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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-6669

Mr. Robert Bowden, Chief
Spill Response Section
Environmental Protection Agency
536 South Clark Street
Chicago, Illinois 60605

August 24, 1984

TAT-05-F-00395

Reference: Myers' Dump Site Assessment
TDD# 5-8405-14

Dear Mr. Bowden:

Please find attached the final Site Assessment report on the Myers' dump site near South Bend, Indiana. The site, as determined through an inspection and review of limited background data, appears to merit immediate removal of flammable materials and a small quantity of potentially shock-sensitive organic peroxide. Large quantities of additional waste materials are also present on the site; however, chemical information would be required prior to any removal activity.

If you have any questions or require additional information, please call.

Respectfully,

A handwritten signature in black ink, appearing to read "Kurt S. Stimpson", written in a cursive style.

Kurt S. Stimpson
Technical Assistance Team
Leader, Region V

KSS:amp

Enclosure

EPA Region 5 Records Ctr.



248175

SITE ASSESSMENT
FOR
MYERS' DUMP
OSCEOLA, INDIANA

Prepared For:

U.S. Environmental Protection Agency
Region V
536 S. Clark Street
Chicago, Illinois

CONTRACT NO. 68-95-0017

TAT-05-F-00380

TDD# 5-8405-14

Prepared by:

REGION-SPER
Technical Assistance Team
Region V

July 1984



1.0 SITE LOCATION AND HISTORY

01 0558

The property known as Myers' Dump is located at 11303 Edison Road, Osceola, Indiana. It is a five acre tract of land 225 ft wide by 950 ft long in the south-central part of Section 32, T38N, R4E (Figure 1). Agricultural land borders the site on its north and east boundaries while Edison Road is south and a vacant lot is to the west. The St. Joseph's River flows 1 1/4 miles south of the property. Numerous residences are located immediately west of the vacant lot and beyond the agricultural land to the east. Population in the immediate St. Joseph County, Penn Township area is approximately 2,000.

Mr. Galen Myers purchased the Edison Road property on February 2, 1970. He and his family resided at this location until his death in June 1983. Mr. Myers operated a salvage business during these years primarily recycling 55 gallon drums in to burn barrels and rubbish containers. The drums were acquired from the local industries in nearby Elkhart, Mishawaka, and South Bend, then cleaned, deheaded and sold. Often drums of various size, origin, and hazard were delivered to the Myers' property still containing amounts of original or waste materials. It is not known what quantity of these materials were accepted over the years, or what procedures Mr. Myers' used for the handling and disposing of them. No manifests, bills of lading or receipts documenting any accepted wastes have been located. His sons have reported that many of the materials were simply dumped on the ground or staged on the property. This appears to be the case, based on information from the county and state, and field inspections conducted by the TAT.

The illegal dumping and unauthorized storage of hazardous materials at the site was first investigated by St. Joseph County Health Department personnel in June 1981 after a nearby resident had complained about the application of raw sewage to agricultural lands northeast of Myers' property. During their inspection of the agricultural land, the inspectors discovered the dumping and storage of waste on Myers' property and requested him to cease such activity. The county health department subsequently submitted a complaint to the Indiana State Board of Health (ISBH) about illegal hazardous waste activity at the site.

On April 5, 1983, Mr. Dave Koepper of the Land Pollution Control Division, ISBH, inspected the Myers' property. This inspection revealed that drummed solid and liquid wastes, some which appeared to be paint waste, were scattered over the site. A group of ten drums, of which one was stenciled "WASTE ACETONE" was identified as originating from a defunct Elkhart, Indiana, business--The Williams Company. Mr.

Koepper contacted a Mr. Bush at Leigh Products Company, parent of The Williams Company, about the drums but a positive identification could not be made (see Attachment 1). The ISBH subsequently contacted the Region V U.S. Environmental Protection Agency (U.S. EPA) Spill Response Section and requested an inspection of the site to determine if an emergency cleanup action was warranted. On June 1, 1983, Mr. Robert Bowden, Chief, Spill Response Section, directed the Technical Assistance Team (TAT) to assess the site and to develop a cleanup plan if necessary.

TAT member Geoff Watkin visited the Myers' property on June 3, 1983. Upon arrival, Mr. Watkin was informed that Galen Myers had died the previous night. Due to this and the fact that many friends and relatives were on the property, the assessment was somewhat hindered. There were many drums on the west side of the site, all of them empty and open-topped. Markings indicated that most of the barrels had contained food products. The "WASTE ACETONE" drum, reported by Mr. Koepper of ISBH, was not found, although seven unmarked drums on the east side of the property were found to contain solids. The late Mr. Myers' daughter indicated that it was her mother's intention to dispose of the drums and other collected debris on the property now that the business was to close.

Because it was the intention of the owner to clean up the property, it was recommended by TAT that the ISBH monitor activities at the Myers' and if any hazardous materials were found, that the U.S. EPA Spill Response Branch should be notified (see Attachment 2).

After no efforts were made by the surviving members of the Galen Myers' family to clean up the site, the ISBH conducted another inspection on April 24, 1984. The inspectors, Messrs. Dave Koepper and Dave Barry, found the site unchanged and were unable to contact any of the family members (Attachment 3). Based upon the apparent abandonment of the site, the ISBH again requested that it be evaluated for an emergency action (Attachment 4).

2.0 SITE ASSESSMENT

On ~~July~~ ^{June 15} 14, 1984, TAT member Geoff Watkin and Mr. Art Murphy of ISBH conducted a site assessment of the Myers' property. The five acre site was thoroughly inspected and St. Joseph County Court Land Planning and Health Department files were investigated to determine the current status of the property. Based on previous TAT and ISBH inspections, the site was investigated in Level D personnel protection (Site Safety Plan, Attachment 5). The Myers' house, garage, storage

buildings, and storage trailers were locked and inaccessible during this initial assessment. Based on previous reports and site visits, the property was found to be strewn with considerably more drums than anticipated and had several areas which may have been used for waste dumping or burial.

Inspectors commenced the inspection at Edison Road and proceeded north through the site on the dirt access road (Figure 2). Access to the site from Edison Road was unrestricted, though there is a three strand wire fence around the other three sides of the property. Three abandoned vehicles were in the driveway of the property as were numerous empty and full or partially full drums. One of the vehicles contained a drum full of oil and three drums of aqueous liquids. The oil drum was marked with a "MOTOR OIL" stencil and one of the other drums was marked "WINDSHIELD WIPER CONCENTRATE." Other drums, empty or containing waste, were noted along the east boundary of the property in the driveway area. Most notable of those containing materials were two 15-gallon drums against a fence at the north boundary of the driveway (Attachment 6, photograph 1-3). One was marked "CIBA--GEIGY TINUVIN RAMAC, MADE IN SWITZERLAND" and was two-thirds full (Attachment 6, photograph 4); the other was marked "COMBUSTIBLE LIQUID" and was one-quarter full. The empties were mostly 55 gallon drums with various manufacturers' labels, such as Alcoa, 3-M, and Amoco. Black tarry residues and an aluminum paste-type substance, presumably dumped from drums during Myers' operations, were noted in various areas of the driveway.

Immediately behind a fence separating the northeast part of the driveway area from the rest of the property are approximately 30 drums, 20 of which contain varying amounts of liquids and/or sludges. The empty drums are open and in various states of deterioration. Low levels (1 to 5 ppm) of organic vapors were detected inside the drums using a calibrated photoionization detector with 10.2 ev probe and 9.8 span setting. All the drums were similar in design and color, being reddish 55-gallon drums with a center end bung and hexagonal plug. Several of the drums that contained waste as well as empty drums had stenciled markings indicating they had originated from Anco Products of 2500 South _____ Street, Elkhart, Indiana (the _____ represents a numbered street, probably 7th or 17th).

As shown in Figure 2, numerous drummed wastes were discovered on the Myers' property. Empty drums were also found all over the property, but are represented unproportionately on the figure due to space limitations. The drums that contain waste are most notably represented by the following:



01 0562

- o Fourteen 15-gallon drums containing paint waste. These drums are located in various areas throughout the property and can be identified by different colors of overflow and spillage on the outside of the container. Some of these drums have labels of the Inmont Corporation, Detroit, Michigan (Attachment 6, photographs 5-8).
- o One 15-gallon drum with the label of Lucidol Division of Pennwalt Chemical. The label identifies the contents as di-t-butyl peroxide which is a flammable organic peroxide. This compound is reactive and has potential for becoming shock-sensitive. The container is in good condition and approximately two-thirds full (Attachment 6, photographs 9-10).
- o Fifteen 55-gallon drums staged on their sides in a group. These white drums, although they have no company labels on them, have similar numbering stencils on their sides and have a black tarry waste leaking from some of the bungs (Attachment 6, photograph 11). It is believed that these are the drums referred to in the ISBH memo originated by Dave Koepper on April 12, 1983 (Attachment 1). The memo places the drums' origin as from the defunct Williams Company in Elkhart, Indiana, whose parent company is Leigh Products Company of Grand Rapids, Michigan (phone: 616/942-1440, contact: Mr. Bush).
- o Forty-one 55-gallon drums located throughout the property are generally unmarked and miscellaneous in nature. They contain varying quantities of unknown liquids, solids, and mixtures (Attachment 6, photographs 12-17).

In addition to the drums containing waste, many of the empty drums found throughout the site merit mention on the basis of their labels, number, or suspected past contents. An empty drum, found in the midwest section of the site, near a pit of debris, had clear manufacturer's markings identifying its past contents as 200 lbs of 97% sodium cyanide (Attachment 6, photograph 18). Approximately 10 to 15 empty drums, located just south of the cyanide drum, were all similar and labeled as "LACQUER." These drums were from Morten Chemical of Chicago, Illinois. Other empty drums, located around the site, such as those scattered near the 15 staged white drums, looked as though they had contained materials but had been dumped or had deteriorated to release their contents. Also, many of the drums considered as empty, contain some residues or solids.



01 0563

The drums detailed above are those discovered during the first site assessment, but due to heavy brush, large piles of debris, and the large area of property inspected, it cannot be assumed that all drums were discovered.

Several physical features of the Myers' property suggest waste burial or dumping in pits. Dirt piles, pits and areas bare of vegetation are evident around the site and, in most cases, drums can be found in the their proximity. An apparent disposal pit in the far northwest part of the site is surrounded by dirt piles and contains both crushed drums and rubbish (Attachment 6, photograph 19). Full and empty drums are also scattered nearby. Just north of this pit, is an overgrown dirt pile which also has drums staged next to it. As discussed earlier, an empty cyanide drum was discovered adjacent to a pit full of debris in the midwest part of the site. Nearby there are bare areas in what is otherwise a very overgrown field. Finally, there is a depressed pit-type area in the mideast portion of the site, which Myers' sons claim was used to back vehicles into for loading. An inspection of the pit floor revealed a thin black layer of what appeared to be organic residuals at the surface of the soil.

After inspecting the site, Messrs. Murphy and Watkin proceeded to St. Joseph's County offices in South Bend, Indiana. They visited the Health, Land Planning, and Court divisions of local government to gather background information and determine the current status of the estate. Land Planning and Health Department personnel reported that the area was extremely sandy (Brem's fine sand) and had a ground water depth as shallow as 10 to 15'. Ground water flow is generally toward the St. Joseph's River to the south, with a slight westerly influence in the direction of the river's flow. Local water supplies around the Myers' dump are obtained from resident wells about which little is known. The St. Joseph's County Clerk's Office reported that the Galen Myers' estate was still open due to its being contested by family members but was expected to close soon. The total value, including real estate, was placed at less than \$30,000.

On June 27, 1984, Art Murphy and Geoff Watkin visited the site to gather samples and gain access to the locked buildings and trailers on site. Mr. Murphy attempted to contact Galen Myers' sons, Dwayne and Dixon, through their attorney, Mr. Phillips Skodinski, of 203 Chamber of Commerce Building, South Bend, Indiana, to obtain keys for the locks but the Myers could not be reached. However, water samples for organic analyses were obtained from five residents' wells near the Myers' property. Also, five soil samples were taken

at various locations on the property. Mr. Murphy maintained his efforts of obtaining keys and after contacting Dwayne and Dixon Myers, arranged a meeting on the site for July 13, 1984. Also attending this site visit were Mr. Jack Barnette, OSC, U.S. EPA, Region V, and Geoff Watkin and Paul Aronian of TAT. After inspecting the storage buildings and trailers, investigators were satisfied that they contained no hazardous materials. They were used primarily by Galen Myers' surviving family to store property of value, pending the decision on the estate. Inspectors again surveyed the site and discussed it in terms of the environmental hazards present and potential actions to resolve them.

01 0564

3.0 THREAT TO HUMAN HEALTH AND THE ENVIRONMENT

Regulatory and environmental interest in the Myers' dump site did not begin until the last month of its operation and in the year since the death of Mr. Myers. Therefore, virtually no historical information concerning the operation of this site is available, nor is there any sampling or analytical data to provide insight into the specific materials accepted there or the extent of contamination resulting from the operation. The only sampling done on or around the site has been done by the TAT and results of the analyses were not available at the time of this writing. However, based on the several site visits by U.S. EPA personnel and contractors, the Myers' dump site was found to pose direct and indirect threats to human health and the environment. These threats include fire and/or explosion, direct human contact, and ground water drinking water contamination.

The 20 reddish-brown 55 gallon drums with liquid contents at the front of the site, the 15 white 55 gallon drums stacked on their sides, and the numerous paint waste drums found throughout the site are suspected to contain flammable materials. Some of these drums are bulged and one of the paint waste drums hissed with pressure during the July 13, 1984, site visit. Flammable and combustible liquid labels can be found on both empty and full drums throughout the site. The flammable components of paint waste are normally petroleum distillates, such as Varnish Makers and Painters (V, M and P) naphtha whose flash points range between 40 and 100°F. Acetone, which has a flash point of 15°F, is also suspected in some of the wastes. Di-t-butyl peroxide, of which a 15 gallon drum was found on site, has a flash point of 65°F, is a strong oxidizer and may ignite if it comes in contact with organic materials or explode if shocked or in contact with reducing agents. Adding to the potential for fire and/or explosion is the heavily overgrown nature of the site which an accidental fire or act of vandalism could ignite.

The Myers' property, as a whole, is easily accessible from all directions. A three-strand wire fence surrounds the site on all but the front or south side. The fence is broken in some areas and is easily passable. It is an inviting property for children to play on, and Dwayne and Dixon Myers stated that they have experienced trespassers and vandals. Due to its accessibility, the potential for direct human contact with hazardous materials is high on the site. Although the specific chemicals contained in the drums, in residues on the driveway and in the materials dumped in the disposal pit are not known, the suspected contaminants would pose a toxicity threat. Solvent, heavy metal, and cyanide containing wastes are strongly suspect on the site due to the quantity of paint waste and the empty drum of pure cyanide found on site. The physical nature of the site compounds the potential for direct exposure to wastes. The open pits, irregular terrain, overgrown fields, and haphazard distribution of metal debris and drums on the site all contribute to hazards awaiting unwary trespassers and vandals.

01 0555

The third human health and environmental threat posed by the Myers' dump site is the potential for contaminating ground water thus, and drinking water supplies. All homes on the Myers' site are on residence wells as was the Myers' property itself. The soil in the area of the site is extremely sandy as described in Section 2.0 and the ground water level is only 12 to 15' below the surface. As is evident from the disposal pit on the site, Mr. Myers dumped domestic garbage directly into excavated holes on his property. It is not known whether he dumped hazardous waste into these pits, but his sons claim that they routinely dumped residues onto the driveway area. Water samples have been taken of five residences along Edison Road; four of these west, and one east of the Myer's property. Results have not been received at the time of this report.

4.0 RECOMMENDED ACTIONS

From this Site Assessment, made at the Myers' dump site in Osceola, Indiana, it is apparent that hazardous chemical wastes were improperly disposed of on the property. In terms of its potential for fire and/or explosion, directly exposing humans and contaminating ground water and drinking water supplies, the site is considered to pose imminent threats to human health and the environment. Therefore, the following recommendations are made in lieu of an Emergency Action Plan:

- o Classify and remove the drums on the surface of the site and dispose of them properly.



- o Conduct a sampling survey to define type and extent of soil and ground water contamination (initial activities addressing this recommendation have been implemented by the TAT who obtained five site soil grab samples and five resident well samples). 01 0566
- o Excavate and dispose of grossly contaminated soils as dictated by the sampling survey and/or fill in the currently open disposal pit on site.
- o If necessary, provide for monitoring of ground water downgradient from the site.

These recommendations are generalized because of the lack of information concerning the wastes Myers accepted and his operations for handling them. A high degree of hazard is recognizable and action is warranted for many of the drums on site. Particularly this would include the organic peroxide and flammable waste drums. Also, since local soils are so permeable and the drinking water supplies of nearby residents are highly vulnerable, further sampling to define any contamination in these areas should be conducted.

01 0567

ATTACHMENT ONE

First ISBH Assessment Report

STATE BOARD OF HEALTH

INDIANAPOLIS

01 0568

OFFICE MEMORANDUM

TO: Williams Company RCRA File

FROM: David Koepper *OK 4/15/83*
Division of Land Pollution Control

SUBJECT: Improper Storage/Transport of Hazardous Waste

DATE: April 12, 1983

THRU: Lee Langlotz *LW*
Guinn Doyle *GD*

On April 5, 1983, I inspected the property of Mr. Galen Myers after receiving a complaint from the St. Joseph County Health Department about illegal hazardous waste activity. The inspection revealed that Mr. Myers collects drums (55-gallon) from local industry and sells them for trash barrels. Over the years that he has done this, he has collected several drums which contained varying amounts of solids in them. Some of these drums remain on his property seemingly full of solid materials with the appearance of solidified paint waste. These drums are scattered about the property behind his house. Mr. Myers also has in his possession ten 55-gallon drums of waste from the now closed Williams Company in Elkhart. Mr. Myers said that these drums contained a liquid or semi-liquid. One of the drums is stenciled "Waste Acetone." One of the drums had developed a leak from the bung (all these drums are stacked on their sides) which had solidified shut with a black tarry substance. I was unable to obtain a sample because of the prone position of the drums.

After some inquiry I found out that the parent company of the Williams Company was headquartered in Grand Rapids. The Leigh Products Company representative I spoke to seemed somewhat reluctant to do anything about these drums without more information. His name was Mr. Bush at 616/942-1440. He is inquiring into the matter and promised to get back in touch when he finds out anything.

Mr. Galen Myers
11303 Edison
Osceola, Indiana
219/259-5946

Leigh Products Company
Grand Rapids, Michigan
616/942-1440
Mr. Bush--Environment

DJK/gw

Be sure to follow up on this!
GD

01 0569

ATTACHMENT TWO

First TAT Assessment Report

TO: Robert Bowden

23 June 1983

FROM: Technical Assistance Team

TAT-05-F-00169

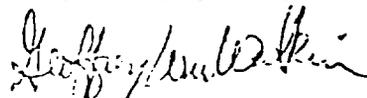
VIA: Site Assessment at Meyer's Dump
Osceola, Indiana
TOD# 5-8306-4

On 1 June 1983 the Technical Assistance Team was requested to conduct a preliminary assessment of Meyer's Dump, 11303 Edison Rd, Osceola, Indiana. The site was first recognized for possible illegal hazardous waste activity by the St. Joseph's County Health Department who notified the Indiana State Board of Health (ISBH). On 5 April 1983, Dave Koepper, Land Pollution Division, ISBH, inspected the property and found that the owner, Mr. Galen Meyers, seemed to be illegally storing hazardous waste on his property. Mr. Koepper found that Meyer's operation recycled used 55 gallon drums from local industry into trash barrels. Over the years, Mr. Meyer had accumulated the residual solid wastes left in the drums and he stored these at the back of his property. Koepper also reported that he found ten 55 gallon drums that contained liquid, one of which was marked "Waste Acetone".

On 3 June 1983 TAT member Geoff Watkin conducted a site assessment at the Meyer's property. Upon arrival, Mr. Watkin was informed that Galen Myer's had died the previous night. Due to this and the fact that many friends and relatives were on the property, the assessment was somewhat hindered. There were many drums on the west side of the site, all of them empty and open topped. Markings indicated that most of the barrels had contained food products. The "Waste Acetone" drum Mr. Koepper of ISBH reported was not found although seven unmarked drums on the east side of the property were found to contain solids. The late Mr. Meyer's daughter indicated that it was her mother's intention to dispose of the drums and other collected debris on the property now that the business was to close.

Because it is the intention of the owner to cleanup the property it was recommended to Dave Koepper that the ISBH monitor activities at Myers' and if any hazardous materials are found that may require special funds for removal, the USEPA Spills Response Branch should be notified.

Very truly yours,


Geoff Watkin

GW/js

01 0571

ATTACHMENT THREE
Second ISBH Assessment Report

TO: File
THRU: George Oliver, Jim Hunt, Guinn Doyle
FROM: David Koepper
RE: Galen Meyers Dump
St. Joseph County

On April 24, 1984, Myself and Mr. David Berrey inspected the dump at the former Galen Meyers property (now deceased). We found the site to be in the same condition as my last inspection during the fall of last year. At that time I attempted to contact Duane Meyers at the only phone number I had for him. His phone was disconnected. He was not listed in the phone book either. It is my opinion that this site should be considered abandoned until evidence is found to the contrary.

I have some evidence of the following problems at the site:

- 1) There are about 10 drums of what appear to be waste flammable liquids on site. These drums are lying on the ground in a prone position stacked two high. The drums are intact for the most part but are deteriorating and may not last through the summer.
- 2) There are several (more than 30 drums) drums scattered throughout the property behind Mr. Meyer's former residence. These drums are mostly in a state of decay and range from empty to full. The drums containing material appear to contain only solids (they could of contained liquids before they rusted through).
- 3) Mr. Meyers son told me that they emptied drums in the driveway on a routine basis for several years before cutting out the tops and selling them for trash barrels. He indicated that the emptied material was varied and that some of it was probably of a hazardous nature.
- 4) There is an indication that some areas of the property were disturbed by digging. These areas could contain buried drums or other materials although I have no direct evidence of this being done.

I believe that some sort of action should be initiated to remove the drums of liquid waste before it deteriorates. The county health department has been contacted and they indicated that they would try to track the progress of the estate settlement. This could be of some help if they are successful. The other problems would appear to be appropriate for ERRIS inspections and rating. Please contact me for any additional information on this site.

DJK

01 0573

ATTACHMENT FOUR

ISBH Request for Federal Evaluation

STATE OF INDIANA



01 0574

INDIANAPOLIS

STATE BOARD OF HEALTH
AN EQUAL OPPORTUNITY EMPLOYER

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206-1964

May 15, 1984

Mr. Bill Sanders, Director
U.S. EPA, Region V
Federal Emergency Response Team
230 S. Dearborn Street
Chicago, Illinois 60604

Dear Mr. Sanders:

Re: Galen Meyers' Property

On April 24, 1984, Mr. David Koepper and Mr. David Berrey conducted a follow-up inspection at the former Galen Meyers' Property at 11303 Edison, Osceola, Indiana, St. Joseph County. The inspection revealed approximately 10 drums of what appears to be waste flammable liquids and more than 30 drums scattered throughout the site in various stages of decay and containing varying amounts of unidentified solid materials. Some of the solid materials have the appearance of solidified paint waste.

The State of Indiana is hereby requesting an evaluation of this site for possible emergency action to remove all drums on-site due to the potential fire, explosion, and direct contact hazards posed by the presence of this material. After the drums have been removed, the site will be placed on the ERRIS List to be investigated under the 3012 Program for possible inclusion on the National Priority List.

Please direct any questions concerning this matter to Ms. Sherry Evans-Carmichael at AC 317/633-8546.

Very truly yours,

David D. Lamm, Director
Division of Land Pollution Control

Enclosures

cc: Bob Bowden, Emergency Response EPA ✓
Sherry Evans-Carmichael, ISBH
David Koepper, ISBH

01 0575

ATTACHMENT FIVE
Site Safety Plan

Region V
 Date 6/15/84
 TDD# 5-8405-4

SAFETY PLAN

01 0576

A. Incident Description

1. Location Myer's Dump
11303 Edison
Osceola, Indiana
2. Date 6/15/84
3. Type: Spill Fire HW Site Other _____
4. Status Abandoned property-used to recycle drums for burn barrels
5. Response Objectives Site assessment - investigate site, determine number of drums, type, markings.
6. Background Review: Complete Partial
 If partial, why? _____ State County Files
7. Hazard Level: High Moderate Low
 Inhalation Ingestion Contact Not well-defined Unknown
 External Physical
8. Site Plan/Sketch Attached Yes No
 See File
9. Background Material attached Yes No
 See file, also Chemical info. di-t-butyl peroxide

B. Material Description

1. Type: Liquid Solid Sludge Vapor/Gas
2. Chemical Name/Class Paint wastes, suspected plating wastes, waste resing, tar
3. Characteristics: Corrosive Ignitable Volatile
 Toxic Reactive Biological Agent
 Peroxide
4. Toxicity: TLV _____ IDLH _____
5. Special Hazards Physical hazards, peroxide, highly flammable
6. Acute Exposure Symptoms peroxide is powerful irritant, other organic solvents which may be present can cause dizziness, nausea, euphoria drowsiness.

SMG:ss
 11/24/82

C. Site Description

01 0577

1. Size 5 Acres
2. Surrounding Population 2,000 in Osceola 100 in immediate area.
3. Buildings/Homes Located on residential street with farms and homes.
4. Topography Flat
5. Receiving Waters St. Joseph River 1 mile south.
6. Weather Sunny, Clear
7. Unusual Features Very sandy soil, abandoned home on site, unfenced.
Debris, vehicles and barrels strewn throughout property, pits suspected
of being seepage lagoons, mounds suspected of buried wastes.
8. Site History Owner who died in June 1983 ran burn barrel business and
dumped burned wastes and fill barrels on property.

D. Personnel Protection

1. Entry Level of Protective clothing : A B C D
2. If not B, why? Site is all open land, drums and wastes which are spread
throughout property are exposed and investigators did not handle materials
except when sampling soils at which time level C was used.
3. Site Instrument Readings:

% O2 _____	% LEL _____
Radioactivity _____	HNU - _____
OVA _____	Other _____

4. Was protective level up or downgraded: Yes No
- Up or Down graded to: A B C D
- Why _____

Actual Change: _____

5. Respirator Protective Equipment:

SCBA _____	Canister Type <u>Organic Vapors</u>
Gas Mask <u>MSA - Chest Mount</u>	Cartridge Type _____
Ultra Twin _____	
Dust Mask _____	

6. Protective Clothing:

Uncoated Tyveks _____	Vinyl Latex Gloves _____	Work Clothers _____
Steel-toed boots _____	Nitrile Latex Gloves (when sampling) _____	
Booties _____	Respirator _____	

7. Field Monitoring Equipment and Materials:

HNU-PID

01 0578

E. Decontamination Procedures

1. Attach sketch showing Exclusion Zone, Contamination Reduction Zone, Support Zone and numerically labelled Decontamination Stations.
2. For each decontamination station note procedure and materials needed on an attachment page. Decontamination involved the removal of disposal clothing and placing in plastic trash bag.

F. General Information

1. Team members

G. Watkin

A. Murphy - ISBH

2. Site Safety Coordinator G. Watkin

G. Emergency Information

1. Have nearby people been evacuated: Yes No
If yes ever how large an area

2. First Aid Instructions

3. Sources of help

	Name	Town	Phone	Notifi Yes
Fire				
Police				
Ambulance				
Hospital				
Poison Information				
Airport				
Helipport				
Site Telephone				
Nearest Telephone				

4. Emergency Telephone Numbers

01 0579

WESTON Hot Line	215-524-1925 or 1926
WESTON NPO	215-431-0797 or 0798 or 692-3030
P. B. Lederman - NPM	
S. M. Gertz - HSO	
Medical Emergency	513-421-3063 (National Service)
EPA - ERT Emergency	201-321-6660
Chemtrec	800-424-9300
Central Disease Control	404-329-3311 (day) 404-329-3644 (night)
National Pesticide	800-845-7633
Medical Emergency	(Regional Service)

Prepared by G. WATKIN
 Date 6/15/85

Approved by _____
 Date _____

(For HSO Use Only)

Reviewed and Comments _____

Action Required? Yes No If yes, what action _____

Followup carried out? _____ Date _____

S. O. Signature Date

ACID

PERIODIC ACID. Syn *paraperiodic acid*. White deliquescent crystals. $HIO_4 \cdot 2H_2O$, mw: 228.0, mp: 122°, bp: 140°.

Irritant to skin, eyes and mu mem. See also 101-102.

Mod. by chemical reaction; an oxidizing agent. Violent reaction with dimethyl sulfoxide.

PERIODATE. Dangerous; when heated to decompose, toxic fumes of iodides, reacts vigorously with reducing materials.

See polyvinyl pyrrolidone.

POTASSIUM PERMANGANATE

See permanganate.

POTASSIUM PERMANGANATE

See permanganate.

POTASSIUM PERMANGANATE. Composition: $KMnO_4$, mw: 158.04.

It is a strong oxidizing agent. Some manganese compounds.

Mod. by chemical reaction with reducing agents.

POTASSIUM PERMANGANATE. Mod. when exposed to heat. Over-permanganates and other metalates may detonate when exposed to high heat. They are in oil and in fires or severely damaged they should be stored in a cool, ventilated area from acute fire hazards and easily oxidizable materials. They may be disposed of by diluting with water. Practically all permanganates are soluble in water. React violently with acetic acid, hydrazine, $(H_2SO_4 + C_2H_6)$ [19].

Useful in organic synthesis. Shock or heat may explode. They can react vigorously on contact with reducing materials.

POTASSIUM PERMANGANATE ACID. In solution only. $KMnO_4$.

Some manganese compounds are peroxidizable. Explosive when mixed with alkanes, aryl hydrocarbons, glycols, cyclic alcohols, amines, and aldehydes. CO_2 from methanol decomposition [19].

POTASSIUM PERMANGANATE CHLORIDE.

See permanganate compounds. Dangerous; when heated to decompose, toxic fumes of chlorides, will react with steam to produce toxic and corrosive fumes.

PERMISSIBLE LEVELS OF RADIATION. See Section 5A.

PERMISSIBLE RADIONUCLIDE CONCENTRATIONS IN AIR AND WATER ABOVE NATURAL BACKGROUND. See Section 5A.

PERMONO SULFURIC ACID. Syn *Crocker's acid*. H_2SO_5 , mw: 114.1.

THR = HIGH corrosive, toxic irritant. See sulfuric acid. It reacts violently with reducing agents, carbon, MnO₂, organic matter, Pb, Ag [19].

PERNAMBUCO. See Brazilwood.

PERONINE. Syn *morphine benzyl ether hydrochloride*. White, prismatic, crystalline, odorless powder, bitter taste. $C_{21}H_{27}NO(OH)(OC_6H_5) \cdot HCl$, mw: 411.9.

THR = HIGH via oral route. A habit-forming drug. Narcotic and analgesic.

Disaster Hazard: Dangerous; when heated to decompose, emits highly toxic fumes.

PEROXIDES, INORGANIC.

THR = Variable. They may cause injury on contact with skin or mu mem. See also hydrogen peroxide.

Fire Hazard: Mod to dangerous, by chemical reaction with reducing agents and contaminants, strong oxidizing agents; contact with moisture may produce much heat. See also hydrogen peroxide and sodium peroxide.

Explosion Hazard: Mod. heat, shock or catalysts can cause violent decomp. Contact with reducing agents may give rise to explosively violent reactions.

Disaster Hazard: Dangerous; shock, heat or moisture may cause explosion, reacts with reducing agents.

PEROXIDES, ORGANIC.

THR = These materials are irrit to the skin, eyes and mu mem.

Fire Hazard: Dangerous, by chemical reaction with reducing agents or exposure to heat. They are powerful oxidizers.

Explosion Hazard: Severe, when subjected to heat or by spontaneous combustion. Many peroxides are very unstable. They react with reducing materials, such as organic matter, thiocarbonyls, [19] and explosive mixtures.

Disaster Hazard: Dangerous; shock, heat or moisture may cause explosion, reacts with reducing agents.

PETROXYACETIC ACID.

See acetic acid.

PETROXYACETIC ACID. See acetic acid.

THR = HIGH via oral route. See acetic acid [19].

PEROXYDIBENZYL PEROXIDE.

Hygroscopic, irritant. Composition: $C_{14}H_{18}O_4$, mw: 254.3. THR = HIGH via oral route.

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Fire Hazard: Mod. by chemical reaction with reducing agents.

PEROXYDIBENZYL PEROXIDE.

See peroxide.

PEROXYDIBENZYL PEROXIDE.

See peroxide.

THR = HIGH via oral route.

PERSENE.

See peroxide.

"PERSENE."

PERSULFATE.

PERSULFATE.

PERSULFATE.

PERSULFATE.

PERUVIAN BARK.

PERYLENE SULFONATE.

PESTICIDE FOR PESTION.

PESTION.

PETASITES JAPANESE.

See petasites.

PETN. See peroxide.

"PETROHOLOL."

"PETROHOLOL."

PETROL.

PETROFATEM.

See petroleum.

PETROXYACETIC ACID.

DI-(p-tert-BUTYL PHENYL)MONOPHENOL PHOSPHATE 553

bp, mw 314.8,
0.8.

g/kg [3]
comp. 100%

1. Not flammable
and does not decompose,
emits highly toxic vapors
vigorously with

CH2(SO C6H4)2

and to decompose,
of which will react
and cor-

colorless liquid,
soluble in alcohol and ether,
S. mw 143.3, d: 1.02,
mp: -62°, flash pt:

50 mg/kg inhal
100 mg/kg dermal LD

routes: HIGH via

to heat or flame

F. OL. Sec. di-

DI-(p-tert-BUTYL PHENYL)MONOPHENOL PHOSPHATE
mp: 158.3
LD: 50 mg/kg [3]
p (+) cat. [3, 20]
MOL. C6H4(O)C6H4

mw 393.7, bp

d to heat or flame

high boiling liquid,
mp: 202.5, bp: 300,
d: 1.089-1.091, g/cm³ 20

Heat of fusion

DI-sec-BUTYL PEROXIDE. (C4H9O)2 water white liquid
(C4H9O)2, mw 146.2, n_D²⁰ 1.40, bp 80 @ 254
mm. Flash pt 51 (O₂), d 0.74, vap. press. 19.51
mm @ 20, d 0.7503

Acute tox data: ip LD₅₀ (rat) = 321 mg/kg [3]
THR = MOD via ip route. Powerful oxidizing agent
inhibits combustion. An explosive [3]

Fire Hazard: Slight peroxide, organic, dangerous

Explosion Hazard: Slight peroxide, organic

Disaster Hazard: Slight peroxide, organic

To Fight Fire: Water may not work

DI-sec-BUTYL PHENOL. Amber liquid
(CH3)2CHCH2C6H4C6H4OH, mw 206.3, bp: 152°-165°
@ 25 mm, fp: -50°, flash pt: 280° F, d: 0.936 @ 25° 4°.
Acute tox data: Oral LD₅₀ (rat) = 1320 mg/kg [3]
THR = MOD via oral route.

Fire Hazard: Slight, when exposed to heat or flame;
can react with oxidizing materials

To Fight Fire: Foam, CO₂, dry chemical.

2,4-DI-tert-BUTYL PHENOL. Tan crystals.
(CH3)3C-C6H3(C(CH3)3)-C6H4-OH, mw: 206.3, mp. 51°, bp. 260.8°,
flash pt 265° F, d: 0.907 @ 60° 4°, vap. press: 1
mm @ 84.5°.

Acute tox data: ip LD₅₀ (mouse) = 25 mg/kg [3]

THR = HIGH via ip route.

Fire Hazard: Slight, when exposed to heat or flame.

Violent reaction with HNO₃. [19]

Disaster Hazard: Mod dangerous, when heated to de-
comp, emits toxic fumes, can react with oxidizing
materials

To Fight Fire: Foam, CO₂, dry chemical.

N,N-DI-tert-BUTYL-p-PHENYLENE DIAMINE.
(C(CH3)3)2N-C6H4-N(C(CH3)3)2, mw: 220.4, mp 178.5,
bp 285 F (100), d 0.94-0.95, g/cm³ 24° 24°.

Acute tox data: Oral LD₅₀ (rat) = 200 mg/kg inhal
LD₅₀ (mouse) = 60 mg/kg for 4 hr dermal LD₅₀
= 100 mg/kg. Slightly toxic [3]

THR = MOD via ip route. Moderate irritant
to skin, eyes, and mucous membranes. Slightly
toxic to aquatic life. May be harmful to the
environment.

Fire Hazard: Slight, when exposed to heat or flame.
Violent reaction with HNO₃. [19]

Disaster Hazard: Mod dangerous, when heated to de-
comp, emits toxic fumes, can react with oxidizing
materials

To Fight Fire: Foam, CO₂, dry chemical.

DI-tert-BUTYL PEROXIDE. (C4H9O)2 water white liquid
(C4H9O)2, mw 146.2, n_D²⁰ 1.40, bp 80 @ 254
mm. Flash pt 51 (O₂), d 0.74, vap. press. 19.51
mm @ 20, d 0.7503

ATTACHMENT SIX

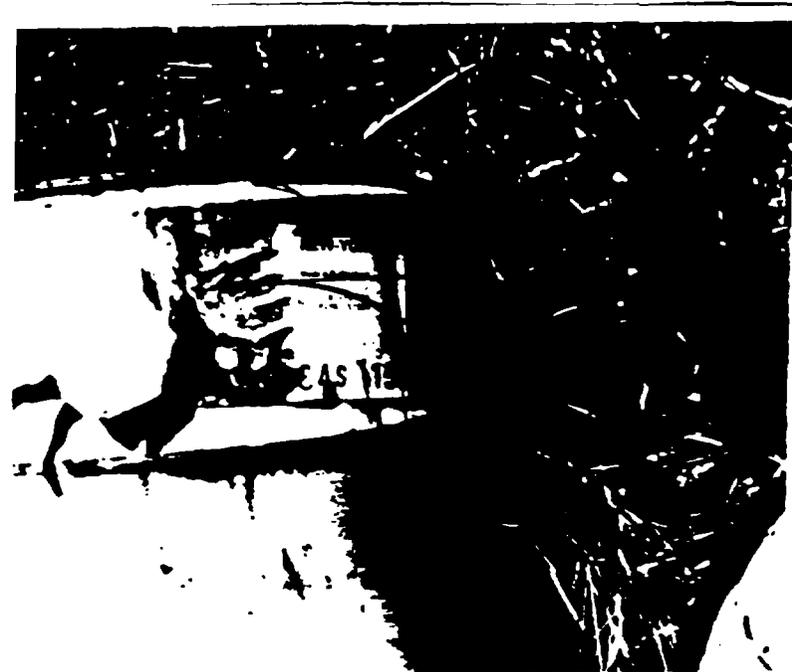
Photographs



1. Driveway area showing waste drums next to east property boundary and abandoned vehicles.



2-3. Front area of property just north of driveway. CIBA GEIGY and combustible liquid drums are to right of tank in center of photograph. 20 to 30 drums are behind fence.



4. CIBA-GEIGY drum labeled TINUVIN 292 RAMAC 01825 located in north part of drive. Way area, next to fence



5. Paint waste drums located just southwest and across access road from wooden building.



6. Paint waste drums located just northwest of wooden building.

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7. Closeup of paint waste drum in area just northwest of wooden building. Drum has "Inmont Corporation, Detroit MI" markings.



8. Another closeup of drum in area just northwest of wooden building. Note: "lacquer thinning compound" and "flammable liquid" labels.



9. Drum located between trailer and large storage building with Pennwalt - Lucidol markings identifying it as di-t-butyl peroxide.

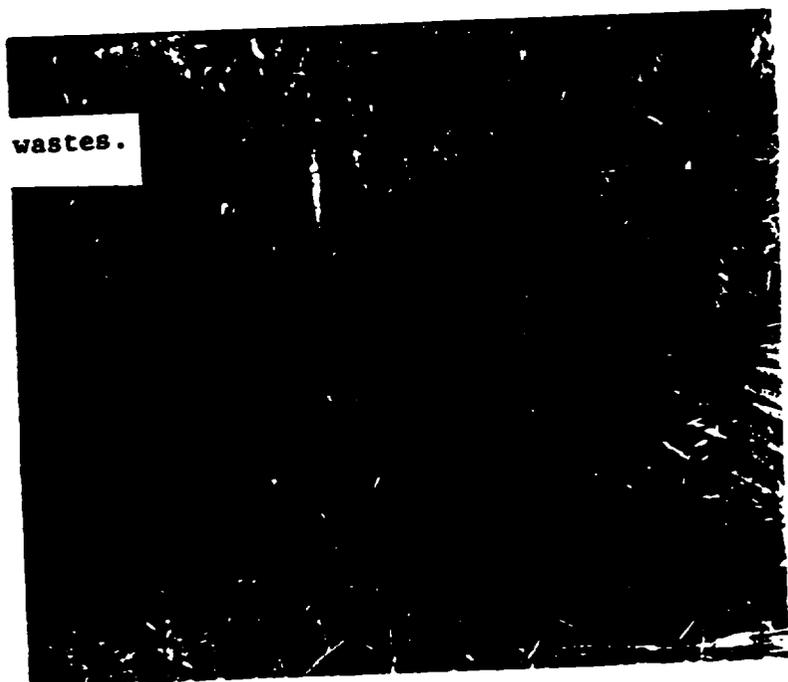
10. Closeup of di-t-butyl peroxide drum.
Note: "flammable liquid" and "organic peroxide" labels.



Approximately 15 drums suspected to contain flammable wastes. Located on east side of site just south of wooden building.



12. Deteriorated drums with residual wastes.



13. Drums scattered around the 15 white drums (middle background).

14. Waste drum labeled "Asbestos Fibre Root Coating".

15. Waste drums located behind dirt mound in extreme north part of site.



16. Deteriorated waste drums scattered on site. These near disposal pit.



17. Waste drum with label of "The O'Brien Corp. - Paints" of South Bend, IN.



18. Sodium Cyanide drum.



19. Disposal pit with drums and trash.