SUBJECT: E-Z Chemical Site
Philadelphia, Philadelphia County, Pennsylvania

DATE: APR 07 1989

FROM: Gerald T. Heaton, Senior On-Scene Coordinator
Western Response and Oil Enforcement Section (3HW25)

TO: Stanley L. Laskowski, Acting
Regional Administrator (3RA00)

ISSUE

The attached CERCLA Funding Request pertains to the E-Z Chemical Site in Philadelphia, Philadelphia County, Pennsylvania.

Emergency Removal operations are necessary to eliminate the threat to the public health and the environment posed by the presence of hazardous chemicals stored in and around the site. Of most immediate concern is the potential for fire and explosion involving or due to drums containing flammable materials. Immediate segregation, proper staging and disposal of the materials would eliminate the immediate threat.

I. BACKGROUND

A. Site Description

The E-Z Chemical Site formerly operated primarily as a drum and chemical re-packaging plant. It is approximately 1.5 acres in size and located at Canal and Laurel Streets in Philadelphia, Philadelphia County, Pennsylvania in an urban area. Adjacent to the site to the southeast is a meat packing/processing plant and an apartment complex is located approximately two blocks to the south. The elevated train
I. BACKGROUND (continued)

Line and I-95 runs two blocks from the site, and a bus/limousine service is adjacent to the site on the west. The site's perimeter is bound by a chain link fence which is in disrepair along the southwestern property line. The main yard is filled with stacked 55-gallon drums, 5-gallon pails, bags and fiber drums both labeled and unlabeled. A lab is located on the second floor of the building on site and contains many unlabeled bottles and suspected shock-sensitive materials. The wooden floor is unstable and decaying in some spots.

There are approximately thirty tanks on site, two tank trucks and estimated over 2000 55-gallon drums. On the southwestern end of the property is a large bulk storage tank (approximately 70ft. high x 60ft. in diameter) which serves as a warehouse for a large number of drums and containers, all of unknown identity. Access into the tank was obtained by a hole cut into the side of the tank through which a five-ton truck could be driven.

B. Incident Characteristics

1. Incident History

In August of 1988 the Philadelphia Department of Licenses and Inspections (L&I) issued a Cease and Desist Order to the E-Z Chemical Company, Inc. According to city officials the order was not fully complied with which prompted a second Cease and Desist Order issued by L&I on April 5, 1989 this one adding an order to evacuate the premises. According to Philadelphia Fire Department records there has been numerous complaints from neighboring businesses of strong odors and vapors in the air and sightings of fuming drums. There were also reported cases of chemicals being discharged into the sanitary sewer. The Philadelphia Fire Department has responded to a number of fires at this facility, the sources for which have been attributed to vandals. The local fire company tasked with response to fires at the site (Engine 29) has expressed repeated concern over their ability to respond adequately to future fires. Consequently, Engine 29 had prepared a Fire and Explosion Contingency Plan specific to E-Z Chemical Company, Inc.

The EPA Region III Emergency Response Section was requested to conduct a joint inspection of the business' premises on April 4, 1989 by Chief Janda of the Philadelphia Fire Dept. Hazmat Unit. Janda indicated that E-Z Chemical Company, Inc. was thought to be in violation of Title III SARA as evidenced by the company's official failure to comply with the provisions of a Cease and Desist Order issued by L&I.
EPA performed a visual inspection of the facility on April 5, 1989 accompanied by the City of Philadelphia Managing Director's Office, the Fire Marshal's Office, the Philadelphia Fire Department Hazmat Unit, L&I, and the City Solicitor's Office. Access to the premises was freely given by the operator and an examination of the property was performed. Within the site's perimeter there are two sewer drains. It is suspected that a discharge of chemicals into the southern drain has taken place as evidenced by discoloration of the ground immediately adjacent to the drain and also by the presence of an unidentified liquid which has pooled on the ground approximately one foot from the drain. The runoff from the property empties into the street and discharges into a sewer culvert adjacent to the facility's main gate. This sewer is reported to empty into the city's water treatment plant; however, during periods of heavy rainfall, run-off is directly discharged into the Delaware River.

2. Current Waste Management Practices

At present, numerous drums and containers of a wide variety of chemicals are incompatibly stored and stacked dangerously high. There is a laboratory in the building on site which contains various potentially shock-sensitive chemicals and numerous unlabeled bottles. The tank now being used for storage of drums and containers has approximately six inches of water on its floor. The two drains on site are currently clogged with sludge. Numerous drums are leaking and some are split open.

C. Quantities and Types of Substances Present

1. Hazardous Substances Present

There are approximately 30 tanks, two tank trucks and estimated over 2000 55-gallon drums on site. The tank used for drum storage in the southwestern end of the property houses an estimated 500 drums all of unknown identity. The laboratory contains approximately 5 containers of ether, 25 one-gallon bottles of acids, and approximately 150 16 oz. bottles of unlabeled liquids.

A partial list of chemicals identified are:

- Acetic Acid
- Hydrofluoric Acid
- Phenol
- Sulfuric Acid
- Nitric Acid
- Ethyl Butanol
- Aniline
- Hydrogen Peroxide
- Phosphoric Acid
- Anhydrous Ether
- Ammonium Hydroxide
- Sodium Chlorite (water-reactive)
These materials fall into numerous categories such as oxidizer, corrosive, poison and flammable, and remain unsegregated.

2. Proposed Sampling Methodology

All environmental extant-of-contamination samples will be taken with disposable sampling equipment to avoid cross contamination. Once taken, samples will be preserved according to EPA sampling protocol (i.e. ice, acidification) and sent to private laboratories with appropriate labeling and chain of custodies. Drum or product sampling, handling and analysis will follow EPA high-hazard protocol. The laboratories will be directed to perform the proper QA/QC on samples analyzed.

D. City Authorities' Roles

The Philadelphia Fire Department Hazmat unit notified EPA Region III Response Sections of the situation at the E-Z Chemical Company, Inc. The Department of Licensing and Inspection issued E-Z Chemical two Cease and Desist Orders with which the owner has not fully complied. In addition, the facility had reportedly not complied fully with Title III reporting requirements. The fire department expressed a strong concern over the potential threat of fire and explosion due to mixing of incompatible chemicals or arson. Potential impact on surrounding population and major transportation arteries as a result of the aforementioned is significant.

II. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

The E-Z Chemical Site meets the criteria for a Removal Action under NCP Section 300.65 in that there is an imminent threat to human health and the environment. The NCP Removal Criteria (Section 300.65) that pertain to this site are as follows:

- Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

- High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

- Weather conditions that cause hazardous substances or pollutants or contaminants to migrate or be released.
A. Threats to Public Health and Welfare

Due to the deteriorated condition of numerous drums and containers and the partially unsecured nature of the site, vandalism and/or human exposure (direct contact or air release) and injury could easily occur. The estimated 2000 drums and suspected shock-sensitive materials on site pose a fire and explosion threat.

B. Threats To The Environment

Threats to the environment posed by the current situation at the facility include uncontrolled release of hazardous materials in deteriorated containers, and discharge of chemicals into the sanitary sewer or into the Delaware River.

III. ENFORCEMENT

See attached Confidential Enforcement Status.

IV. PROPOSED ACTIONS AND COSTS

A. Proposed Scope of Work for Initial Phase of the Project

I. SECURITY

A 24-hour security will be instituted to monitor site entrances. The portions of fence in disrepair shall be replaced or repaired. Locks in poor condition shall be replaced. Included in the 24-hour security shall be a fire watch.

Emergency phone numbers and procedures shall be clearly posted and available at all times. Fire extinguishers shall be placed:

- at the building entrance
- at the east gate
- at the "tank dumping area"
- at the storage shed and tank area
II. INVENTORY

All containers on site are to be characterized and identified by sampling or confirmation of label information. Information shall be gathered to determine:
- type and condition of container
- labels and markings
- amount of material in container
- chemical and physical state/properties

III. SEGREGATION

All containers - drums, 5-gallon pails, bags, etc., shall be segregated by compatibility group:
- oxidizers
- flammables, combustibles
- poisons
- corrosives
- other

IV. HOUSEKEEPING

The garbage and debris outside the eastern fence shall be inventoried for stray containers and sampled if necessary to ensure non-contamination prior to disposal.

Storm and sewer drains shall be secured with a dike or by other means to prevent migration of contaminants off site. Should run-off/rainwater collect and hamper operations, the water will be transferred into drums and sampled for contamination prior to any disposal action.
V. COMMUNITY SAFETY AND AWARENESS

The adjacent businesses will be informed of hazardous operations such as moving of containers, liquid transfer, disposal, etc. The air shall be monitored with the appropriate instrumentation to ensure that no chemical vapors escape the property or adversely affect adjacent persons. Should an incident occur, emergency procedures shall be enacted and proper authorities be notified. In addition, evacuation of adjacent properties may be warranted, to be coordinated through local agencies.

To address these issues, a safety plan, air monitoring plan, and contingency/emergency plan shall be in place prior to hazardous operation.

Community relations will be coordinated through EPA Office of Public Affairs. The OSCs will coordinate on site operations and emergency procedures/notification through the LEPC and/or SERC representative. OPA will also coordinate public information through the LEPC and/or SERC representative.

VI. DISPOSAL

Subsequent to identification and segregation, all waste streams must be properly sampled, disposed of and/or treated at an approved, licensed facility by compatibility group.

Tank contents will be sampled and transferred into liquid tank trailers for disposal at a licensed, approved facility. The tanks shall be cleaned and wash/rinse water will be disposed of in a similar manner.

All hazardous waste transporters shall be properly licensed and all loads have proper manifests.

VII. BUILDING/LABORATORY

Subsequent to the removal of flammables and poisons, the laboratory area will be addressed. Any and all shock-sensitive materials must be identified. Containers will be inventoried, characterized and segregated by compatibility group. Proper labpack procedures will be followed for disposal of lab materials. Unknown will be fragged and either analyzed or disposed of in an approved manner. A fire extinguisher will be placed inside the laboratory during these operations.

Subsequent to the removal of all materials, the laboratory floor, benches, and any other pertinent area will be decontaminated.
VIII. FINAL PHASE

Surface soil, runoff water, and asphalt will be sampled to ensure that residual contamination does not exist. Should such contamination be found, removal of said areas will be necessary, followed by proper disposal of excavated materials. The excavated areas will be backfilled in accordance with original grade.

B. Estimated Costs for initial stabilization phase

These costs reflect the project funds to cover the inventory, segregation and stabilization. The OSC expects that these costs will be sufficient to begin proposed actions I, II, III, IV, and will submit an additional funding as soon as a better cost estimate is available.

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TOTAL PROJECT CEILING ESTIMATE $250,000
VI. RECOMMENDATION

Because conditions at the E-Z Chemical Site meet the criteria of Section 300.65 of the NCP, I have approved $250,000 of CERCLA funds to initiate this removal action, of which $205,000 are extramural costs.

Approval [Signature] Date 4-7-89