



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION V  
230 SOUTH DEARBORN ST.  
CHICAGO, ILLINOIS 60604

NOV 9 1981

NOV 0 5 1981

REPLY TO ATTENTION OF:  
5EWHME

William Rock, Deputy Director  
Bureau of Solid Waste Management  
Wisconsin Department of Natural  
Resources  
Post Office Box 7921  
Madison, Wisconsin 53707

Re: Saukville Well Contamination

Dear Mr. Rock:

During the past two years, this office and the Department's Bureau of Solid Waste have cooperated in the investigation of the contamination of the Village of Saukville's well water supply. Based on the quarterly sampling program conducted by the U.S. Environmental Protection Agency (U.S. EPA) and other information evaluated during this time, sufficient information has been developed to indicate that Freeman Chemical Company is the primary source of this contamination.

In this regard, we have continued our discussions with the Department's hazardous waste staff regarding the need for a detailed hydrogeological study of the Freeman plant and surrounding area. We have contracted with Ecology and the Environment, Inc., environmental science consultants, for the preparation of a groundwater study plan for the Saukville area. Two copies of this report are enclosed.

Freeman Chemical Company should be required to perform this investigation. It is our understanding that the Department will contact Freeman in the near future to develop the details of the groundwater study and to determine Freeman's willingness for such an undertaking. If the company is not agreeable to your proposals, or if the Department is lacking the authority to require the study be made, we will be ready to support your position. A draft Order Requiring a Proposal for Sampling, Analysis and Monitoring pursuant to Section 3013 of the Resource Conservation and Recovery Act (RCRA), has been prepared by this office and will be referred to our Headquarters in Washington, D.C. for issuance, should you not reach an agreement with Freeman within a reasonable time. A copy of this draft Order is enclosed.

Also, we are concerned that Freeman be made aware of the violations of the hazardous waste regulations adopted under Subtitle C of RCRA. A copy of a U.S. EPA inspection report dated March 27, 1981, and a draft RCRA Compliance Order for remedy of these violations have been sent to your staff under separate letters. We had agreed that the Department would inform Freeman of the violations and track their future compliance. Dealing with the company on issues associated with the potential for contamination of the Saukville drinking water should not preempt efforts to effect compliance with the hazardous waste regulations.

Please keep us informed as to your progress and copy us on all correspondence with Freeman regarding this matter. If you have any questions, please contact Norm Niedergang of our Water and Hazardous Materials Enforcement Branch at (312) 886-6745.

Very truly yours,

*Dale D. Bryson*

for Sandra S. Gardebring  
Director, Enforcement Division

Enclosures

Rec'd 11/9/81-DNR

**DRAFT**

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	
FREEMAN CHEMICAL COMPANY (RESPONDENT)	)	DOCKET NO.
	)	
PROCEEDING UNDER SECTION 3013	)	
RESOURCE CONSERVATION AND RECOVERY ACT	)	
(42 U.S.C. § 6934)	)	

ORDER REQUIRING PROPOSAL FOR SAMPLING, ANALYSIS AND MONITORING

The Administrator of the United States Environmental Protection Agency (U.S. EPA), acting by and through the person whose name and signature appears herein, has been presented with information from which a determination has been made that the presence or release of hazardous waste at the facility or site described as follows:

A tract of land known as the Freeman Chemical Company Site, located at Railroad Street, consisting of 9.5 acres, more or less, in the Town of Saukville, Ozaukee County, Wisconsin, (herein referred to as the "site"), which is now or has been owned, operated or controlled by Freeman Chemical Company, may present a substantial hazard to human health or the environment.

DETERMINATION OF SUBSTANTIAL HAZARD

The information presented from which a determination was made is as follows:

- (1) State of Wisconsin, Committee on Water Pollution report dated March 26, 1952, recommending that Freeman Chemical Company provide for disposal of reactor distillate rejects by discharging the waste to the ground in the vicinity of the plant for disposal by soil absorption.
- (2) Memorandum for File dated June 24, 1952, by R. H. Scott, Wisconsin State Board of Health, reporting that reactor condensate was being discharged to the ground surface by the Respondent at a rate of 25 gallons per day.
- (3) Letter from Mrs. Karen A. Kruger, 228 S. Claremont Road, Saukville, Wisconsin dated July 1979, to Congressman Eckhardt, U.S. House of Representatives, reporting observation of a chemical spill at Respondent's facility which caused her children to suffer throat and respiratory irritation, and noting odors in the Saukville drinking water.
- (4) "History of Efforts to Resolve Water Contamination Problems at Well No. 2," prepared by the Village of Saukville, December 11, 1980, reporting complaints by Saukville residents concerning odor of the drinking water, beginning in February 1979.

**DRAFT**

(5) Chemical analysis by U.S. EPA of water samples collected from wells in Saukville surrounding the Respondent's property. Results of the analysis showed the following chemicals. A map showing the location of the wells is attached (Attachment A).

<u>Constituent</u>	<u>Sampling Date</u>	<u>Value (parts per billion)</u>
<u>Well 2</u>		
* benzene	January 15, 1980	.2
* trichloroethylene	January 15, 1980	.5
	November 19, 1980	.9
* tetrachloroethylene	August 5, 1981	.4
<u>Well 4</u>		
* tetrachloroethylene	August 5, 1981	.6
* methyl benzene(toluene)	August 5, 1981	1.6
ethyl benzene	August 5, 1981	1.6
1,2 & 1,4 dimethyl benzene(xylene)	August 5, 1981	4.9
<u>Laubenstein Well</u>		
* benzene	February 24, 1981	29
* trichloroethylene	February 24, 1981	2018
* dichloromethane	February 24, 1981	2.6
* 1,2 dichloroethene	February 24, 1981	63
ethyl benzene	February 24, 1981	5.2
<u>Cemetery Well</u>		
* tetrachloroethylene	August 5, 1981	1.3
* methyl benzene(toulene)	August 5, 1981	1.77
ethyl benzene	August 5, 1981	1.8
1,3 dimethyl benzene(xylene)	August 5, 1981	5.4
1,2 & 1,4 dimethyl benzene(xylene)	August 5, 1981	6.1

The constituents marked with an '\*' are listed by U.S. EPA in 40 CFR Part 261 as constituents of hazardous waste.

6. Part A, RCRA Permit Application submitted by Respondent on November 3, 1980, in which Respondent applied for authorization to treat the following hazardous wastes:

<u>EPA Hazardous Waste No.</u>	<u>Description</u>	<u>Volume (pounds per year)</u>
F003	Spent solvents-xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, n-bertyl alcohol, cyclohexanone	100,000
U002	acetone	1000
U008	acrylic acid	5
U112	ethyl acetate	5
U140	isobutyl alcohol	200
U147	maleic anhydride	500
U154	methanol	500
U190	pthalic anhydride	1000
U220	toluene	1000
U223	toluene diisocyonate	500
U229	trichlorofluoromethane	1000
U239	xylene	1,000,000
D002	corrosives	1,700,000

**DRAFT**

7. Report of RCRA Compliance Evaluation Inspection conducted on March 13, 1981, by Richard E. Boice, U.S. EPA, reporting a leaking valve on a xylene-feed line to an incinerator at Respondent's facility. Xylene was observed discharging into the ground surface.

8. Chemical analysis by U.S. EPA of a water sample collected on August 5, 1981, from a sedimentation basin for the truck washing operation at Freeman Chemical Company indicated the following constituents. These compounds have been detected in the groundwater surrounding Respondent's property.

<u>Chemical</u>	<u>Value (parts per billion)</u>
* methyl benzene (toluene)	530 <i>H<sub>2</sub>O</i>
ethyl benzene	11,320 <i>H<sub>2</sub>O</i>
* tetrachloroethylene	35 <i>H<sub>2</sub>O</i>
1,3 dimethyl benzene	19,950 <i>H<sub>2</sub>O</i>
1, & 1,4 dimethyl benzene	22,400 <i>H<sub>2</sub>O</i>

\* The constituents marked with an '\*' are listed by U.S. EPA in 40 CFR Part 261 as a constituent of hazardous waste.

ORDER

Based upon the information set forth above, and the determination of a substantial hazard to human health or the environment which may be presented by the presence and discharge of hazardous wastes from the site, the Respondent is hereby ordered, pursuant to Section 3013, of the Resource Conservation and Recovery Act, as amended (42 U.S.C. § 6934) to prepare and submit to the undersigned at the address shown below, a proposal for the sampling, analysis, reporting and monitoring of the hazardous waste present on or being discharged from the site. The proposal ordered herein should include, without limitation, the following matters:

- (1) The location, constituents, and amounts of all chemical wastes which have been treated or disposed of by the Respondent either on-site or in the village of Saukville in the area surrounding the site, including relevant time periods;
- (2) a description of all chemical waste treatment or disposal operations, including the manner in which such waste was treated or disposed of;
- (3) detailed chemical analysis of wastes which have been treated or disposed of, for at least the volatile organic fraction of the U.S. EPA priority pollutants (see Attachment B);

**DRAFT**

The proposal ordered herein must be submitted by Respondent to the Director, Enforcement Division, Region V, U.S. EPA, 230 South Dearborn St., Chicago, Illinois, within thirty (30) days of the date of this Order. The proposal shall be certified by a Registered Professional Engineer or qualified hydrogeologist. Failure to comply with the terms and provisions of this Order will subject Respondent to a civil action by U.S. EPA for appropriate relief under above mentioned Act.

Under the provisions of the Act, you are entitled to request a conference with U.S. EPA at which you may appear in person and by attorney or other representatives for the purpose of presenting any objections, defenses or contentions which you may have regarding your liability to conduct the sampling, analysis, monitoring and reporting program described in this Order; the scope of the program; or the proposal which you are required to submit. Any objections, defense or contention which you may make should be in writing, signed and forwarded to Mr. Norman Niedergang, Water and Hazardous Materials Enforcement Branch, Region V, U.S. EPA, phone: (312) 353-2110, as soon as possible.

WITNESS MY HAND as Administrator of the United States Environmental Protection Agency, on this \_\_\_\_\_ day of \_\_\_\_\_, 1981.

U.S. Environmental Protection Agency

By: \_\_\_\_\_

**DRAFT**

**DRAFT**

(4) installation of a network of groundwater monitoring wells for the purpose of:

- a. determining the direction and velocity of groundwater flow,
- b. determining aquifer characteristics of hydraulic conductivity, transmissivity and storativity,
- c. determining the cone of depression for Village Well No. 2,
- d. determining the potential for movement of contamination off-site, and
- e. determining degree of groundwater contamination;

(5) a sampling and analysis program for monitoring groundwater, both on-site and off-site, which describes frequency of sampling and sampling and analytical procedures;

(6) analysis of groundwater samples from newly installed wells and existing Village wells for at least the volatile organic fraction of the U.S. EPA priority pollutants (see Attachment B);

(7) physical and chemical analysis of soil samples collected during well installation, including sufficient physical data to allow preparation of a geologic profile of the site; Chemical analysis shall be performed on at least one soil sample from each drilling location expected to be downgradient of a contaminant source and shall include analysis for at least the parameters listed on Attachment B.

(8) performance of slug tests or pumping tests to determine aquifer characteristics;

(9) a proposed schedule for the implementation of the items set forth above;

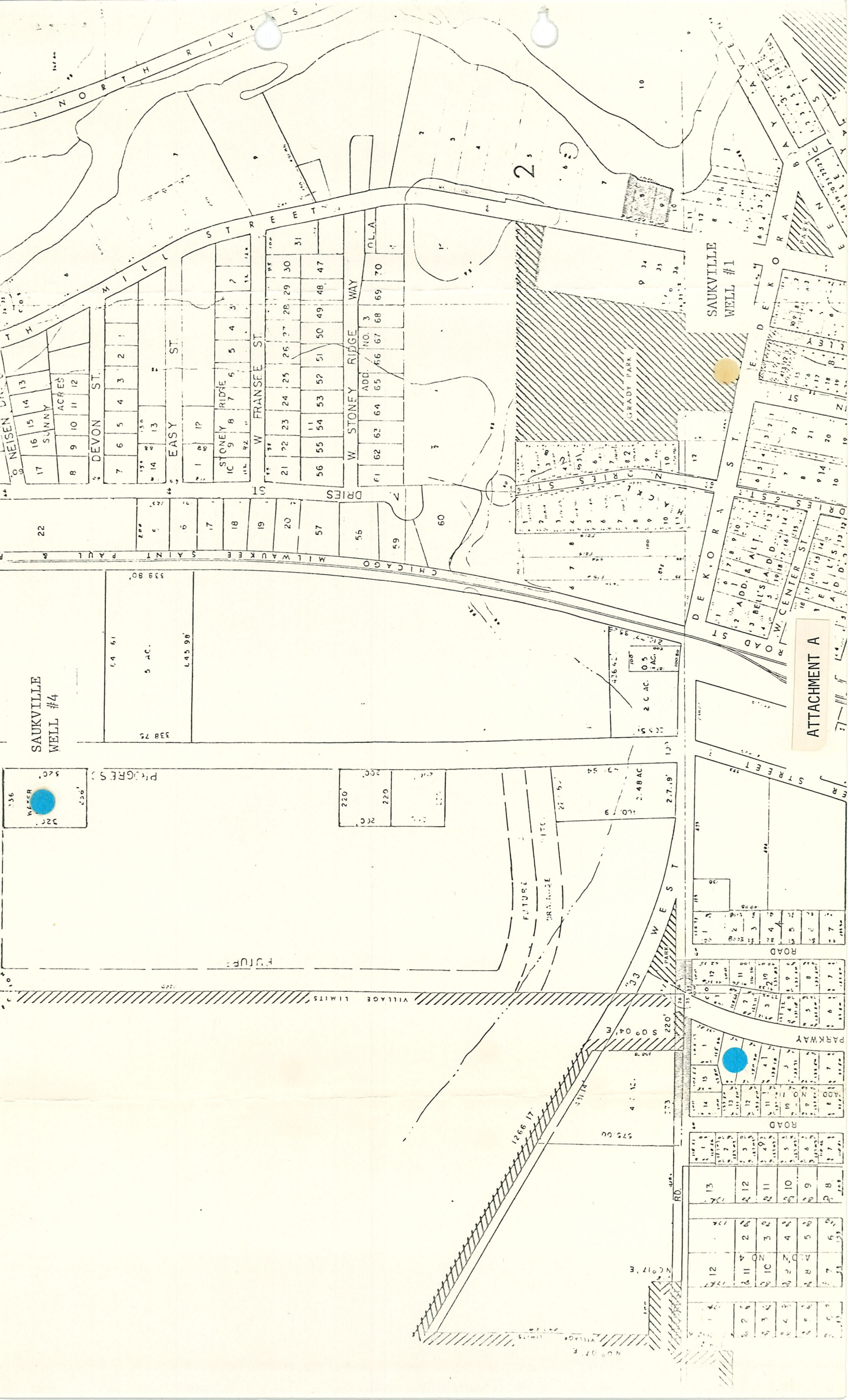
(10) the means and frequency of reporting to U.S. EPA the implementation of the items set forth above, and the results of the sampling, analysis and monitoring program; and

(11) how the Respondent will gain rights of entry to off-site sampling and drilling locations which may be necessary to carry out the program for sampling, analysis and monitoring to be proposed pursuant to this Order.

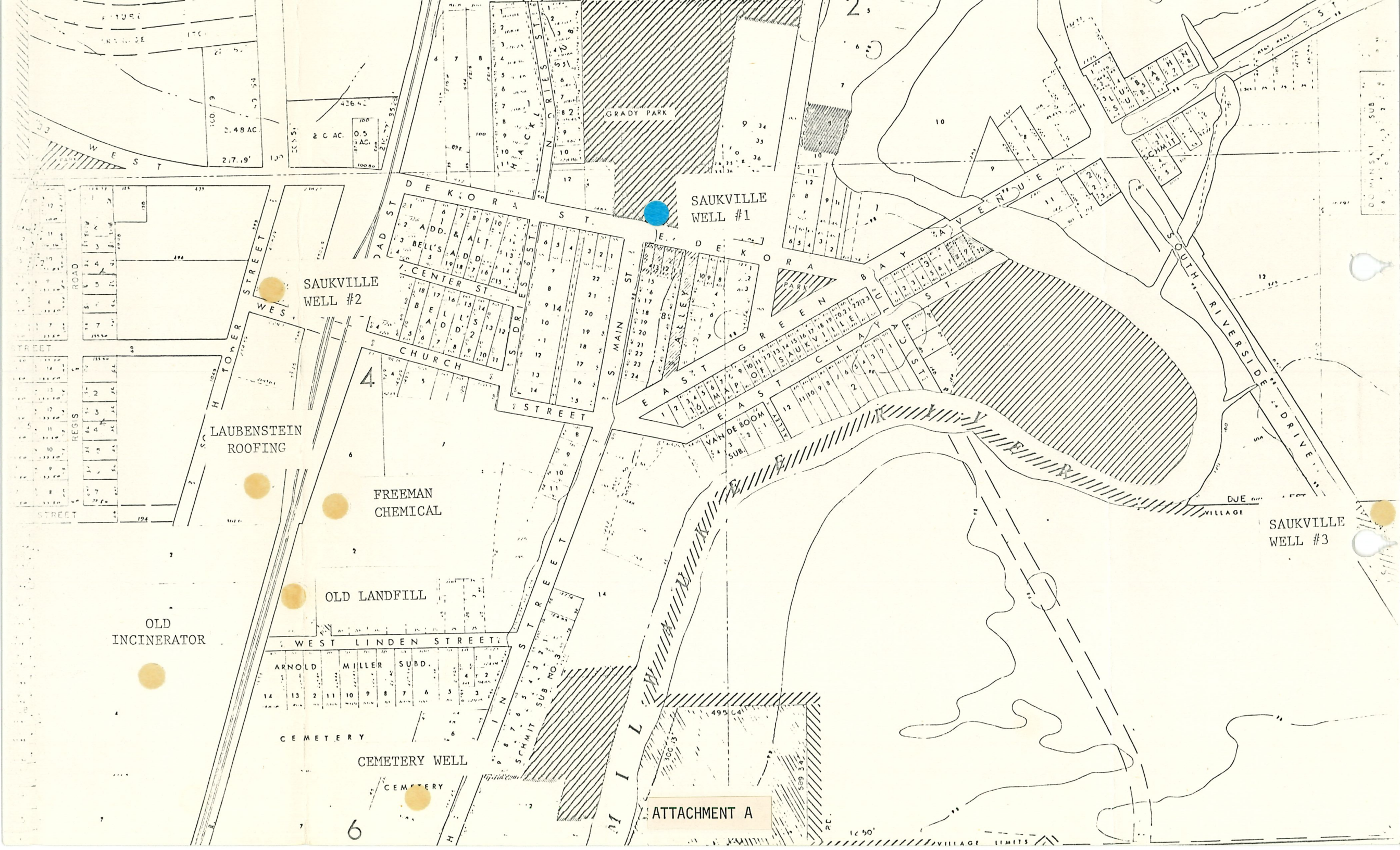
SAUKVILLE  
WELL #4

SAUKVILLE  
WELL #1

ATTACHMENT A







SAUKVILLE WELL #1

SAUKVILLE WELL #2

SAUKVILLE WELL #3

ATTACHMENT A

GRADY PARK

FREEMAN CHEMICAL

LAUBENSTEIN ROOFING

OLD LANDFILL

OLD INCINERATOR

ARNOLD MILLER SUBD.

CEMETERY

CEMETERY WELL

CEMETERY

6

1250'

VILLAGE LIMITS

WEST  
2.48 AC  
217.19'

2 C AC.  
0.5  
100 AC.

RESIS STREET  
TOWER STREET  
WEST

DEKORAST  
BELL'S ADD.  
CENTER ST  
CHURCH STREET  
S. MAIN ST  
ALLEY

EAST GREEN ST  
VAN DE BOOM SUB  
S. CLAY ST

SOUTH RIVERSIDE DRIVE  
SCHMIT  
DUE VILLAGE

WEST LINDEN STREET  
CEMETERY

SCHMIT SUB NO. 3  
MILL

495 L4  
589 34'

1250'

ATTACHMENT B

VOLATILE ORGANIC FRACTION  
U.S. EPA PRIORITY POLLUTANTS

acrolein	1, 2 - dichloroprophyllene
acrylonitrile	ethyl benzene
benzene	methylene chloride
carbon tetrachloride	methyl chloride
chlorobenzene	methyl bromide
1, 2 dichloroethane	bromoform
1, 1, 1 - trichloroethane	dichlorobromomethane
1, 1 - dichloroethane	trichlorofluoromethane
1, 1, 2 - trichloroethane	dichlorodifluoromethane
1, 1, 2, 2 - tetrachloroethane	chlorodibromomethane
chloroethane	tetrachloroethylene
2 - chloroethylvinyl ether	toluene
chloroform	trichloroethylene
1, 1 - dichloroethylene	vinyl chloride
1, 2 - trans-dichloroethylene	1, 2 - dichloropropane