UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

3/15/89

MEMORANDUM

SUBJECT: ACTION MEMORANDUM
Request for Removal Action at the Jensen Drive Drum Site, Houston, Harris County, Texas
Cerclis #TXD987966900
Site ID# K9
Category of Removal: Time Critical

FROM: Patrick L. Hammack
On-Scene Coordinator
Emergency Response/Site Investigation Section (6E-EI)

TO: Robert E. Layton, Jr.
Regional Administrator (6A)

THRU: Russell F. Rhoades
Director
Environmental Services Division (6E)

I. PURPOSE

This memorandum requests approval for a Removal Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) at the Jensen Drive Drum Site. The proposed action involves the transportation and disposal of 200 drums containing various solvents, acids, corrosives and some known CERCLA designated hazardous substances, as well as the removal of contaminated soil and debris. This action is the suggested follow-up to a December 1988 stabilization of the site. The December action was not carried to completion in order to determine who was responsible for the site, and to offer enforcement staff opportunity to pursue those responsible.

This action meets the criteria for initiating a removal action under Section 300.65 of the National Contingency Plan (NCP) and is anticipated to require less than twelve months and under $2 million for completion.

II. BACKGROUND

A. National Significance:

This site is not of national significance.

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B. Site Description:

The Jensen Drive Drum site is located at 3116 Jensen Drive, two blocks south of Collingsworth Street in northeast Houston, Harris County, Texas. It is in a light industrial and residential area. Inhabited houses are immediately adjacent to the site. Three churches and a school are within a one-half mile radius. Dozens of residences are located within a one quarter mile radius.

The site occupies a rectangular lot measuring approximately 400 feet by 150 feet (Attachment 1). There is a warehouse in the center of the site with two bay doors facing east and west.

There are a number of vehicles on the site. These vehicles include cars, trucks and trailers. Mr. Charles Lees of Workman and Doggett Auto Parts, an adjacent business, has indicated that the vehicles belong to the Auto Parts store.

The site was refered to the EPA by the Texas Water Commission in August, 1988, and the initial site investigation was made then. In December 1988, the Regional Administrator approved a Classic Emergency Action Memorandum for a stabilization action at this site. The need for that action became apparent during a site investigation performed by the EPA Emergency Response Branch (ERB) in December 1988. Leaking drums of incompatible wastes had subsequently been placed in close proximity, and ERB initiated a classic emergency action for site stabilization.

Approximately 400 drums were present on the site. Many of the drums were empty. Approximately 180 to 200 drums contained materials. The drums were in varying stages of deterioration and some were bulging. Measurements taken of the drum contents indicated materials present with pH ranging from 0 to 13.

After completion of the December, 1988 Classic Emergency action, the warehouse now contains 200 overpacked steel drums, twelve compressed gas cylinders, and a 500 gallon polypropylene vat that is about half full of a dilute solvent. There is a small locked office in the southwest corner of the warehouse. There is a loft along the interior south side of the warehouse where lumber was stored.

Vegetation on site consists of weeds and grass with few trees. The perimeter of the site is overgrown. Various areas show stressed vegetation. There are areas of chemical stained soil evident throughout the site. Two large areas of soil discoloration are present. One is on the northeast corner of the site at the fence line. The other, at the southeast corner of the site, is also adjacent to the fence line. The land in the area is generally flat with no obvious run-off pathways. Buffalo Bayou is less than one mile south of the site.

Ambient air monitoring was conducted with a HNU photoionization detector. HNU readings above background were observed in various locations throughout the site. Outside of the warehouse several readings in the range of 3-5 ppm were measured. Inside the warehouse, three separate readings of 15, 50, and 110 ppm were measured.

The site is not on the National Priorities List.

C. Incident Characteristics:

Historical accounts on this site are limited. However, the site was known to be the location of the May Cooperage, Inc. owned by Mr. Fred Winston. A complaint by an anonymous caller prompted the Texas Water Commission (TWC) and the City of Houston to file complaints against Mr. Winston. Mr. Winston has subsequently abandoned the drum business. Mr. Winston originally moved to the Jensen Drive location from a similar site on Davis Street, which is also currently under EPA evaluation.

D. Quantity and Types of Substances Present:

There are currently 200 drums on site, grouped by compatibility class, and locked in the warehouse onsite. The drums were sampled on December 19-23, 1988, by the Emergency Response Cleanup Services Contractor (ERCS) during the Classic Emergency removal action. The drums were found to contain: Solvents including methyl ethyl ketone (MEK) and xylene; Sludges and liquids containing lead (up to 2000 ppm), chromium, and copper; Acids and caustics with pHs ranging from 0 to 13; and paint residues. These compounds are RCRA hazardous wastes as identified in 40 CFR part 261. A number of these compounds are also considered to be carcinogenic.

E. State and Local Authorities Roles:

The TWC and the City of Houston filed complaints against Mr. Winston about his operation of May Cooperage, Inc. The TWC requested the EPA investigate the site for potential of an imminent and substantial endangerment to the public. The site does not meet the requirements for a state funded removal.

F. Other Actions To Date:

The status of emergency was reached when ERB discovered in December, 1988 that leaking and unstable drums of incompatable materials had been placed in very close proximity to each other and nearby residences. A threat of fire and explosion existed due to the storage arrangement. Therefore, a Classic Emergency Removal Action was undertaken to stabilize the site. The specific actions taken included:

1. Providing site security by repairing the existing fence and employing a temporary guard service;
2. Sampling and staging drums by compatibility class;
3. Obtaining information on PRPs and via enforcement efforts, Pursuing their participation in the cleanup effort;
4. Overpacking drums that were leaking or in poor condition;
5. Storing the drums in a locked onsite warehouse.

The site work was completed on December 29, 1988. When equipment and crews were demobilized, the guard service was discontinued.

III. THREAT TO PUBLIC HEALTH, WELFARE OR THE ENVIRONMENT

A. Threats to Public Health and Welfare:

Although the site fence and gate were repaired in the December 1988 stabilization action, the site is still presents a threat to human health and the environment and is not considered to be secure. During the stabilization action, considerable amounts of drug paraphenalia were found on site. One of the site structures had apparently been utilized by local drug dealers/users as a "shooting gallery". The guard on duty during the action found that several local young people had entered the site in spite of the repaired fence and warning signs. They exited only after the guard presented his firearm. Site and neighborhood vandalism is evident. Vandalism of the site is a significant concern, and could result in injury to the vandals or possibly cause a fire and/or an explosion.

Although the drums are now stabilized in overpacks, the life of these containers is limited. Corrosives on site will steadily decompose these new containers until they fail. A release of the drums contents would result in direct contact, inhalation, and ingestion threats as identified in the December Action Memorandum (Attachment 1).

The significant threat of vandalism at the abandoned site and the ongoing corrosion of the new containers makes the continuation of the action time critical.

B. Threats to the Environment:

A release of these materials would contaminate the surrounding soil. An air release, possibly from a fire, would result in a much greater extent of contamination on the surrounding air, soil, water and vegetation.

IV. ENFORCEMENT

See Attachment 3

V. PROPOSED ACTIONS AND COSTS

A. Proposed Actions:

The proposed action involves the removal and disposal of contaminated soil and drummed materials. No single disposal method is applicable to the various wastes present. The disposal method selected for each waste category was based on consideration of several factors, including cost effectiveness, degree of protection of human health and the environment, and compliance with EPA's offsite disposal policy. The following methods are proposed:

Waste Category	Disposal Method
Contaminated soil	RCRA approved landfill
Drummed wastes	
Liquid solvents	Fuels blending or incineration in a RCRA approved incinerator;
Sludges and solids	Incineration in a RCRA approved incinerator or disposal in a RCRA approved landfill.

The proposed action is expected to take approximately 7 days of on site activity. The response is not being initiated under the OSC's $50,000 authority. The action is not expected to require a twelve-month or a $2 million exemption.

A. Summary of Costs:

Extramural Costs

ERCS Cleanup Contractor $111,000

TAT Contractor Costs $16,000

Subtotal Extramural Direct Costs $126,500

20% Project Contingency $19,000

Total Extramural Cost $145,000

Intramural Costs

Intramural Direct Costs $4,500

Intramural Indirect costs $3,000

Total Intramural Costs $7,500

Total Removal Project Ceiling Estimate $153,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION BE DELAYED

Without further attention, the containers will continue to deteriorate. If this is allowed, the health and welfare of the area residents will be endangered. If the materials are allowed to mix with one another, a fire and explosion danger to the local citizens may result. In the event of a fire, toxic fumes would be emitted, endangering the local citizens. If removal of the waste is not conducted soon, it is likely that a removal action would have to be conducted under true emergency conditions. The more time these containers are allowed to deteriorate, the greater the probability for the liberation and release of chemical substances to the atmosphere and the soil with consequent detrimental health or environmental effects. The longer the site continues to exist in it's current condition, the greater the chance is for vandalism to occur.

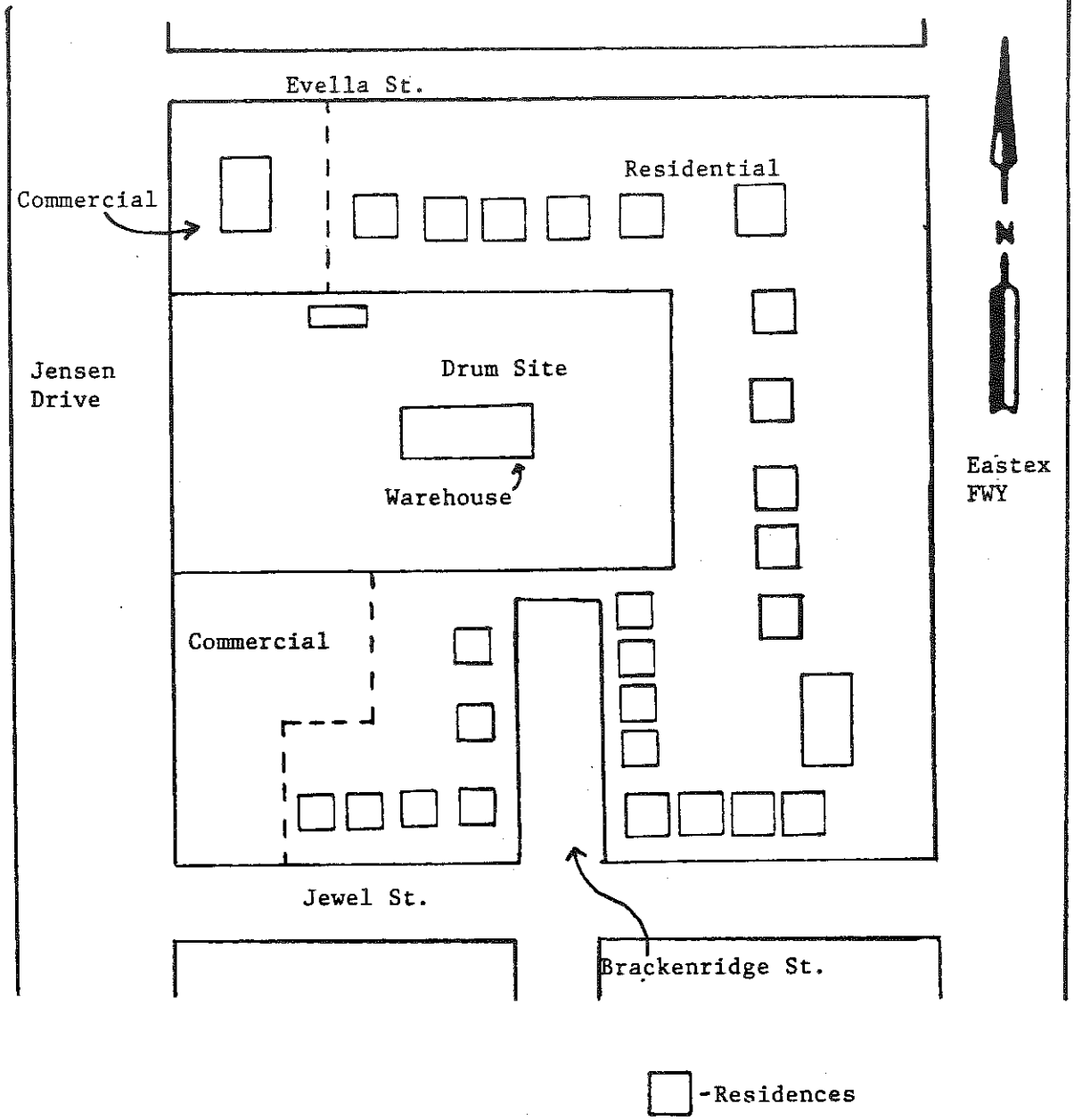
VII. RECOMMENDATION

Because conditions at the site meet the NCP section 30.65(b) (2) criteria for a removal, I recommend your approval of the proposed removal action. The estimated total project costs are $153,000 of which $110,500 are for extramural cleanup contractor costs. You may indicate your approval or disapproval by signing below.

APPROVE: Robert E. Stayton Jr. DATE: March 15, 1989

DISAPPROVE: _____ DATE: _____

ATTACHMENT 1



Sketch of location of Jensen Drive drum site showing proximity to residences

Not To Scale

	Ecology and Environment, Inc. Technical Assistance Team Region VI	Case No: N/A	TDD No: T06-8810-28
		PAN: TTX 0829 SAB	Date: 10-18-88
		Originator: Michael C. Taormina	

Site Sketch
Jensen Street Drum Site
Houston, Texas

ATTACHMENT II.

Table 1
Inorganic Analysis Results from Drum Sample Jensen Drive Site, With
laboratory numbers 8TFAKC46 01 through 10
Results Reported in ug/L

Element	01	02	05	06	08	09	10	Drinking Water Std
Aluminum			722		203	279	2480	-
Antimony	520	356						-
Barium		122	144	74			153	1
Beryllium					50	67		11*
Cadmium	18							10
Calcium		52900	1610	14300	1800	3320	2400	-
Chromium		106	264				39	50
Cobalt		1800	3190					-
Copper	388	88	9760	50			162	1000
Iron	83	20700	7960	9460	440000	494000	1050	300
Lead		269	57300			133	129	50
Magnesium		424000	8150	1150			1940	-
Manganese		2990	132	95	5820	6000	46	50
Nickel		52	50					-
Potassium		20100		5130		16600000		-
Sodium		124000	2310	26800	5660	6060	3140000	-
Zinc	661	448	1770	302	72	144	177	5000*

- No EPA drinking water standard.

* Suggested criterion for drinking water, there is no EPA drinking water standard.

Table 2
Inorganic Analysis Results From Soil Samples At Jensen Drum Site With
laboratory numbers 8TFAKC46 03 and 04

Results Reported in mg/kg

Element	03	04
Antimony	13	
Barium	182	117
Beryllium	3	1
Cadmium	1	1
Chromium	17	8
Cobalt	4	2
Copper	34	18
Lead	158	127
Mercury		0.4
Nickel	17	5
Zinc	381	333

Table 3 Organic Analysis Results From Drum
and Soil Sample at Jensen
Drum Site With Chemical Properties of Substances Detected.

Sample #	Substance	Concentration	Toxicity Properties
02	2,4 - Dimethylphenol	366 ug/L	An equivocal tumorigenic agent; high oral, intra-peritoneal and intravenous. Disaster hazard: when heated to decomposition it emits toxic fumes.
	1 Bis - (2-ethylhexyl) phethalate	235 ug/L	Teratogenic effects; gastro-intestinal tract effects; possible human carcinogen; high intravenous; low oral, and intra-peritoneal; mild irritation effects skin, eye, and systemic. Disaster hazard: when heated to decom-position it emits toxic fumes.
	Benzoic acid	515 ug/L	High toxicity by vapor inhalation, a moderate skin irritant. Disaster hazard: When heated to decomposition it emits toxic fumes.
03	2 - Methylnaphthalene	28,500 ug/kg	Low oral. Disaster hazard: when heated to decomposition it emits toxic fumes.
05	Naphthalene	210 ug/L	Moderate oral; high intra-peritoneal and intravenous. An equivocal tumorigenic agent. Poisoning may occur by ingestion of large doses, inhalation or skin absorption. Moderate fire hazard when exposed to heat or flame.
	Phenanthrene	25 ug/L	Neoplastic effects; an equivocal tumorigenic agent, mutagen. High intravenous; moderate oral. Skin photo-

			sensitizer. A slight fire hazard. Disaster hazard: when heated to decomposition it emits toxic fumes.
	Fluoranthene	23 ug/L	An equivocal tumorigenic agent; high intravenous, moderate oral and skin, mutagenic. Slight fire hazard when exposed to heat or flame. Disaster hazard: when heated to decomposition it emits toxic fumes.
	Pyrene	13 ug/L	Mutagenic; an equivocal tumorigenic agent; a skin irritant. Disaster hazard: when heated to decomposition it emits toxic fumes.
06	2,4 - Dimethyphenol	1370 ug/L	Mutagenic; an equivocal tumorigenic agent; a skin irritant. Disaster hazard: when heated to decomposition it emits toxic fumes.
	Isophorone	129 ug/L	Serious eye, nose and throat irritant by inhalation; seriously toxic by inhalation