sited close to Middlesex College and the Raritan Center office complex, and any air emissions into the atmosphere from the research center could have an adverse effect on the environment and health of the people in this densely populated area.

153

This area is in a non attainment location for priority pollutants of the atmosphere, and any addition (however small) of pollutants into the air, will cause further problems and deterioration of the clean air act.

154

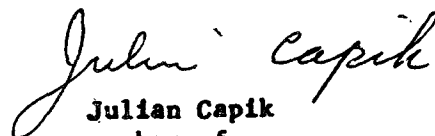
The Environmental Protection Agency already has other hazardous-waste research centers on line in other parts of the country, which can produce the same technological information as this site, and therefor should abandon the idea of building one in this highly polluted, densely populated area.

155

Those of us who have lived in this area for many years no longer believe in technological risk assessments. We have watched our freinds suffer with respiratoy ailments, and are aware of the high rate of cancer victims, because we are associated with them daily.

If your environmental impact statement is true when it states: only one in a million people could die from the effects of this research facility, then I would request that you abandon the idea of building this facility. I would like to save the life of that millionth person.

Sincerely yours,



Julian Capik
member of
Middlesex County Environmental
Coalition

DARE TO CARE

HOMELESS OUTREACH CENTER

2-4 New & Kirkpatrick Streets • New Brunswick, NJ 08901 • (201) 214-8888

April 19, 1990

Mr. Mike Torrusio
Associate Regional Administrator
EPA Region II
26 Federal Plaza
New York, NY 10278

Dear Mr. Torrusio:

At the public hearing on the Environmental Protection Agency's proposed E-TEC Facility, I raised a number of questions regarding the impact of the project on our plans to build transitional housing on our property which is located adjacent to the EPA's property in Edison. My concerns focused primarily on the uncertainties which are inherent to the operation of a research facility and the effects on the surrounding community. It is difficult for us to understand the risks associated with the facility when neither the precise nature of the experiments nor the precise results from them can be determined in advance. If it could there would certainly be no reason to conduct the experiments.

Like you, we are concerned about the effects of toxic waste on the community. We understand that the EPA is not in the business of creating toxic waste, rather its purpose is to determine safe ways of disposing of it. We are aware that Edison in particular has more than its share of toxic waste sites which need to be immediately cleaned up. We are also in support of the development of safe ways of disposing of these wastes.

While we share these concerns for our environment, our first concern is for the homeless families who will be residing in our transitional housing facility. These families are currently housed in unsafe and indecent welfare motels in the Edison area. In these motels, where costs range between \$1800 and \$2400 a month, entire families are crammed into single rooms that are barely larger than the bed in which they sleep. The rooms are often cold, dirty, and roach infested. Sometimes, the room doors do not even lock. Prostitutes and drug pushers comprise a large part of the motels' clientele, becoming the community in which homeless mothers and their children live.

Our planned transitional housing project will give these families a decent environment in which to live while they work to resolve their homelessness. Our project will include an array of services for these families including a licensed daycare center on site. I'm sure that you can understand why we are concerned about the impact of the proposed E-TEC Facility on our project. We could not in good conscience bring homeless families onto the site if we believed it was unsafe.

At the public hearing, I urged that the EPA continue the process of gathering information so that a fair assessment of the risks of the facility could be made. In particular, I suggested that a consultant be retained to evaluate the Environmental Impact Statement to determine the accuracy of its

conclusions so that the public could have an opportunity to offer meaningful comment on the plan.

Since the hearing, we have been contacted on several occasions by the EPA in an effort by the Agency to address the concerns which we expressed during the hearing. I have found a willingness by the EPA to make itself available to the community to discuss the concerns which were expressed in the hearing. While I do not feel that all the questions which have been raised have been answered, I have been pleased by the efforts of the EPA to continue the public dialogue on the project. I can say in all sincerity that I was skeptical at the public hearing that the Agency was merely going through the motions of soliciting public opinion without giving serious consideration to the concerns expressed. I was particularly concerned by the announcement that the public hearing would be the close of the opportunity for the public to formally comment on the plan. Like most others in the community, we are not scientists and are not trained to evaluate the adequacy of the EIS. We were concerned that by closing off the public comment, there would be no opportunity for further study.

I understand that the EPA has now decided to reopen the public comment period to enable Middlesex County College to retain an independent expert who could fairly evaluate the EIS. We are wholly in support of the reopening of the comment period to permit this further evaluation and discussion of the plan. At the end of this evaluation, we feel that we will be in a better position to evaluate the impact of E-TEC on our facility.

We believe that a full and open discussion of the plan will provide the community with the information needed to understand the risks of the project. We commend the EPA for its support of this continuing process.

156

Sincerely,



Bob Nasdor
Transitional Housing
Project Director

WALTER R. STOCHEL Jr.

2118 Oak Tree Road
Edison, New Jersey 08820
(201) 906-0529

Chief
Environmental Impacts Branch
EPA-Region II
26 Federal Plaza
Room 500
New York, NY 10278

March 3, 1990

RE: E-Tec Facility, Edison, N.J.

Dear Sirs,

As a resident of Edison I am concerned about the Proposed E-Tec facility.

I attended the public meeting on February 27, 1990 and I would like to add my comments and questions to the record.

The first question I have is that has there been an agreement between Edison, and the EPA about this facility?
Was Edison suppose to give local approval in exchange for the use of 2 warehouses on the site?

157

This site is part of the former Raritan Arsenal. There is a D.E.R.P. confirmation study going on about the site. This study has not been released to the public. We do not know the full extent of the contamination of the site. One of the most contaminated areas is area #1, which is on the Federal Property. Area #10 borders the Federal property. Area #1 has 3 monitoring well. The test results on those wells have not been released to the public.

158

Has the Army Corp conducted part of their confirmation study on the site where the E-Tec facility will be built?

The Draft EIS mentions a study done by the Letterkenny Army Depot in 1961. This study is not mentioned in the reference section. Has this study been released to the public?

159

I feel that since this site is a former Army Arsenal, it is best to wait until the release of the confirmation study, and wait until a cleanup plan is enacted.

160

I do not think the Draft EIS covered the local impact this facility would have, in respect to the kinds of businesses it would attract to the area.

This facility will attract all kinds of research and development companies to this area. Most of these companies would be dealing with Toxic, and Hazardous Waste. The EPA cannot guarantee that these companies will not test there own Toxic Waste Cleanup equipment in their own industrial buildings, and not at the E-Tec facility.

161

As the valley south of San Francisco is know as the Silicon Valley. Edison could be known as the "Toxic Waste Valley". This town could be the worldwide center for the testing of toxic waste equipment. I think this is more of a risk than the residents are willing to take.

The Draft EIS mentions that any Toxic Waste generated on the site, or Waste that has not been processed will be sent to a proper disposal site. What about the soil and water that have gone through a test process, and come out clean? Will this "clean" waste (soil & water) be disposed of in Edison?

162

I feel that any waste brought onto the site, any waste created ate the site, should be removed from the site, and removed from Edison. We have enough Toxic Waste problems in Edison we don't need the potential for more.

My main concern is the health impact this facility will have on the people of Edison. We are in the middle of "Cancer alley". I know of many long time Edison families who have lost loved ones due to cancer. I believe it is because of all the toxic waste problems in Edison. We do not know what the long term effects of this facility will be. Just like we did not know what the long term effects of Kin-Buc would be, 30 years ago. The EPA should do the right thing and reject the Draft EIS.

Sincerely,

Walter R. Stochel Jr.

Walter R. Stochel jr.

March 7, 1990

Mr. Robert W. Hargrove
Chief Inivronmental Impacts Branch U.S. E.P.A.
26 Federal Plaza, Room 500.
New York, N. Y. 10278

Dear Sir:

While we fully appreciate the vast need for creating the proposed E-TEC facility in Edison and the fact that the location is very convenient for the E.P.A. and the academia who will be involved in such project. We object to having our very lives endangered, our address stigmatized, and our properties devalued by having such a risky hazardous waste lab placed in our midst by the government who is supposed to be serving us. 163

As we see it, there is no way the E.P.A could accurately predict "the insignificant environmental and health problems, the E.P.A.'s people have told us E-TEC could cause" since the nature of the work to be done there will be of experimental nature and the lab will be the largest in the nation. We are sure no one can predict the risks to our pregnant women, to the unborn, and to our children, from long term exposure to the emissions from the "small burner". In addition to the poor air quality we already breathe here among all these highways and industry. 164

This area is too densely populated, there are too many schools and day care centers in the proximity, the traffic is too congested, and the risks to the quality of our lives and our environment are too great without taking into consideration how probable a truck accident or spill could be. 165

Please consider other less populated and congested areas and do no experiment with our very lives. Choose a place you can evacuate in case of a catastrophic fire, explosion or spill, where you have a better fire fighting force and less trafic, and where the quality of so many thousands of lives will not be endangered. 166
Please put yourselves in our place, and do not do to us what you would not want done to your own family and community.

Sincerely,

Zoila and Edward De la Cruz
Mr. & Mrs. Edward De La Cruz
6 Birch Road,
Edison, New Jersey 08817

March 27, 1990

Dear EPA Branch Chief,

I should like to be
on record as OPPOSING
the proposed toxic waste
site near Middlesex
County College.

Our campus has
over 10,000 students,
staff, and faculty.
Most of our students
are under 20 (we know
they are more susceptible
to toxins). We cannot
afford to expose this
large community to
toxins so close to campus!

Sincerely,
Dennis Pearce

Mrs. Jane Tousman
14 Butler Rd.
Edison, N. J. 08820
201-561-5504
April 2, 1990

Mr. Robert Hargrove
U.S.E.P.A., Region II
Environmental Impacts Branch
26 Federal Plaza, Rm. 500
New York, N. Y. 10278

Dear Mr. Hargrove;

Re: EIS of Proposed E-Tech
Facility in Edison, N. J.

There are still far too many unanswered questions left about your proposal for me to take a position on this facility at this time. A CONCEPTUAL PLAN is only that and in this case it presents far more questions than answers. What I am seeking by this letter is some of those answers. I also wish to re-affirm my queries raised at the public hearings.

AIR IMPACT:

Air emissions are one of the most serious concerns with this project. Considering that one bad event could cause an evacuation of the whole area. Considering that the most acutely toxic materials will be stored on this site. How would this evacuation be carried out and who would be responsible are serious concerns not yet addressed. The emergency concerns to be addressed when dealing with such substances as PCB's, CLORODANE, BENZENE, CLOROBENZENE, TRICHLOROETHYLENE, CADMIUM, DDT and others needs to be fully explained. Some experimentation will take place in the area of incineration. I feel that scrubbers should be mandated on the proposed incinerator no matter what its size. Also there should be an after burner not only the baghouse mentioned in the text of the EIS with the possibility of SCRUBBERS. I am advised that State Law will apply to this facility as well as Federal Regulations. I am also advised that this facility will be considered a MINOR facility. This means that only so much toxic material may be stored on site at any one time. However would there be a Rt. to Know by the Citizens of the area if there is some tell tale sign? Would there be an audit of these materials available to the public annually? I also hope that you would bear in mind that there has NEVER been air monitoring equipment on or near this site. The closest air monitoring equipment installed is in New Brunswick and Perth Amboy. How accurate can this equipment be concerning emissions coming from Sayerville (MCU A), Edgboro Landfill plus the 3 landfills currently in existence (Kin Buc, the Edison Landfill, and ILR). Do we qualify as an area of none attainment? These are questions that have never been answered. How will this facility contribute the the ozone problem that this state is experiencing? I would very much like to be a part of the public hearing process that the DEP might conduct on this facility.

Lastly I would like to bring your attention to the 2 groups who would be at 178

great risk if this facility has a problem with air emissions. They are the VERY YOUNG AND THE VERY OLD. In each case we have the most vulnerable people in the area. The college is only a stone's throw from this facility. Although I am told that there would be a 200' buffer as opposed to a 50' buffer required, we are not told what type of plantings will be offered. It is far better to kill plants than people and right now there is a tremendous amount of research being carried on at Rutgers into what type of plants do the best job with air emission. I would like to know that you will check into this. I would also like to be kept appraised if there are field studies being done on the toxicity of the soil beneath the proposed site. I understand that studies are underway on this.

179

180

Emergency procedures which were touched upon earlier carry these additional concerns. How will the personnel on site be trained? Will there be a chemical specialist on site at all times? Will there be a computer tied into the DEP and EPA so that any irregularities will be picked up early by a qualified specialist?

181

182

WATER IMPACT:

I would like to see the detail of how materials will be stored on site. I am told that there would be layers of protection which will include materials such as bentonite that would prevent leakage to the groundwater. I also understand that diking would be used. The physical means of protecting our water supply is a major interest to me.

183

I would also like to know what will be done to protect the wetlands on the southern portion of the site? Will there be buffers around these wetlands so that they can continue to function? Also is there any sort of stormwater management plan being put forth? I would also like to see how the indoor spill plan works? I heard that there is such a plan in existence.

184

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186

Regarding your risk assessment, the cancer problems are mentioned but how about the effects on the wildlife of the area? How about the effect connected with birthweights, miscarriage, and in general unborn children? While many of these effects are long-term and cumulative, I still feel Edison residents have a right to know.

187

188

LIABILITY:

The vendors carrying out the work and their skills and background is something that certainly demands scrutiny. I would like to know who would be liable if there was an accident on site? Are there any "no risk agreements". Insurance is scarce and costly. Who will assume the cost for insurance of this facility? Through the process of privatization which this project uses, how will this be carried out. Will the N. J Hazardous Waste Commission be reviewing this proposal?

189

190

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192

I truly hope that answers can be found to the concerns articulated here. I look forward to hearing from you.

Jane Tousman
Jane Tousman

cc: Michael L. Verhaar

April 3, 1990

U.S. EPA ENvironmental Impact Branch
26 Federal Plaza
Room 500
New York, New York 10278

Gentlemen:

The purpose of this letter is to object to the proposed location of a toxic research laboratory at the Raritan Arsenal tract between Middlesex County College and Raritan Center, Edison, New Jersey.

The geographic area around the proposed site is already known as "Cancer Alley" and has one of the highest incidences of cancer cases in the nation. Almost every family in the area has suffered or will suffer a cancer case.

Your EPA scientist, Michael L. Verhaar, has stated that there will be emissions of nitrogen and sulfur compounds. Obviously, these emissions are not known for their health properties.

193

The truckloads of contaminated soil to be trucked in from the nation's superfund priority hazardous waste sites will include cancer-producing carcinogenic substances. Accidental spills or accidents to the trucks carrying hazardous wastes shall result in dangerous exposure to area police and other governmental employees who would be called upon to respond to the emergency situations which would exist in the event of a spill or truck accident.

194

Hopefully, our Congressional representatives from "Cancer Alley" will intervene to stop the introduction of these additional carcinogenics which would only accelerate existing cancer epidemics in our area.

Very truly yours,

Aimee Szilagyi
John Szilagyi
AIMEE AND JOHN SZILAGYI
1614 Edison Glen Terrace
Edison, New Jersey 08837

61 Franklin Avenue
Edison, New Jersey 08837
April 4, 1990

U. S. Environmental Protection Agency II
26 Federal Plaza, Room 500
New York, New York 10278

Attention: Mr. Michael L. Verhaar, Environmental Scientist

Dear Mr. Verhaar:

We talked to you on Saturday, March 31, 1990 at Middlesex County College regarding your choice of placing the Toxic Waste Lab adjacent to the college.

You could not convince us that the Toxic Waste Lab would be 100% safe to the environment and mostly to the people living in the area. You stated it was to be for experimental purposes only because of your limited budget. However, what is to stop your growth when you get a larger budget which you and I know will happen.

This type of project should not be located in a heavily populated area (homes, a college, schools, day care centers and Raritan Center with 8,000 people working there). Look for a remote site where you will have no neighbors to contend with as well as no harm will come to them with your experiments (no experiments are 100% safe).

No matter how small the emission it is still polluting the air we breath and in some time in point it will be known that it is causing some ill effects to humans and the environment. By that time it is too late to remedy the situation. Today 5,000 gallons for 90 days. Tomorrow---20,000?

No your lab doesn't belong here. It has to be located in an area where in case of a disaster people's lives aren't in danger.

Today, President Bush signed a clean air law and stated a cleaner and safer America. Well shouldn't it apply to Edison, New Jersey.

Sincerely,

Joseph R. Both
Joseph R. Both
Eleanore Both
Eleanore Both

cc: Senator B. Bradley
Congressman B. Dwyer
State Senator T. Paterniti

April 4, 1990

Robert W. Hargrove, Chief
Environmental Impacts Branch
EPA - Region II
26 Federal Plaza, Room 500
New York, N.Y. 10278

Dear Mr. Hargrove:

Attached to this letter you will find a letter which I wrote and sent to a number of New Jersey legislators (including Bradley, Lautenberg, Dwyer, Paterniti, Pelly, and Spadaro). I sent a revised copy to several newspapers.

The letter expresses some of my concerns about the proposed site for your new toxic waste research facility -- i.e., the site in Edison, New Jersey, adjoining Middlesex County College. The letter expresses a number of my objections to this placement of the facility.

Please read the attached letter.

I urge you to reconsider placement of this toxic waste research facility (E-TEC). That land could be sold for a very good price and the money used for building a facility to your exact specifications in a place of low density (or "zero density") population. To think that you can put this facility next to a growing college in a growing community and never have a problem, never have a disaster, seems to me to be folly. Again and again, the disasters we have had in recent years in which large numbers of people have been injured or killed have been at chemical or energy facilities, and the cause of these disasters has been human error.

All of your precautions and the best designs possible cannot eliminate human error. The best you can do to protect people and the surrounding environment (and you are a "protection" agency) is to place such a facility in a location where any disaster will affect the least number of people and have the least disastrous consequences on surrounding wildlife, water supplies, and other aspects of the environment.

Please reconsider the placement of this E-TEC facility. Please do not put it in Edison, or in any community similar to Edison, New Jersey. There is plenty of open land in the West and Southwest of this country (as recommended in an earlier study).

You are in a position of influence; you can have an effect on the changing of this plan. If you do not, and a disaster occurs in Edison, New Jersey, I expect you will remember when you had the opportunity to make a difference, to "protect" rather than to endanger, and you did not do so.

Sincerely,

Georgia S. Cohen

(The Rev.) Georgia S. Cohen, Ph.D.
P.O. Box 5
Stewartburg, N.J. 08504

March 27, 1990

The Honorable Frank M. Pelly
669 Nassau St.
North Brunswick, N.J. 08902

Dear Mr. Pelly:

On Tuesday night, February 27, 1990, I attended an Environmental Protection Agency hearing at the Stelton Community Center in Edison, N.J. There were about 150 citizens present, almost every one of them there to protest the placement of an EPA research facility for the treatment of hazardous waste on the proposed EPA location -- i.e., a parcel of land adjoining Middlesex County College in Edison, N.J.

From the presentation made by the E.P.A., it is apparent that the Middlesex County College site was chosen by the EPA for its toxic waste research facility simply for monetary reasons, because it appeared to be the most cost-effective site. (The EPA already owns the land.)

197

However, this facility is to be a full-scale toxic research facility, storing continually at least 5000 gallons of liquid toxic waste and 70,000 tons of solid toxic waste, with weekly shipments of at least one major truckload of toxic waste from anywhere and everywhere in the country.

198

In their presentation the E.P.A. admitted that there could be danger to the sole water source for the area, an aquifer. They also admitted that experiments done would range from test-tube size to "full-scale" experiments (suggesting the possibility also of "full-scale" disasters). The E. P. A. also admitted that they tested 12 chemicals which will be present at the facility, tested them for their toxic effect on human life were there to be a fire at the facility. Out of 12 chemicals they tested (and only 12 were tested or examined), TWO of the chemicals tested would be toxic to human beings. That is two chemicals too many.

199

The EPA seems determined to use this as a site despite the high population density of the adjacent residential area, despite its location next door to a college of 11,000 students, despite the presence nearby of many day care centers and a home for pregnant mothers. Their estimate of the costs involved does not take into account the medical, psychological, and burial costs that could be involved to citizens in the event of a disaster such as a fire among the tons of toxic materials stored there.

Officials of the government of the City of Edison pointed out that the City does not have the capacity for handling any such emergency, were it to occur. It also does not have the tax base it would need in order to make the necessary emergency personnel available.

200

Roads leading into the facility area are frequently extremely crowded already. In the event of a needed evacuation, evacuation would be nearly impossible in time to prevent serious health damage.

201

All citizens and institutions who spoke at this meeting (with the exception of one professor from another community who wishes to work in one of the labs) spoke out against the placement of the facility in Edison next to the Middlesex County College campus. (The toxic labs would be less than 200 yards from the main classroom buildings of the college.)

I pointed out that Middlesex County is supposed to grow by about 80,000 people in the next decade. But, if such a facility is built next to the College, perhaps Edison (and Middlesex College) will not grow by 80,000 people. How many people will buy a home near a toxic waste facility which is doing full-scale experiments? How many will allow their children to study at a college where the classrooms are less than 200 yards from toxic waste experiments and storage facilities? How many will want to work near such a facility? In other words, the installation of such a facility in this particular highly populated area could result in a meaningful decline in the population and tax base of Edison and of Middlesex County (meaning far less growth than predicted and fewer services perhaps than now).

202

As a citizen who works near the proposed site, I must ask you - and urge all Edison residents, businesses, and educators - to oppose this facility immediately and vehemently, for your own sake and the sake of others. Even if there is never a fire or other disaster at the facility (which is a big "if," given human error), the mere presence of the facility and the very good possibility that someday there will be a fire or other disaster due to human error may be enough to cause fear and flight from the environs by home owners and businesses, thus adversely affecting property values and businesses, as well as the rest of Middlesex County.

The College spokesman made a good suggestion to the EPA, an alternative course of action. Let the EPA sell the land they have next to the College; it would sell for a good price. Then let the EPA use the proceeds to purchase land in a far less populated area, land which could itself be used for a toxic dump. (Preliminary studies done did actually recommend a site in the West or Southwest of the USA.) That is where such a toxic facility should be placed, not in the fastest growing county in New Jersey.

203

The next formal EPA public availability session will be held at Middlesex County College on Saturday, March 31, from 11:00 a.m. to 4:00 p.m., in the College Center. I ask you to make every effort to be present, or to send your representative. Your immediate attention to this issue is vital.

And, if you can use your influence to oppose the placement of this facility in Edison, next to the College, a placement which clearly poses a threat to the health of this community and your constituents, you can really help make a difference. If you do nothing, you will let down your constituents and contribute indirectly to the endangering of their health and well-being.

No one disputes the need for such a research facility. What is adamantly opposed is the placement of such a facility in a highly populated area, when the land could be sold at a good price and the proceeds used to build the facility in the West or Southwest or other largely unpopulated area.

204

Thank you for your help.

Sincerely,

(The Rev.) Georgia S. Cohen, Ph.D.
P.O. Box 5
Blawenburg, N.J. 08504

P.S.

The E.P.A. has extended the public comment period on this issue to April 6, 1990. (Copies of their environmental impact statement are available at the Middlesex College Library, as well as the Edison Public Library and other locations.) Please submit your written comments to: Chief, Environmental Impacts Branch, EPA - Region II, 26 Federal Plaza, Room 500, New York, N.Y. 10278.

JOY R. GRAFTON
10 LYNNWOOD ROAD
EDISON, N.J. 08820

April 4, 1990

Robert W. Hargrove, Chief
Environmental Impacts Branch
United States Environmental Protection Agency
Region II
26 Federal Plaza
New York, N.Y. 10278

Re: Environmental Technology and Engineering Facility
Edison, N.J.

Gentlemen:

I was unable to attend the PAS on March 31, 1990.

Nevertheless, I would like to express, again, my opposition to and concern about the siting of the ETEC in Edison, N.J.

I have enclosed a copy of an article that ran in the Metuchen Edison Review on March 23, 1990.

Edison is already burdened with two known and some suspected hazardous waste dumps. Our own "sanitary" landfill is scheduled to be closed by the N.J. DEP because it is producing uncontained hazardous leachate.

As a crossroads for major highways and site of many chemical companies we have plenty of toxic and hazardous waste problems (see article). We do not need any more.

If the facility was to be used to clean up the KIN-BUC or ILR dumps it might serve some purpose to the local community and justify its location in Edison.] 205

As proposed, the ETEC will only serve to create a new "dirty" site in town.] 206

I worked at Brookhaven National Laboratories, on Long Island N.Y. as a guest research associate and understand the benefits of a centralized research facility as a common ground for industry and government. However, in this case the detriments created (new "dirty" site, more hazardous wastes on roadways, no improvement to local hazardous dump burdens, more toxic air emissions, need for evacuation plan, need for a "hazmat" team, location in heavily population and travelled area, proximity to college and day care

centers) outweigh the benefits (one location for coordinated research by industry and government).

As a less burdensome alternative I would suggest that the industrial locations producing the hazardous materials be asked to be the sites of research on a rotating basis. These locations are already "dirty" and have the financial and technical support for such research on site.

207

I hope you will give my comments consideration.

Thank you for your attention.

Very truly yours,


JOY R. GRAFTON

encl

Middlesex-Edison Review
March 23, 1990

ETEC

Awareness night attracts hazardous-materials units

By GARY S. BLOG

EDISON — *Middlesex County is second in the nation in the number of hazardous-materials emergencies last year.

So-called hazmat teams were called out 1,289 times in 1989, said John Scully, volunteer chief of Raritan Engine Company No. 3.

For that reason, a special hazmat awareness night was held recently at the Edison First Aid Squad No. 2 building, New Dover Road.

The event, sponsored by the squad and the Volunteer Fire Officers Association, attracted teams from all over the county, and local emergency response personnel were able to learn who and what are available to help out in hazardous-materials incidents.

Trucks from the Cheesequake Fire Department, the Middlesex County Haz-Mat Team and the Middlesex County Emergency Management Team each with equipment costing more than \$300,000 were on display.

"This was an open house to

show the hazmat equipment and communications equipment that is available to local fire departments and first aid squads," said Bill Prairie, Middlesex County fire coordinator.

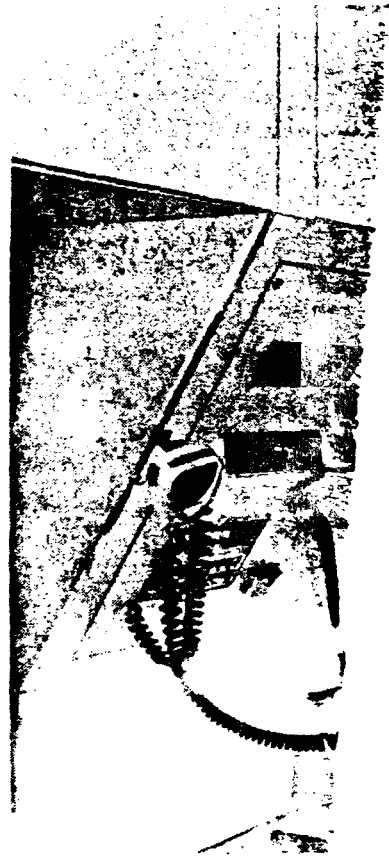
There are four fully qualified hazmat units in Middlesex County: one operated by the county and one each in Kendall Park, Cheesequake and South Old Bridge, Prairie said.

There are two more hazmat units in the works, he added. One will be in Woodbridge, and the other will be in North Brunswick.

"Edison does not have one," *Scully said. "We have to rely on Cheesequake and the county."

The trucks contain the equipment to mitigate a hazardous-materials situation. Scully said, noting the equipment is not meant to clean up a landfill and is, instead, for emergency containment.

Most of the emergencies in Edison are transportation-related, Prairie said. "That is going to keep increasing," he added.



Bill Prairie, Middlesex County Edison First Aid Squad No. 2, night at the squad building,



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18 Winter Street

Edison, N.J. 08820

April 25, 1990

To whom it may concern:

Please be advised that as a resident of Edison township I strongly urge you to reconsider your plan to build an experimental laboratory in this area. To build such a facility in such a congested area, especially near a college which is probably the best community college in the state is akin to a criminal act. "If" there is a disaster such as a fire, it will be too late to decry your action. This "if" is a strong possibility which can destroy lives, property etc. We, in Middlesex County, already live in "cancer" alley. Is that not enough? Your property can and should be sold, the profits taken and property should be purchased in the west or southwest of the United States where there is almost

208

209

nil population. The earth in that area
can best absorb experiments in the toxic
waste dilemma.

Please consider strongly the effect
of building this lab at the proposed area. It
will be a disaster and a disaster which you
will not be able to live with. Is this what
the EPA stands for? The environment here
needs no more pollution etc. The residents
here need no more pollution or worry. We
have more than enough already.

Yours truly,
Elvie Guskai

Chief, Environmental Impacts Branch
EPA Region II
26 Federal Plaza
Room 500
New York, NY 10278

Dear Sir/Madam:

Recently I became aware that the EPA is considering locating a toxic-research facility on land adjoining Middlesex County College in Edison. When I consider the vast spaces in the United States that could be used, where potential problems would be minimized, in relation to the fastest growing county in New Jersey, I cannot imagine how EPA could be serious. With regard to the proposed NJ site:

- it is very close to a college with 11,000 students,
- it is very close to day-care centers,
- there is heavy traffic in the area, making evacuation, if necessary, extremely difficult.

I think no rational person questions the need for such a facility. But placing it in the heart of a heavily-populated area, with the attendant effects on safety,

Chief, Environmental Impacts Branch

P. 2

and property values, seems ill-advised and inequitable. I understand that EPA owns this Middlesex County land. I agree with a representative of Middlesex County College who suggested that the property no doubt would fetch a good price, which could be used to purchase a site in a much less populated area. 212

I respectfully urge your consideration of what I have said.

Sincerely,

Janis and/or Claire Bisgany
22 Annette Drive
Edison NJ 08820-1010

April 29, 1990

ATT ROBERT HARGROVE

DEAR ROBERT

I hope this letter finds you in
GOOD HEALTH. I WRITE ABOUT THE MEETING HELD BY THE
DEP AND EDISON RESIDENTS AT THE STELTOW COMMUNITY
CENTER. WHAT WAS THE OUTCOME ABOUT THE TOXIC RESEARCH
FACILITY. WHAT DECISION WAS REACHED. I THOUGHT THE
PEOPLE VOTED IT DOWN. I HAD TO DEPART WHEN I THOUGHT THE
MEETING WAS OVER. WAS WONDERING IF I MISSED OUT ON ANY THING.
THANK YOU GOD BLESS. WOULD APPRECIATE ANY INPUT YOU
CAN FURNISH.] 213

PEACE & PRAYERS
LOUIS FUZALL SR
13 SINK RD EDISON
08817
201-548-9347

1
E-TEC FACILITY

Edison NJ

- 1) NEPA 1502.10 (J) *Audit is missing* 214
- 2) Cover Page - 1502.11(b) *add Middlesex County* 215
1502.11(f) *Actual date comment due needed.*
- 3) Summary 1502.12
Areas of controversy not included 216
Issues raised by Public / Agencies not included
Any unresolved issues?
- 4) Purpose & Need - *the need for placement of the facility in the north east, specifically a densely populated area of New Jersey should be explained.* 217
- 5) Alternatives: *Since the potential for vehicle accidents is a prime concern, alternate approach routes should be discussed and evaluated. This should include a water approach using the Raritan River.* 218
- 6) Review of Constraints (Pg 2-2) *None of the ~~cost~~ constraints appear very limiting, or even pinpoint the Northeast, specifically Edison as the best site. Constraints 3 (Regional Perspective) doesn't even list Northeast. Thus conclusion on page 2-4, ~~costs~~ considering modern transportation / communication techniques doesn't seem to follow.* 219

7) Section 1502.14 states alternatives section is to present comparative environmental impacts. It doesn't. Ex air quality 220

8) Based on alternatives section there was no reasonable alternative to Edison. This is hard to believe. 221

Statement made in apparent non compliance to sections 1502.14 (a) (b) (c)

9) No apparent mitigation presented 1502.14(b) 222

10) Overall appearance of alternatives section rather than objective, seems to eliminate other alternatives from a pre-selected site (Edison). (see sentence 1 on Para 2.2) 223

10) Table 2 - Fort Dix's change in mission + reduction in use may provide facilities and personnel to accomplish task 224

12) Page 2-9 Selection of Arkansas facility goes contrary to all arguments in this EIS. Why was the Arkansas site selected? 225

13) Page 2-5 The cost of new construct is estimated Appendix B details proposed action but omits construction costs for comparison. Why? 226

14 - Affected Environment - Based on requirements in ~~1502.15~~ 1502.15 and lack of impacts in section 2, it is not clear why para. 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.10.1, 3.1.10.2, 3.2.4.1, and 3.2.4.2 are needed for just rehabing existing structure and its subsequent operation. 227

15 - Figure 3-6 is good but in itself misleading. A figure should also be presented depicting present and future land use in relation to proposed facility. 228

16 - Para 3.2.7.2 It is not clear what route material will take to get to facility. This section should be expanded to detail probable delivery routes, especially in Edison. 229

17 Environmental Consequences - Para 4.2.8 - Delivery between midnight and 6 AM, period of low traffic, could reduce potential for accidents. 230

~~18 Para 4.3 It is unclear how this~~

Joe Debler X 4662/3
Rm 2119

April 18, 1990

Dear Sir,

We the undersigned members of AFSCME, Locat 2269, of Middlesex County College, Edison, N.J. 08818, wish to express our disapproval of the actions of the EPA on Woodbridge Ave. Edison, N.J..

We think that the placement of a Waste Disposal Plant on the above site has not been thought out properly. Adjacent to the proposed site is Middlesex County College, with an enrollment of over 11,000 students and workers.

-231

In the advent of any accident on the sight of the EPA property, the students and workers would be in great danger.

We the undersigned wish you to investigate the placement of the EPA waste Disposal Plant so close to the local populous, and do everything in your power to stop it.

Richard D. Finck
Anthony Harsule
Thany Lyden
Erny Christman
L. Tahlman
Sue Shah
Ann McKeeney
Ann Stubb
Frances Mundel
Mary J. Flannery
Eggy Hilt
Eileen Schreck
Helen K. Wasson
Theresa Borden
Eileen Amster
Dorothy G. Yonko
Margaret K. Lee
Louise Thomas

Op. Lickard
Doris Weil
Katherine V. Kane
Jack Jones
Sandra Siegel
Marcia Skutypa
Dora Lewis
Phyllis Rosen
Judy Kamen
Ann Skider
Lynette Finner
Patricia S. Pizzone
Claire S. Brewer
Joni Weissman
Edward Davis
Mavis A. Schmitt
Nancy Chavira
J. Adelle Luck

Paula Iggott

Marianne Casenza

Patricia Martin

Helen Mraz

Martha Strowski

Marvella Tracy

Marlene Deane

Abbie Doren

Mary Joerner

Celia May Lusa

Mario Mardi

Dora Lewis

Patricia Caronale

Booker T. Alexander

Irma Weiss

Bea Tadmofsky

Peggy Johannes

Phyllis Wasson

Eileen Davis

Adelaide Novak

Helen Mraz

Blanca Rodriguez

Mary Lyden

Lore Stahl

Katherine Kang

Grace A. Wolfson

Shirley Jones

P. Kennedy

Ruth Vitale

Barbara Shmentov

Pat Wilf