P 557 099 491

5HS-12

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

*(See Reverse)*

| | |
|---|---|
| Sent to Guinn Doyle | |
| Street and No. 1330 W. Michigan St | |
| P.O., State and ZIP Code Indianapolis, In 46206 | |
| Postage | $4.58 |
| Certified Fee | .75 |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to whom and Date Delivered | .70 |
| Return receipt showing to whom, Date, and Address of Delivery | |
| TOTAL Postage and Fees | $6.03 |
| Postmark or Date | |

CHICAGO, IL LOOP STA

IND 040888992

PS Form 3800, Feb. 1982

★ U.S.G.P.O. 1983-403-517

# EXECUTIVE CORRESPONDENCE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:
5HS-12

SEP 1 6 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Guinn Doyle, Chief
Division of Land Pollution Control
Hazardous Waste Management Branch
Indiana State Board of Health
1330 West Michigan Street
Post Office Box 1964
Indianapolis, Indiana 46206-1964

RE: Part B Permit Application
Conservation Chemical Company
Gary, Indiana
IND 040888992

Dear Mr. Doyle:

We are herewith transferring a new Part B permit application from the above referenced facility. On January 30, 1985, we returned the Part B permit application to the company for resubmittal because the application was grossly deficient and incomplete.

Please evaluate the subsequent submission for completeness as a new permit appication and return a draft letter of response with deficiencies by October 31, 1985.

Contact Mr. Greg Weber of my staff at (312) 886-0991, if you have any questions.

Sincerely yours,

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

Enclosure

DO NOT WRITE ON THIS COVER AS IT IS INTENDED FOR RE-USE
RETURN IT WITH THE FILE COPIES TO ORIGINATING OFFICE

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

July 17, 1985

RECEIVED
JUL 19 1985
SWB-A15
U.S. EPA, REGION V

RECEIVED
JUL 19 1985
SOLID WASTE BRANCH
U.S. EPA, REGION V

Ms. Edith Ardiente
Chief Technical Programs Section
U.S. EPA
230 S. Dearborn Street
Chicago, IL 60604

Attn: 5HS-12
Re: Notice of Defiency
RCRA Part B Application
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, Indiana IND 040888992

Dear Ms. Ardiente:

We are in receipt of your letter dated June 28, 1985 advising us that the main body of our Part B Application had not yet been received as of that date. Enclosed herewith is a copy of a Receipt for Certified Mail and a Return Receipt signed by Louis Salcido indicating that the Certified Mail bearing Certification No. P611 168 935 was received by the U.S. Environmental Protection Agency on May 14, 1985.

On May 20, 1985, a member of our staff called the Region 5-U.S. EPA and talked with an individual by the name of Lorna Herezo in the mail room. Our staff member was advised by Ms. Herezo that the box containing our Part B Applications had been logged in and that they had gone to the proper department for processing. In light of the foregoing, we made the presumption that the Part B Resubmission had been delivered to the proper parties and were in the process of being reviewed.

Upon receiving your letter of June 28, 1985, our staff member talked with Louis Salcido and learned from him that the package had indeed been logged in and received in their department. In attempting to determine exactly what happened to the Part B Applications we also talked with Gary Victorine and Greg Weber. Through them and Louis Salcido we learned that the box containing our Part B Applications, apparently, had been forwarded to the Regional Administrator. As of July 16, 1985 the box had not been rerouted to the location where it originally was received which we understand to be the normal practice in this set of circumstances.

We have been advised by Mr. Weber to wait several more weeks before going to the expense of recopying the Part B Application and submitting it to you and the Indiana State Board of Health as directed in your June 28, 1985 letter. This will allow additional time to search for these documents.

We are proceeding according to Mr. Weber's instructions and assume that this meets with your approval. If this is not the case, please let us know.

Very truly yours,

Norman B. Hjersted
President

COPY 2

cc/ Guinn Doyle Indiana State Board of Health

JUN 2 8 1985

5HS-12

Norman B. Hjersted
Conservation Chemical of Illinois
5201 Johnson Drive
Suite 400
Mission, Kansas 66205

RE: Notice of Deficiency
RCRA Part B Application
Conservation Chemical of Illinois
6500 Industrial Highway
Gary, Indiana
IND 040888992

Dear Mr. Hjersted:

This is to acknowledge receipt of your letter of May 8, 1985, which was in response to the notice of deficiency dated January 30, 1985. You stated that the main body of the application had been mailed under separate cover on May 6, 1985, however, it has not been received as of this date. Accordingly, your permit application is still incomplete. Enclosed is a copy of the deficiencies that you failed to address. Submit the original and one copy of your Part B permit application to the United States Environmental Protection Agency (U.S. EPA) and two copies to the Indiana State Board of Health at the following addresses:

RCRA Activities
Part B Permit Application
U.S. EPA, Region V
Post Office Box A3587
Chicago, Illinois 60690-3587

Part B Permit Application
Division of Land Pollution Control
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

Attention: Terry F. Gray

| | TYPIST | AUTHOR | STW #1 CHIEF | STW #2 CHIEF | STW #3 CHIEF | TPS CHIEF | WMB CHIEF | WMD DIRECTOR |
|---|---|---|---|---|---|---|---|---|
| INITIALS | | GW | | | | M.K. | | |
| DATE | | 6/19/85 | 6/19/85 | | | 6/21/85 | | |

Failure to submit a complete application by July 9, 1985, may result in the United States Environmental Protection Agency (U.S. EPA) initiating an enforcement action against your facility.

Please contact Mr. Greg Weber of my staff at (312) 886-0991, if you have questions regarding this matter.

Sincerely yours,

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

Enclosure

cc: Quinn Doyle, ISBH

bcc: Muno
Boyle

SHS/Weber:vc 6/10/85 Disk #13

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

RECEIVED
MAY 17 1985
SOLID WASTE BRANCH
U.S. EPA, REGION V

May 15, 1985

Ms. Edith M. Ardiente, P.E.
Chief, Technical Program Section
U.S. EPA Region V
Box 7861
230 South Dearborn Street
Chicago, IL 60604

RECEIVED
MAY 20 1985
WMD-RAIU
EPA, REGION V

Re: Part B of RCRA Hazardous Waste Permit Application
Conservation Chemical Company of Illinois
6500 Industrial Highway, Box 6066
Gary, Indiana 46406-0066

Attention: 5 HS-12

Dear Miss Ardiente:

In my May 8, 1985 letter to you I indicated to you that we would be providing additional information regarding Wind Rose at the above captioned facility (see the second paragraph of Item (3) on page 2)and Respiratory Protection (see item 11 on last page).

Enclosed herewith is the Wind Rose Information for the above captioned facility. In my May 8, 1985 letter, I errored by saying that we had not answered your questions regarding Personnel Training. Please see Page H-19 of the revised Part B for information regarding Respiratory Protection.

Very truly yours,

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

N B Hjersted

Norman B. Hjersted
President

Enclosure

COPY 2

WIND ROSE INFORMATION FOR
CONSERVATION CHEMICAL COMPANY OF ILLINOIS'S
FACILITY LOCATED AT 6500 Industrial Highway
Gary, Indiana 46406-0066
EPA No. IND 040888992

| MONTH | SPEED-MPH | DIRECTION |
|---|---|---|
| January | 11.5 | West |
| fastest | 50 | West |
| February | 11.5 | West |
| fastest | 51 | Southwest |
| March | 12 | West |
| fastest | 54 | Northwest |
| April | 11.8 | West |
| fastest | 50 | Northwest |
| May | 10.4 | SouthSouthwest |
| fastest | 54 | Southwest |
| June | 9.4 | Southwest |
| fastest | 50 | West |
| July | 8.4 | Southwest |
| fastest | 46 | Northwest |
| August | 8.2 | Southwest |
| fastest | 54 | Northwest |
| September | 9 | South |
| fastest | 48 | Southwest |
| October | 9.8 | South |
| fastest | 45 | South |
| November | 11.3 | SouthSouthwest |
| fastest | 60 | Southwest |
| December | 11.1 | West |
| fastest | 50 | Southwest |

COPY 2

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

May 8, 1985

RECEIVED
MAY 10 1985
SOLID WASTE BRANCH
U.S. EPA, REGION V

Ms. Edith M. Ardiente, P.E.
Chief, Technical Program Section
U.S. EPA Region V
Box 7861
230 South Dearborn Street
Chicago, IL 60604

RECEIVED
MAY 13 1985
WMD-RAIU
EPA, REGION V

Re: Part B of RCRA Hazardous Waste Permit Application
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, Indiana 46406-0066

Attn: 5 HS-12

IND 040 888 992

Dear Ms. Ardiente:

In response to your letter date stamped January 30, 1985 and pursuant to your letter date stamped April 10, 1985 both of which pertain to the above captioned topic, we resubmitted a complete Part B of the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Facility Permit Application for the above referenced facility. In an effort to make the Part B resubmission in a timely fashion, it was necessary to complete some portions of it after the main body of the application had been mailed. We are enclosing three copies of the applicable portions herewith and ask that you please insert them in each of the three copies of the Part B which were mailed to you under separate cover on May 6, 1985. Incidentally, when mailing the three copies of Part B to your office, we failed to indicate a specific department for delivery. However, we have talked with an individual in the mail department in your building named Donna and she has promised to put the various mail stations on notice that this material is being delivered. She also indicated that she would advise us when the box was received and see that it gets routed to your section.

The insertions mentioned above will be identified below as we respond to the General and Specific Comments which were enclosed with your letter date stamped January 30, 1985. Hopefully, responding to these comments item by item will aid you in determining whether we have corrected the defiencies set forth or, in those instances where we were unable to make the corrections in a timely fashion, you will be advised concerning our ability to correct the defiencies.

Our responses to your comments are as follows:

(1). General Comments: The Part B submitted on May 6, 1985 contains a 1-page brief table of contents at the front of the application. This page is not numbered, but it is the third page of the application. Enclosed herewith is a divider with a tab entitled Table of Contents. Please insert this divider in front of the aforementioned page. We have also enclosed a more detailed Table of Contents bearing page nos. T-1 through T-6. Please insert these

COPY 2

pages in the Part B immediately after the page identified as Table of Contents currently in the Part B.

We have eliminated the references to the Part 265 Standards. Where applicable, we have made reference to the Part 264 Standards. Although we reviewed Part 270, we did not adhere strictly to the order set forth therein in arranging the information. Instead, we followed a format set forth in a document provided to us by the EPA Region V Office entitled Suggested Permit Application Outline. In retrospect, we see that there was some confusion on our part about the applicability of using the format set forth in this outline. The use of this outline explains why we have made reference to sub-headings in outline form (e.g., B-3a, C-1, D-1, etc). Our use of the outline also explains why the reference numbers in the left hand margin of the Table of Contents and throughout the Part B are not always consistent (e.g., under Section B the first reference is B-3a). Since neither B-1 or B-2 as shown on the aforementioned outline were not applicable to our operation we did not include them in our Part B. The same explanation holds true for the reason why these references in Section C are not strictly in numerical and alphabetical order and why Section I jumps from I-1d(b) to I-5.

We apologize for any diffuculty this creates for you in determining the completeness of our Part B.

(2). Specific Comments-A. Part A Application: We have revised our Part A. In so doing, we prepared a discussion for each item which was changed from the original Part A. We have enclosed three copies each of pages which have been numbered A-7 through A-9. Please insert one copy of these enclosed pages in each Part B which was forwarded to your office. They should be inserted in Section A after page A-6. The information contained in the revised Part A is consistent with that in the resubmitted Part B regarding Processes, Design Capacity and the Hazardous Waste Handled.

(3). Specific Comments-B. Facility Description: A topographic map was included in the Part B on page B-2. In addition, a facility map was included in Part B on page B-14. Some of the information requested under this item in your letter is shown on the maps on pages B-13 (i.e., Loading & Unloading Areas) and B-14 (i.e., Fire Control Facilities and Building and Hazardous Waste Management Units ). We do not have any injection or withdrawal wells on the facility or within 1,000 feet around it. We did not indicate the Proposed Point of Compliance nor did we show the Locations of Uppermost Aquifers and Aquifers Hydraulically interconnected beneath the facility, including flow and direction. The latter two items were not included because they would not be applicable to the facility in light of the changes which have been made to the revised Part A (i.e., We are not seeking to operate a Surface Impoundment and will either close out the Waste Pile or operate it in accordance with 40 CFR 264.250 (c).).

The map shown on page B-2 does not include information regarding Wind Rose. We will submit this specific information to you by May 15, 1985.

(4). Specific Comments-C. Waste Analysis Plan: In our revised Part A, we indicated that the following wastes are handled at the facility: K062, F007, F008, F009, D002, K049, F001, F002, F003, F005 and D003.

In the resubmitted Part B for K062, we have provided a Waste Analysis Plan which specifies the items set forth under 40 CFR 264.13 (b) (1) through (5). We did not specify those items for the other wastes listed in the revised Part A because we will not be accepting those wastes at the facility. Those wastes will be included in the partial facility closure plan to be submitted to the Indiana State Board of Health by August 1, 1985. As indicated in the resubmitted Part B, our Waste Analysis Plan with respect to the Wastes listed above, except for K062, is to simply turn away any truck or vehicle containing those wastes.

Please note that on our revised Part A that we show 285 tons of K049 waste stored in a tank. We also show 2100 tons of K049 waste stored in a Waste-pile. The K049 wastes are not specifically addressed in the resubmitted Part B. The reason for this is that we are not certain whether this material stored at the plant is subject to the RCRA Regulations. The material was stored at the facility at the time that it was purchased by Conservation Chemical Company in the mid-1960's. No additional material has been added since that time. No additional waste will be added in the future. Analyses of the material indicate that it does not exhibit the characteristics of corrosivity or EP Toxicity. Further analytical work will be done to determine whether it exhibits the characteristics of ignitability or reactivity. We would expect the additional analyses to be completed by July 1, 1985. Once those analyses are available we will provide you with information concerning our Waste Analysis Plan for this particular waste.

(5). Specific Comments-D. Process Information: We have indicated on page D-77 that the facility does not have a waste-pile as defined by 40 CFR 260.10. We included the Process Code for a Waste-Pile (i.e., S03) because we are not certain whether the pie-shaped basin area referred to on D-77 and outlined on page D-79 constitutes a waste-pile. As a consequence, no Process Information has been included in the resubmitted Part B. As indicated in the above paragraph, we will provide you with further information regarding this waste as soon additional analytical work is completed.

(6). Specific Comments-D. Process Information 2--Surface Impoundments: The facility is not requesting that a Surface Impoundment be included in its final permit. As a consequence, no process information is included in the resubmitted Part B.

(7). Specific Comments-D. Process Information 3--Incinerator: We have not included an incineration unit in the resubmitted Part B. As a consequence, we have not included any Process Information for an Incinerator.

(8). Specific Comments-D. Process Information 4--Container Storage Area: Process Information regarding the Container Storage Area is shown on pages D-1 through D-5.

(9). Specific Comments-D. Process Information 5--Tank Storage: Information regarding tank storage can be found on pages D-6 through D-76.

(10). Specific Comments-E. Additional Information Requirements: In the revised Part A, we are not listing a Surface Impoundment as a storage or treatment method. Therefore ground water monitoring would not be necessary. In the discussions above, we have indicated that we will do additional work to determine whether we have a Waste-Pile at the facility. In the event that we do, we would either include the closure of that Waste-Pile in our partial facility closure plan to be submitted to the Indiana State Board of Health by August 1, 1985 or operate the Waste-Pile in accordance with 40 CFR 265.250 (e). As a consequence, ground water monitoring would not be necessary.

(11). Specific Comments-F. Personnel Training: We have not answered your questions regarding the type of respiratory protection employees used when entering closed spaces such as tanks or what type of respiratory protection training that these employees receive. The answers to these questions will be submitted to you by May 15, 1985.

(12). Specific Comments-G. Closure Plan: Any matters broached under this topic on pages three and four of your letter that are not addressed in the closure plans set forth on pages I-1 through I-24 of the resubmitted Part B will be addressed in the plan for partial facility closure which will be submitted to the Indiana State Board of Health by August 1, 1985.

In reviewing the resubmitted Part B, we have found that we should have included the Hazardous Waste Code F008 at the top of page C-33. Please add this to each of the three copies of the resubmitted Part B which has been forwarded to you. We should have also added Hazardous Waste Code Nos. F001, F002, F003, and F005 to the top of page C-48. Please make these additions to each of the three copies previously forwarded to you.

We apologize for having to ask you to make these changes at this point. Please let us know if you have any questions about the changes or the location where earlier items mentioned should be inserted.

Very truly yours,

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

N B Hjersted LTK

Norman B. Hjersted
President

Enclosures

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In order to make the information contained in the Part B Application consistent with the information in the Part A Application on file with the U.S.-EPA, it was necessary for us to make changes to our Part A Application. Our revised Part A is shown on pages A-1 through A-6. Information regarding the changes made to the revised Part A are outlined below:

(1). Form 1-Item IV: The new facility contact is shown as Don Grimmett. The facility contact shown on the original Part A, James Williams is no longer with the company. The telephone number shown is the one which must be used currently to reach the plant. The phone number shown on the original Part A was applicable to a phone-line which allowed our customers to call an Illinois area code. That phone line is no longer in use.

(2). Form 1-Item VIII-D: The same explanation as that shown above for the change in phone number is applicable to this item.

(3). Form 1-Item XI: The topographic map referred to in Item XI was submitted with our original Part A. As a consequence, we have not submitted another 7.5 minute series (topographic) map. If it is necessary to do this, please let us know. We have submitted a topographic map on Page B-2 of the Part B Revised Application.

(4). Form 1-Item XII: The description shown in this item on the revised Part A is the same as that shown on the original Part A except that we have not included any plans to receive or store less than truck-load quantities of hazardous waste in drums. We excluded this activity because we did not plan to receive any drummed waste at the facility.

(5). Form 3-Item II-B: Since this is a revised application, we made this indication accordingly.

(6). Form 3-Item III-C-Line No. 1: The number of containers (drums) stored at the facility has been reduced considerably since the original Part A was filed. Since we do not plan to take in any additional containers, the Process Design Capacity has been reduced appreciably on the revised Part A. The revised Process Design Capacity provides for those drums currently stored at the facility plus some allowance for any additional drums that might be filled as a result of cleaning out tanks in a partial closure.

(7). Form 3-Item III-C-Line No. 3: We have replaced the Process Code S04 shown on the original Part A, with the Process Code, S03. The Process Code S04 was eliminated on the revised Part A because we do not wish to include that Process Code as part of the final permit. Please see pages D-80 and I-19 for further information regarding the Surface Impoundment. On the original Part A application we had also listed the Process Code S04 because it was our understanding that an area at the facility referred to as a pie-shaped basin would be considered as a Surface Impoundment under the regulations. We have since learned that under the definition shown in 40 CFR 260.10, this pie-shaped basin area would be defined as a Waste-Pile. As a consequence, we are now listing this Process Code on the revised Part A. Please see the discussion on page I-23 of the Part B Application for further information regarding the Waste-Pile.

(8). Form 3-Item III-Line No. 4: We increased the Process Design Capacity shown on the original Part A for Process Code T01 from 25,000 gallons/day to 52,000 gallons/day. This increase in Process Design Capacity was necessary in order to accomodate the anticipated increase in the amount of pickle liquor which could be processed as outlined on page C-3 of the Part B application and the Cyanide Treatment outlined on page C-37 of the Part B application.

(9). Form 3-Item IV-D-Line Nos. 2-4: On the original Part A we showed an Estimated Annual Quantity of Waste for F007, F008 and F009 of 450 tons. On the revised Part A we have shown an Estimated Annual Quantity of Waste of 750 tons. The amount shown on the original Part A was too small. Our most recent inventory reports indicate that we are currently storing 750 tons of this material. For F007, F008 and F009, we have added the Process Code T01. We have done this because we plan to treat this material in accordance with one of the two processes outlined on page C-36 of the Part B application. Please note that the 750 tons shown on Line No. 2 is the total amount of material which was generated by the Non-Specific Sources assigned EPA Hazardous Waste Nos. F007, F008 and F009.

(10). Form 3-Item IV-Line No. 5: We have added the EPA Hazardous Waste Number D002 to the revised Part A. This material was erroneously left off of the original Part A (i.e., this volume of waste was not identified appropriately as D002). We have shown the Process Codes S02 and T01 because the material is currently stored in a tank and will be treated in a tank prior to being disposed of off-site. The treatment in the tank will be a part of the partial facility closure plan referred to on page C-52 under the heading of "C-1b (1) Tanks-Dilute Nitric Acid-D002."

(11). Form 3-Item IV-Line No. 6: The information shown on this line is unchanged from that which was shown on Line No. 10 of the original Part A application.

(12). Form 3-Item IV-Line No. 7: This is the same information that was shown on Line No. 13 of the original Part A except that the Process Code has been changed from S04 to S03. This change was made because we mistakenly considered this material to be stored in a Surface Impoundment when the original Part A was filed. We have since learned that the definition of a "Pile" as shown in 40 CFR 260.10 is applicable to the storage area of which we have referred to as the pie-shaped basin. As a consequence, we changed the Process Code from S04 to S03.

(13). Form 3-Item IV-Line Nos. 8,9,10 and 11: The information shown here is the same as that shown on the original Part A except that the Estimated Annual Quantity of Waste has been increased from 260 tons to 370 tons. The most recent inventory measurements indicated that this is a more accurate estimate of the material that is currently stored at the facility. Please note that the total Estimated Annual Quantity of Waste of 370 tons as shown on Line No. 8 represents the total amount of waste for EPA Hazardous Waste Nos. F001, F002, F003 and F005. Waste material received from Non-Specific Sources and bearing these Industry and EPA Hazardous Waste Nos. were mixed and stored in the same tanks as they were received at the facility. As a consequence, it is not possible to estimate the amount of waste applicable to each of these individual numbers.

(14). Form 3-Item IV-Line No. 12: We have added the EPA Hazardous Waste Number D003. It is applicable to the Silica Tetrachloride which is stored at the Facility. This EPA Hazardous Waste No. was left off the original Part A. We have shown the Process Codes ofS02 and T01. The Process Code of T01 was included because we plan to treat the material in a tank prior to disposing of it off-site in accordance with the partial closure plan which will be submitted to the Indiana State Board of Health as indicated on page C-45 of the Part B.

(15). We entered the EPA Hazardous Waste No. F006 on the original Part A. We did not include it on the revised Part A. This EPA Hazardous Waste No. erroneously included on the original Part A. We do not have a waste at the facility from one of the Non-Specific Sources bearing the generic Industry and EPA Hazardous Waste No. F006.

(16). We entered the EPA Hazardous Waste No. K063 on the original Part A. The EPA Hazardous Waste No. K063 is no longer listed under 40 CFR Part 261 Subpart D. As a consequence, we did not include it on the revised Part A. The waste to which this EPA Hazardous Waste No. was applicable is the Neutralized Acid Sludge referred to on page C-51 under the title C-1b. Tanks-Neutralized Acid Sludge and page I-12. It should be noted that this material was included on the original Part A because it fell within the Industry and EPA Hazardous Waste No. for Hazardous Waste from Specific Sources identified by K063. The initial analyses of this material shown on pages C-52 and C-53 indicate that this material does not exhibit the characteristics of corrosivity or EP Toxicity. We would not expect this material to be either ignitable or reactive given its chemical make-up. However, it will be tested for these two characteristics. If it does not exhibit the characteristics of ignitability or reactivity then we would presume that it would not be classified as a hazardous waste. This would be taken into account in developing the partial facility closure plan which will be submitted to the Indiana Department of Health by August 1, 1985 as indicated on page C-51.

MAY 3 1985

5HS-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Williams
6500 Industrial Highway
Gary, Indiana 46406

RE: Corrective Action Requirements,
Hazardous and Solid Waste
Amendments of 1984

Conservation Chemical
IND 040888992

Dear Mr. Williams:

As you know, we are currently reviewing Part B of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 (copy enclosed) of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken, pursuant to a RCRA permit. An important part of our determination includes your willingess (or unwillingness) to sign the enclosed certification statement. Please read it carefully and either sign it and return it, or return it to us unsigned with a cover letter of explanation, within three weeks of the date of this letter. Any information regarding releases of hazardous waste or hazardous constituents to the environment will be evaluated during the permit review process. Any tentative decision we make concerning your permit application will be public noticed in a newspaper of general circulation in the area of the facility.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours,

Karl J. Klepitsch, Jr.
Chief, Solid Waste Branch

Enclosures

| | TYPIST | AUTHOR | STU #1 CHIEF | STU #2 CHIEF | STU #3 CHIEF | TPS CHIEF | WMB CHIEF | WMD DIRECTOR |
|---|---|---|---|---|---|---|---|---|
| INITIALS | VC | | | | | | | |
| DATE | 4/30/85 | 4/30 | 4/30/85 | | | 5/3/85 | 5/3/85 | |

APR 1 0 1985

SHS-12

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Lloyd T. Kaiser
Conservation Chemical of Illinois
5201 Johnson Drive
Suite 400
Mission, Kansas 66205

RE: RCRA Permit Application
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, Indiana
IND 040888992

Dear Mr. Kaiser:

This is to acknowledge your letter of March 25, 1985, in which you requested a 60 day extension to respond to the notice of deficiency for your RCRA permit application. The reasons for the extension request were that you wanted extra time to consider permitting the waste heat recovery unit under TSCA instead of RCRA, time to consider closing certain aspects of the operation, and your consultant was called out of the country . Your request for a 60 day extension is hereby denied because eliminating those units from your RCRA permit application should reduce the amount of time required to prepare your submission. Your facility has had well over a year, since December 22, 1983, to prepare its RCRA permit application and your request for 60 additional days has not been justified.

Your submission was due the first week of April. However, the due date is hereby extended to May 6, 1985. Failure to submit a complete application by this new due date may result in United States Environmental Protection Agency (U.S. EPA) initiating an enforcement action against your facility.

Please contact Mr. Greg Weber of my staff at (312) 886-0991, if you have any questions regarding this matter.

Sincerely yours,

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

cc: Guinn Doyle, ISDH

bcc: Part B Log

SHS/Weber:vc 4/3/85

| | TYPIST | AUTHOR | STU #1 CHIEF | STU #2 CHIEF | STU #3 CHIEF | TPS CHIEF | WMB CHIEF | WMD DIRECTOR |
|---|---|---|---|---|---|---|---|---|
| INITIALS | VC | | | | | | | |
| DATE | 4/4/85 | 4/4/85 | 4/4/85 | | | 4/8/85 | | |

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

March 25, 1985

RECEIVED
MAR 27 1985
WASTE MANAGEMENT
BRANCH

Mr. Greg Weber
Environmental Scientist
U.S. Environmental Protection Agency
Region V
230 S. Dearborn Street
Chicago, IL 60604

Re: Notice of Defiency
RCRA Hazardous Waste Permit Application
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, Indiana 46406
IND 040888992

Dear Mr. Weber:

We are in receipt of your letter dated January 30, 1985 pertaining to the above captioned matter. As you know, we were given sixty days from the date we received the aforementioned letter to resubmit our Part B Application.

Two events have occurred that will make it diffucult for us to respond within sixty days. First, the consultant that did the majority of the work in preparing the initial Part B Application was called out of the country due to his mother's death. As a consequence, he has not been available to respond to the items broached in your Notice of Defiency.

Secondly, a closer review of the Part B Application which we submitted initially leads us to conclude that we may need to alter the application. For example, we have learned that it may be necessary to approach TOSCA rather than your department for a permit to operate the Waste Heat Recovery Unit. It is also possible that we may want to submit a closure plan on certain aspects of the operation rather than requesting a permit to handle hazardous waste other than pickle liquor.

We hereby request an additional sixty days to respond to your letter of January 30, 1985. If you have any questions about the foregoing, please contact me at (913) 262-3649. Please advise us concerning whether our request for additional time will be granted.

Very truly yours,

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

Lloyd T. Kaiser

Lloyd T. Kaiser

LTK/kd

JAN 30 1985

SHS-12

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Williams, Plant Manager
Conservation Chemical of Illinois
Post Office Box 6066
Gary, Indiana 46406

RE: Notice of Deficiency
RCRA Hazardous Waste Permit Application
Conservation Chemical Company
6500 Industrial Highway
Gary, Indiana 46406
IND 040088992

Dear Mr. Williams:

Thank you for Part B of the Resource Conservation and Recovery Act (RCRA) hazardous waste management facility permit application for the above referenced facility which was received July 13, 1984. The submission has been reviewed for completeness pursuant to the regulatory requirements given in 40 Code of Federal Regulations (CFR) Parts 264 and 270. Our review indicates that your application is deficient and incomplete, and is herewith returned to you for revision.

Enclosed is an attachment which describes the deficiencies and lists the omissions. Your application must be resubmitted in triplicate, within 60 days of the receipt of this letter. Failure to resubmit a complete application by the deadline may result in the initiation of procedures to terminate interim status under 40 CFR §124.3(d).

Please contact Mr. Greg Weber of my staff, at (312) 886-0991, if you have any questions regarding this matter.

Sincerely,

Edith M. Ardiente, P.E.
Chief, Technical Program Section

Attachment

cc: Guinn Doyle, ISDH
Norman Hjerstad, Conservation Chemical
David Connolly, Conservation Chemical

bcc: Part B Log

CM 1-30-85

| | TYPIST | AUTHOR | STU #1 CHIEF | STU #2 CHIEF | STU #3 CHIEF | TPS CHIEF | WMB CHIEF | WMD DIRECTOR |
|---|---|---|---|---|---|---|---|---|
| INITIALS | VC | GW | Indiana | 5HS/Weber:vc | | | | |
| DATE | 1/29/85 | 1-29-84 | 1/29/85 | | | 1/30/85 | 1/22/85 | |

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
5HS-12

JAN 30 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Williams, Plant Manager
Conservation Chemical of Illinois
Post Office Box 6066
Gary, Indiana 46406

RE: Notice of Deficiency
RCRA Hazardous Waste Permit Application
Conservation Chemical Company
6500 Industrial Highway
Gary, Indiana 46406
IND 040888992

Dear Mr. Williams:

Thank you for Part B of the Resource Conservation and Recovery Act (RCRA) hazardous waste management facility permit application for the above referenced facility which was received July 13, 1984. The submission has been reviewed for completeness pursuant to the regulatory requirements given in 40 Code of Federal Regulations (CFR) Parts 264 and 270. Our review indicates that your application is deficient and incomplete, and is herewith returned to you for revision.

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Please contact Mr. Greg Weber of my staff, at (312) 886-0991, if you have any questions regarding this matter.

Sincerely,

for Edith M. Ardiente, P.E.
Chief, Technical Program Section

Attachment

cc: Guinn Doyle, ISBH
Norman Hjersted, Conservation Chemical
David Connolly, Conservation Chemical

Conservation Chemical Comany of Illinois
IND 040888992
Notice of Deficiency

FEB 4 10 10 PM '85
DIV. OF LAND POLLUTION CONTROL
STATE DEPT. OF HEALTH

## General Comments

The Conservation Chemical Part B application is poorly organized and has no table of contents to identify where the required information can be located. The absence of a table of contents made it difficult to locate specific documents and technical information. The application should include a table of contents which references items required as part of the application, gives a brief description of each item, and identifies where the information can be located.

In general, the information contained in the application was severely deficient and incomplete.

For example, the application constantly referred to the Part 265 standards whereas the Part 264 standards apply. The applicant should review the Part 264 permitting standards prior to preparing his resubmission. Also, the applicant should review the Part 270 permit application requirements and edit his resubmission so that the information is arranged in the same order.

## Specific Comments

### A. Part A Application

Information contained in the Part A was not consistent with that in the Part B regarding Processes, Design Capacity and the Hazardous Wastes Handled. Revise the Part A so that it is consistent with the Part B.

### B. Facility Description

The topographic map was missing. Submit a topographic map which must show, for the facility and 1,000 feet around it, the following items:

1. Contours sufficient to show surface water flow.
2. Surface waters.
3. Surrounding land uses.
4. Wind rose.
5. Injection and withdrawal wells.
6. Building and hazardous waste management units.
7. Loading and unloading areas.
8. Fire control facilities.
9. Proposed point of compliance.
10. Locations of uppermost aquifers and aquifers hydraulically interconnected beneath the facility, including flow and direction. (§§270.14(b)(19), 270.14(c)(3), 270.25(c)(4), 264.95, 264.97)

C. Waste Analysis Plan

The applicant must develop and follow a written waste analysis plan which describes the procedures it will carry out to comply with the requirement to characterize the waste. At a minimum, the plan must specify the following items:

1. The parameters to be analyzed and the rationale for their selection.
2. The test methods to be used (SW846).
3. The sampling methods (SW846).
4. The frequency of repeating the initial analysis.
5. The waste analysis supplied by the generator.

The applicant provided a waste analysis plan, however, the above specifications were not addressed in sufficient detail to provide the required information.

The applicant's submissions indicated that the following wastes are handled at the facility: F001, F002, F003, F005, F007, F008, F009, F014, F015, D002, D003, K049, D062 and PCBS. However, the applicant only addressed spent pickle liquor and cyanide waste. The applicant must revise its waste analysis plan to address the above specifications for each of the wastes handled at the facility.

D. Process Information

1. Waste Pile
   No information submitted

2. Surface Impoundments
   No information submitted

3. Incinerator
   The applicant calls its proposed incineration unit a waste heat recovery unit and stated that it is applying for a new waste heat recovery unit permit. The applicant proposes to burn hazardous wastes which contain constituents listed in 40 CFR 261 Appendix VIII and liquids containing more than 50 ppm of PCBs.

   Prior to the incineration of PCBs or PCB items, the applicant must receive the written approval of the appropriate official in U.S. EPA, Region V. The approval request procedure is described in 40 CFR 761.70(d) titled Approval of Incinerators.

   Prior to commencing construction of a new incinerator for burning hazardous waste, the applicant must receive a fully effective RCRA hazardous waste management facility permit. Incinerator permit application requirements are located in §270.19 titled Specific Part B Information Requirements for Incinerators. The applicant's submission did not include a trial burn plan

(§270.62) or information submitted in lieu of a trial burn (§270.19(c)). Both must be submitted. Incidently, U.S. EPA does not issue permits for waste heat recovery units under RCRA.

4. Container Storage Area

The application information revealed that the containment system consists of a 12 inch high dirt berm, a concrete pad to store hazardous waste containers is going to be installed (no compliance schedule was given), and a fence and a sump pump with level control will be installed. This information reveals that the container storage area does not meet the §264.175 containment system requirements. Submit a schedule for bringing this system into compliance or a schedule for closing it.

5. Tank Storage

The applicant must develop a schedule and procedure for assessing the condition of each tank. The schedule and procedure must be adequate to detect cracks, leaks, corrosion or errosion which may lead to cracks or leaks, or wall thinning to less than the thickness required under §264.191. The submission of raw data (page D-12) from an unidentified testing method failed to provide an explanation how this data could be used to detect cracks, leaks, corrosion or errosion which could lead to cracks or leaks or wall thinning to less than that thickness required under §264.191.

The applicant revealed that the tanks do not have controls to prevent overfilling and no compliance schedule was included.

E. Additional Information Requirements

Pursuant to §270.14(c), the applicant was required to submit information regarding the protection of ground water from the hazardous waste in the applicant's surface impoundments and waste pile. The applicant failed to provide this information which must be submitted.

F. Personnel Training

Identify the type of respiratory protection employees use when entering closed spaces such as tanks. What type of respiratory protection training do these employees receive?

G. Closure Plan

The closure plan is incomplete and deficient. The applicant referenced the Part 265 Interim Status Standards as the basis of its closure plan submission. This was in error because under 40 CFR 270.14(b)(13), the applicant was required to submit copies of the closure plan and the post-closure plan required by §§264.112 and 264.118, including the specific requirements in §§264.178, 264.197, 264.228, 264.258, and 264.351.

The applicant must address the following deficiencies in revising its closure plan:

1. The closure plan must list the steps and procedures followed such that all hazardous waste and hazardous waste residues are removed from the container storage areas including the containment system. It must list the steps and procedures taken to decontaminate or remove remaining containers, liners, bases, and soil containing or contaminated with hazardous waste residues.

2. The closure plan must list the steps and procedures followed such that all hazardous waste and hazardous waste residues are removed from tanks, discharge control equipment, and discharge confinement structures.

3. The closure plan must list the steps and procedures taken to close the waste pile, surface impoundments, and the proposed incinerator. Post-closure care for the waste pile and surface impoundments must also be addressed.

4. An estimate of the final year of closure and the schedule for final closure were missing (§264.112).

5. The closure cost estimate was not documented. The closure cost estimate must be documented in order that the basis for the cost estimate can be checked. Experience of other hazardous waste management facilities and inquiries to waste removal contractors indicate the closure cost estimate to be too low. The maximum inventory on page I-5 of the closure plan included 180,000 gallons of waste pickle liquor and 500 drums, however, no pickle liquor and only 150 drums were included in the cost estimate.

6. The closure cost estimate failed to include all associated costs necessary to carry out closure procedures. A cost estimate for a given activity (i.e., bulking wastes from containers to tankers for transportation to incinerator), must include all costs associated with this activity, including fully loaded labor costs (i.e., including fringe benefits and overhead), and costs of supervision, fuel and maintenance costs for the equipment used, provisions for normal contingencies and administrative costs. Administrative costs include all costs associated with taxes and insurance, as well as costs of routine administration paperwork, and reporting.

IN4 040888992

PS Form 3811, July 1982

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

**(CONSULT POSTMASTER FOR FEES)**

1. The following service is requested (check one).
   - [x] Show to whom and date delivered ..... ____¢
   - [ ] Show to whom, date, and address of delivery .. ____¢
2. [ ] RESTRICTED DELIVERY..... ____¢
   *(The restricted delivery fee is charged in addition to the return receipt fee.)*

**TOTAL $____**

3. ARTICLE ADDRESSED TO:
James Williams, Plant Manager
P.O. Box 6066
Gary, Indiana 46406

4. TYPE OF SERVICE:
   - [ ] REGISTERED
   - [ ] INSURED
   - [x] CERTIFIED
   - [ ] COD
   - [ ] EXPRESS MAIL

ARTICLE NUMBER
P246527269

**(Always obtain signature of addressee or agent)**

I have received the article described above.
**SIGNATURE** [ ] Addressee [x] Authorized agent

5. DATE OF DELIVERY

POSTMARK
(may be on reverse side)
U.S. POSTAL SERVICE DEC 27 1983

6. ADDRESSEE'S ADDRESS *(Only if requested)*

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT

☆ GPO: 1982-379-593

DEC 22 1983

SHW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

James Williams, Plant Manager
Conservation Chemical of Illinois
P.O. Box 6066
Gary, Indiana 46406

Re: Conservation Chemical of Illinois
6500 Industrial Highway
Gary, Indiana 46406
IND 040888002

Dear Mr. Williams:

This letter constitutes the next step in the formal process leading toward issuance or denial of a Resource Conservation and Recovery Act (RCRA) permit. Under the authority of 40 CFR 270.10, this is a formal request for submittal of Part B of the permit application for the above-referenced facility.

Enclosed is a copy of 40 CFR 270.14, which list the items required for submitting the Part B permit application for the facility. The Part B application must be submitted in quadruplicate and postmarked no later than June 20, 1984. The original and 3 copies of the application must be sent to the U.S. EPA at the address below. Please uniquely number each page of the application including all attachments (maps, specifications, etc.). A certification statement identical to the one stated in 40 CFR 270.11(d) must accompany the application and all additional submittals. Send your application to the following address:

RCRA ACTIVITIES
Part B Permit Application
U.S. EPA, Region V
P.O. Box A3587
Chicago, Illinois 60690-3587

We are committed to conducting the RCRA permitting process as efficiently as possible. Consequently, I suggest you contact Mr. Richard Shandross of my staff, at (312) 886-0986, as you begin preparing your application. Mr. Shandross will be available to discuss specific needs of your application or to meet with you in Chicago. These efforts are intended to generate complete applications, without requiring any information beyond that which is necessary to make RCRA permit decisions.

Failure to furnish the complete Part B permit application by the above date, and to provide in full all required information, is grounds for termination of interim status under 40 CFR 270.10.

Information in the Part B permit application can be disclosed to the public, according to the Freedom of Information Act and U.S. Environmental Protection Agency (U.S. EPA) Freedom of Information regulations. If you wish, however, you may assert a claim of business confidentiality by printing the word "Confidential" on each page of the application which you believe contains confidential business information. U.S. EPA will review business confidentiality claims under regulations in 40 CFR Part 2, and may later request substantiation of such claims. Please review these rules carefully before making a claim.

If you claim parts of your application as confidential, please provide us with a public information copy of the application. The public information copy must be identical to the full application with the exclusion of the confidential information.

We have also enclosed a copy of 40 CFR Part 264, which include technical standards for the operation of treatment, storage, and land disposal facilities. These standards will become applicable to your facility upon issuance of a RCRA permit by U.S. EPA. A copy of our "Guidance For Permit Application Preparation" and "Part B Completeness Checklist" are also enclosed, they will help you in preparing a comprehensive and complete permit application.

We will coordinate review of the application with the Indiana State Board of Health (ISBH), and will strive for the simultaneous issuance of Federal and State hazardous waste facility permits. It is possible that during the processing of the application, the State hazardous waste program may become authorized to issue RCRA permits for your type of facility. In that case, direct Federal processing will cease, and ISBH in lieu of U.S. EPA will make the final determination on your permit application.

We look forward to receiving your Part B permit application.

Sincerely yours,

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Enclosures: 40 CFR 270
40 CFR 264
Guidance For Permit Application Preparation
Part B Completeness Checklist

cc: David Lamm, ISBH
Norman B. Hjersted, President

bcc: Part A file
Ken Burch, GMCU

5HW;Hamper/mg 12/13/83 Disk 2

| INITIALS | TYPIST | AUTHOR | STU #1 CHIEF | STU #2 CHIEF | STU #3 CHIEF | TPS CHIEF | WMD CHIEF | WMD DIRECTOR |
|---|---|---|---|---|---|---|---|---|
| DATE | (2)13/83 | 12/14/83 | 12/16/83 | | | 12/20 | 12/20 | |

SECTION A

CONSERVATION CHEMICAL COMPANY
Box 6066
6500 Industrial Highway
Gary, IN 46406

## STATE AND FEDERAL EPA's IDENTIFICATION NUMBERS

1. Federal EPA I.D.#IND040888992
2. Indian I.D.#IN4514-0080-11
3. Transporter I.D. ILL #0074
4. Transporter I.D. OHIO #
5. Transporter I.D. MN #
6. Virginia H.W. Transporter I.D.#IND0408889923
7. H.W. Transportation Permit No. PA#177

RECEIVED
JUL 13 1984
WMD-RAIU
EPA, REGION V

## VEHICLE USED IN TRANSPORTATION OF HW

| Vehicle License Plate# | Type and Year of Model | Capacity Gallons | IL EPA Vehicle Reg.# | IN EPA Veh. Permit | MN Veh. Reg.# | MO Veh. Reg.# |
|---|---|---|---|---|---|---|
| MO 209 TCR | Fruehauf Van Trailer 1969 AVG911C56-Van | 70 Barrels | | 982 | | |
| IN 50573 | Trailmobile 1979 V40181 Rubberlined | 4250 gallons | 0074-011 | 393 | | |
| 407-TRZ | Butler Tank Trailer 4204313 Stainless Steel | 4600 gallons | | 1006 | | |
| 408-TRZ | Fruehauf Tank Trailer 1974 OMR640601 Rubberlined | 5000 gallons | | 1245 | | |
| 405-TRZ | Fruehauf Tank Trailer OMM505201 Rubberlined Chlorobutyl | 5000 gallons | | 1007 | | |
| 50574 IN | Fruehauf Tank Trailer 1972 OMP602101 Rubberlined | 5000 gallons | 0074-002 | 2943 | | |
| 600TPE MO | Trailmobile Tank Trailer 1PTL435J9C4000411 Rubberlined | 5000 gallons | 0074-012 | 2249 | | |
| 758RBS | Trailmobile Tank Trailer 1PTL435J9C4000410 Rubberlined | 5000 gallons | | 2263 | | |
| 210TCR MO | 1963 Lubbock Tank Trailer GT1057 | 3800 gallons | 0074-007 | | | |
| 50571 | 1973 Fruehauf Tank Trlr. OMR602101 | 5000 gallons | 0074-003 | | | |

COPY 2

(Sh[illegible] areas are spaced for elite type; i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# HAZARDOUS WASTE PERMIT APPLICATION

*Consolidated Permits Program*

*(This information is required under Section 3005 of RCRA.)*

**I. EPA I.D. NUMBER**

F I N D 0 4 0 8 8 3 9 9 2 — T/A: 1

**FOR OFFICIAL USE ONLY**

| APPLICATION APPROVED | DATE RECEIVED (yr., mo., & day) | COMMENTS |
|---|---|---|
| | | |

## II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

| YR. | MO. | DAY |
|---|---|---|
| 67 | 04 | 17 |

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

| YR. | MO. | DAY |
|---|---|---|
| | | |

**B. REVISED APPLICATION** *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

## III. PROCESSES – CODES AND DESIGN CAPACITIES

**A. PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at a facility. Use [illegible] for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

**B. PROCESS DESIGN CAPACITY** – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Storage:** | | |
| CONTAINER *(barrel, drum, etc.)* | S01 | GALLONS OR LITERS |
| TANK | S02 | GALLONS OR LITERS |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS |
| **Disposal:** | | |
| INJECTION WELL | D79 | GALLONS OR LITERS |
| LANDFILL | D80 | ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER |
| LAND APPLICATION | D81 | ACRES OR HECTARES |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS |

| PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|---|---|---|
| **Treatment:** | | |
| TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| INCINERATOR | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)* | T04 | GALLONS PER DAY OR LITERS PER DAY |

| UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE | UNIT OF MEASURE | UNIT OF MEASURE CODE |
|---|---|---|---|---|---|
| GALLONS | G | LITERS PER DAY | V | ACRE-FEET | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

**EXAMPLE FOR COMPLETING ITEM III** *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 600 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

DUP — T/A: 1

| LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify) | 2. UNIT OF MEASURE (enter code) | FOR OFFICIAL USE ONLY | LINE NUMBER | A. PROCESS CODE (from list above) | B. PROCESS DESIGN CAPACITY 1. AMOUNT | 2. UNIT OF MEASURE | FOR OFFICIAL USE ONLY |
|---|---|---|---|---|---|---|---|---|---|
| X-1 | S02 | 600 | G | | 5 | | | | |
| X-2 | T03 | 20 | E | | 6 | | | | |
| 1 | S01 | 100,000 | G | | 7 | | | | |
| 2 | S02 | 620,000 | G | | 8 | | | | |
| 3 | T01 | 25,000 | U | | 9 | | | | |
| 4 | | | | | | | | | |

continued from the front.

## PROCESSES *(continued)*

SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

## DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate code are:

| ENGLISH UNIT OF MEASURE | CODE | METRIC UNIT OF MEASURE | CODE |
|---|---|---|---|
| POUNDS | P | KILOGRAMS | K |
| TONS | T | METRIC TONS | M |

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

**PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: **HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 100 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed [illegible] These wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there [illegible] estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

| LINE NO. | A. EPA HAZARD. WASTE NO. *(enter code)* | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE *(enter code)* | D. PROCESSES 1. PROCESS CODES *(enter)* | D. PROCESSES 2. PROCESS DESCRIPTION *(if a code is not entered in D(1))* |
|---|---|---|---|---|---|
| -1 | K054 | 900 | P | T03 D80 | |
| | D002 | 400 | P | T03 D80 | |
| -3 | D001 | 100 | P | T03 D80 | |
| X-4 | D002 | | | | Each dof [illegible] |

Form 3510-3 (3-80)

PAGE [illegible]

A-3

Continued from page 2

NOTE. Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

| EPA I.D. NUMBER (enter from page 1) | | FOR OFFICIAL USE ONLY | | |
|---|---|---|---|---|
| W I N D 0 4 0 8 8 8 9 9 2 | T/A C 1 | W | DUP | T/A C 2 DUP |

## IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

| LINE NO. | A. EPA HAZARD. WASTE NO. (enter code) | B. ESTIMATED ANNUAL QUANTITY OF WASTE | C. UNIT OF MEASURE (enter code) | D. PROCESSES 1. PROCESS CODES (enter) | D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1)) |
|---|---|---|---|---|---|
| 1 | F001 | 260 | T | S02 | |
| 2 | F002 | included with above | | | |
| 3 | F003 | " " " | | | |
| 4 | F005 | " " " | | | |
| 5 | F006 | 2000 | T | S02 | |
| 6 | K063 | included with above | | | |
| 7 | F007 | 450 | T | S02 | |
| 8 | F008 | included with above | | | |
| 9 | F009 | " " " | | | |
| 10 | K049 | 285 | T | S02 | |
| 11 | K062 | 15000 | T | S02 T01 | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |

EPA Form 3510-3 (6-80)

(enter "A", "B", "C", etc. behind the "3" to identify photocopied pages.

Continued from the front

## DESCRIPTION OF HAZARDOUS WASTES *(continued)*

USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

| | | | | | | | | | | | | T/A | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | N | D | 0 | 4 | 0 | 8 | 8 | 8 | 9 | 9 | 2 | | 6 |

## V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

## VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

## VII. FACILITY GEOGRAPHIC LOCATION

| LATITUDE *(degrees, minutes, & seconds)* | LONGITUDE *(degrees, minutes, & seconds)* |
|---|---|
| 41 37 20 N | 87 25 30 W |

## VIII. FACILITY OWNER

X A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

| 1. NAME OF FACILITY'S LEGAL OWNER | 2. PHONE NO. *(area code & no.)* |
|---|---|
| | |

| 3. STREET OR P.O. BOX | 4. CITY OR TOWN | 5. ST. | 6. ZIP CODE |
|---|---|---|---|
| | G | | |

## IX. OWNER CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

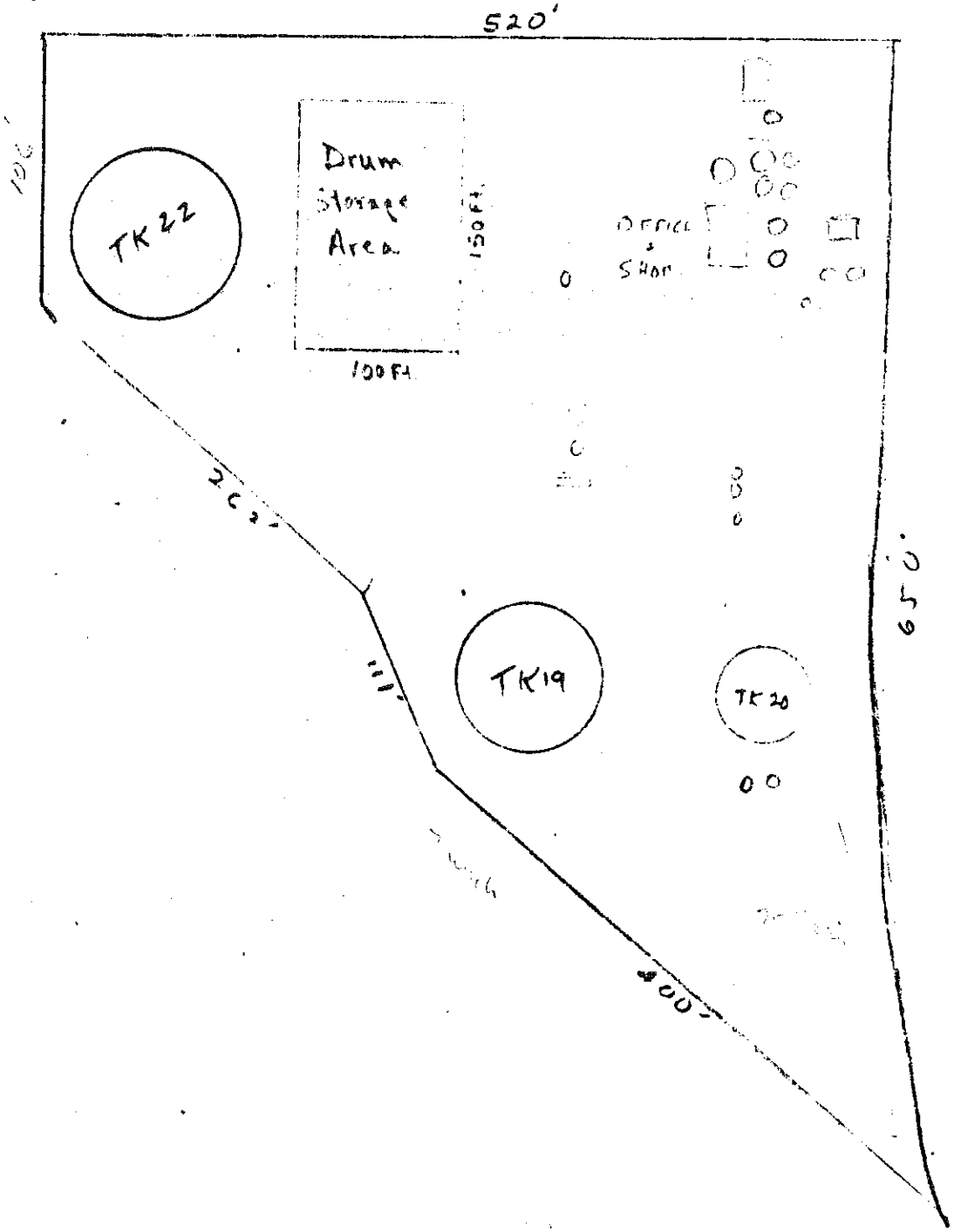
| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| Norman B Hjersted | N B Hjersted, President | 11-18-80 |

## X. OPERATOR CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| A. NAME *(print or type)* | B. SIGNATURE | C. DATE SIGNED |
|---|---|---|
| | | |

**V. FACILITY DRAWING** *(see page 4)*

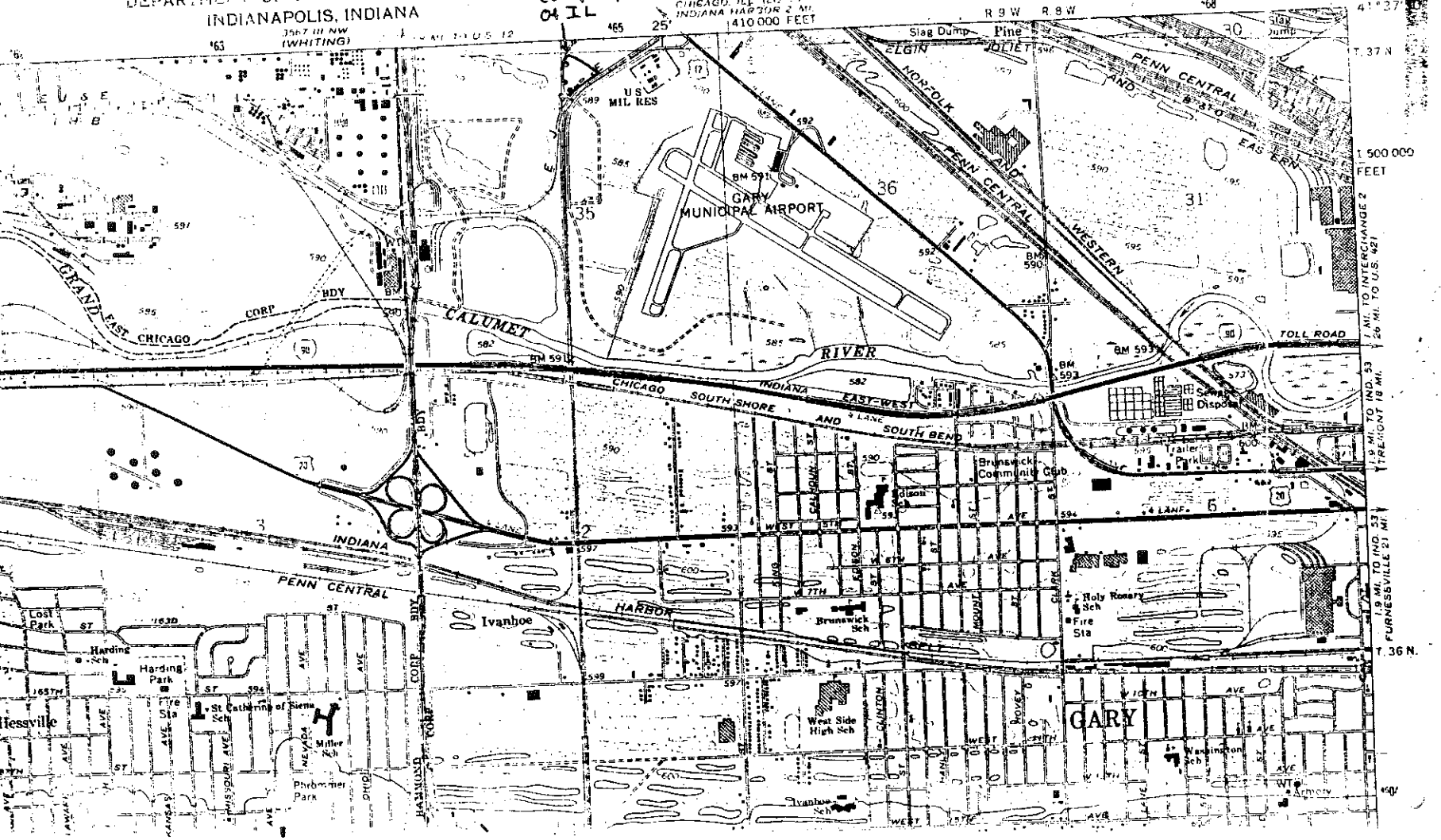



SCALE: 1 IN = [illegible] FEET

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
INDIANAPOLIS, INDIANA

Conservation Chemical Company of IL

HIGHLAND QUADRANGLE
INDIANA – LAKE CO
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 TOLLESTON 15' QUADRANGLE



Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F IND040888992 D

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the label is in the left of the label space lists the information that should appear), please provide it in the proper fill-in areas below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

LABEL ITEMS

I. EPA I.D. NUMBER: IND040888992

III. FACILITY NAME: CONSERVATION CHEM. CO

V. FACILITY MAILING ADDRESS: BOX 6066 ~~INDUSTRIAL~~ GARY, IN 46406

VI. FACILITY LOCATION: ~~BOX 6066 INDUSTRIAL GARY, IN 46406~~

## II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "no" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of those forms. [illegible] is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of [illegible]

| SPECIFIC QUESTIONS | MARK "X" YES | NO | FORM ATTACHED | SPECIFIC QUESTIONS | MARK "X" YES | NO | FORM ATTACHED |
|---|---|---|---|---|---|---|---|
| A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A) | | X | | B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B) | | X | |
| C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C) | | X | | D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D) | | X | |
| E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3) | X | | X | F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4) | | X | |
| G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4) | | X | | H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal [illegible] (FORM 4) | | X | |
| I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) | | X | | J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5) | | X | |

## III. NAME OF FACILITY

1 SKIP CONSERVATION CHEMICAL COMPANY OF

## IV. FACILITY CONTACT

A. NAME & TITLE (Last, First, & Title)

2 WILLIAMS JAMES PLANT MANAGER 512 [illegible]

## V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3

4

## VI. FACILITY LOCATION

A. STREET, ROUTE, P.O. OR OTHER SPECIFIC IDENTIFIER

5 6500 INDUSTRIAL HIGHWAY

B. COUNTY NAME

LAKE

Form 3510-1 (6-80)

CONTINUED FROM THE FRONT

**I. SIC CODES (4-digit, in order of priority)**

| A. FIRST | B. SECOND |
|---|---|
| 2819 (specify) Industrial Inorganic Chemicals, Not Elsewhere Classified | 9999 (specify) Nonclassifiable Establishments |
| **C. THIRD** | **D. FOURTH** |
| (specify) | (specify) |

**II. OPERATOR INFORMATION**

A. NAME: CONSERVATION CHEMICAL COMPANY OF ILLINOIS

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL M = PUBLIC (other than federal or state)
S = STATE O = OTHER (specify)
P = PRIVATE

P (specify)

D. PHONE (area code & no.): A 312 734 2441

P.O. BOX 6066

F. CITY OR TOWN: GARY | G. STATE: IN | H. ZIP CODE: 46406

IX. INDIAN LAND: Is the facility located on Indian lands? ☐ YES ☒ NO

**X. EXISTING ENVIRONMENTAL PERMITS**

| | | |
|---|---|---|
| A. NPDES (Discharges to Surface Water) | D. PSD (Air Emissions from Proposed Sources) | |
| N NA | NA | |
| B. UIC (Underground Injection of Fluids) | E. NESHAPS (Emissions of Hazardous Pollutants) | |
| NA | NA | (specify) |
| C. RCRA (Hazardous Wastes) | F. OTHER (specify) | |
| R NA | NA | (specify) |

**XI. MAP**

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for specific requirements.

**XII. NATURE OF BUSINESS (provide a brief description)**

Conservation Chemical Company of Illinois manufactures iron salts which are used as coagulant aids in the treatment of both potable and waste waters. Some of the raw materials used to produce our finished products are hazardous wastes (e.g., pickle liquor from the steel industry). In some instances, we are paid to remove pickle liquor and other hazardous wastes from the generator's facility. As a consequence, we are also a service facility providing an outlet for specific types of hazardous wastes that can be recycled.

We also plan to receive and store less than truck load quantities of hazardous waste in drums. They will be accumulated at the plant until a truckload of compatible drums can be shipped to an approved landfill. In some cases, liquid wastes will be dedrummed and stored in bulk until a truckload is accumulated. It will then be transported to an approved treatment facility.

**XIII. CERTIFICATION (see instructions)**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

| A. NAME & OFFICIAL TITLE (type or print) | B. SIGNATURE |
|---|---|
| Norman B. Hjersted, President | N.B. Hjersted, President |

COMMENTS FOR OFFICIAL USE ONLY

EPA Form 3510-1 (6-80) REVERSE

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved. OMB No. [illegible]
GSA No. 0246-EPA-01

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

# NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

**INSTRUCTIONS:** If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act).*

INSTALLATION'S EPA I.D. NO.: IND040888992

I. NAME OF INSTALLATION: CONSERVATION CHEM. CO

II. INSTALLATION MAILING ADDRESS: BOX 6066 INDUSTRIAL
GARY, IN 46406

III. LOCATION OF INSTALLATION: BOX 6066, INDUSTRIAL
GARY, IN 46406

DETACH A

## FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER: F | T/A: C 1 | APPROVED | DATE RECEIVED (yr., mo., & day)

## I. NAME OF INSTALLATION

## II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 3

CITY OR TOWN | ST. | ZIP CODE: 4

## III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 5

CITY OR TOWN | ST. | ZIP CODE: 6

## IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: 2 Kaiser Lloyd Admin Manager

PHONE NO. *(area code & no.)*: 316-421-8494

## V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER: 8 Conservation Chemical Company Of Ill

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*: F = FEDERAL, M = NON-FEDERAL — M

## VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [ ] A. GENERATION
- [X] B. TRANSPORTATION *(complete item VII)*
- [X] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

## VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [X] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

## VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.:

## IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

EPA Form 8700-12 (6-80)

CONTINUE ON REVERSE

I.D. – FOR OFFICIAL USE ONLY

W

## IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

| | | | | | |
|---|---|---|---|---|---|
| 1 F001 | 2 F002 | 3 F003 | 4 F005 | 5 F006 | 6 F007 |
| 7 F008 | 8 F009 | 9 | 10 | 11 | 12 |

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

| | | | | | |
|---|---|---|---|---|---|
| 13 K049 | 14 K062 | 15 K063 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

| | | | | | |
|---|---|---|---|---|---|
| 31 | 32 | 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 | 41 | 42 |
| 43 | 44 | 45 | 46 | 47 | 48 |

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

| | | | | | |
|---|---|---|---|---|---|
| 49 | 50 | 51 | 52 | 53 | 54 |

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

- ☐ 1. IGNITABLE (D001)
- ☒ 2. CORROSIVE (D002)
- ☐ 3. REACTIVE (D003)
- ☒ 4. TOXIC (D000)

## X. CERTIFICATION

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

| SIGNATURE | NAME & OFFICIAL TITLE *(type or print)* | DATE SIGNED |
|---|---|---|
| Lloyd T. Kaiser | Lloyd T. Kaiser, Admin. Mgr. | 8/18/80 |

EPA Form 8700-12 (6-80) REVERSE

STATE OF INDIANA
ENVIRONMENTAL MANAGEMENT BOARD

1984

APPLICANT - DO NOT WRITE IN THIS SPACE
Operator Permit No. IN 4514-0080-11 | Date Issued
APPLICATION REVIEWED BY DWB

...on of Land Pollution Control
...diana State Board of Health
...130 West Michigan Street
...dianapolis, Indiana 46206
...el. (317) 633-0833

# APPLICATION FOR PERMIT TO REMOVE AND TRANSPORT LIQUID INDUSTRIAL WASTE

APPLICANT - COMPLETE, PRINT OR TYPE ITEMS 1 THROUGH 8

1. Business Name: Conservation Chemical Co. of Illinois
Address: 6500 Industrial Highway, P.O. Box 6066
City: Gary, State: IN
County: Lake Zip: 46406

2. Name and Home Address of Principal or Authorized Representative
Norman B. Hjersted, President
5201 Johnson Drive, Mission, KS 66205

3. Business Phone: 219-949-8229

4. Emergency (24-hour) Phone:

List all other Indiana cities with Branch Offices

6. List Indiana counties that are served (attach a list if necessary)
All

7. VEHICLE DESCRIPTIONS. Provide the following information for each vehicle to be approved to haul liquid industrial waste. Tank trailer units require permits.

| STATE LICENSE PLATE NO. | VEHICLE a. Make–Model–Year b. Identification No. | TANK DESCRIPTION a. Capacity (gallons, barrels, cubic ft.) b. Construction of tank (steel, fiberglass, rubber lined, etc.) | PRESENT INDIANA VEH. PERMIT NO. (for renewals only) | NEW VEHICLE PERMIT NO. (office use only) |
|---|---|---|---|---|
| ~~929-TRZ~~ 209 TCR | a. Fruehauf (Van) Trailer - 1969 b. AVG-911056 VAN | a. 70 barrels b. Van | 982 | 982 |
| ~~11 51353~~ 50573 | a. Trailmobile - 1979 b. V-40181 16 | a. 4250 gallons b. Rubberlined | 393 | 393 |
| 407-TRZ | a. Butler Tank Trailer b. 4204313 | a. 4600 gallons b. Stainless Steel | 1006 | 1006 |
| 408-TRZ | a. Fruehauf Tank Trailer - 1974 b. OMR640601 | a. 5000 gallons b. Rubberlined | 1245 | 1245 |
| 05-TRZ | a. Fruehauf Tank Trailer b. OMM505201 | a. 5000 gallons b. Chlorobutyl rubberlined | 1007 | 1007 |
| ~~[illegible]~~ 51354 50574 | a. Fruehauf Tank Trailer b. OMP602101 14 | a. 5000 gallons b. Rubberlined | 2943 | 2943 |
| ~~7 -RBS~~ 600 TPE | a. Trailmobile Tank Trailer b. 1PTL43SJ0C4000411 21 | a. 5000 gallons b. Rubberlined | 2249 | 2249 |
| 758-RBS | a. Trailmobile Tank Trailer b. 1PTL435J9C4000410 | a. 5000 gallons b. Rubberlined | | 2263 |
| 210-TCR | a. b. Lubbock | a. b. | | |

8. Application is made and fee is attached. The amount for operator's permit and/or vehicle permit(s) is calculated in the following manner:

OPERATOR'S PERMIT FEE (Check One): [ ] NEW [X] RENEWAL @ $100 (1) $100

VEHICLE PERMIT(S):
Number of New Vehicles 1
Number of Renewal Vehicles 7
Number of Replacement Vehicles
Total Number of Vehicles 8
Total Vehicles Minus One 7

@ $10 each (2) $70
TOTAL FEE (1) PLUS (2) (3) $170

MAKE CHECK OR MONEY ORDER PAYABLE TO: Stream Pollution Control Board

COMPLETED APPLICATION AND FEE TO: Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

I, the undersigned, certify that the information contained herein is true and complete and that the removal, transporting and disposal of liquid industrial wastes will be done in accordance with the requirements of Indiana Rule 320 IAC 5-10-1 et seq.

SIGNATURE (Authorized Representative) Delia A. Rice, Bus Mgr. DATE 11/25/83

State Form 40830

A-12

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT
TO HAUL SPECIAL WASTE

FOR AGENCY USE ONLY

0074 — Hauler No.
0074 1002 thru 0074 1012 — Vehicle Nos.

1 0074
Vehicle
S.W.H. Number

LICANT: COMPLETE (PRINT OR TYPE) ITEMS 1 THROUGH 8

1. Conservation Chemical Company of Illinois
Business Name of Operator of Vehicles
5201 Johnson Drive, Suite 400
Address
Mission — Kansas
City — State
Johnson — 66205
County — Zip

(Box 6066
65 Industrial Hwy
Gary, IN 46406)

2. Name and Home Address of Principal or Authorized Representative and Business Title
Norman B. Hjersted, President
5201 Johnson Drive, Suite 400
Mission, Kansas 66205

3. Business Phone 913-262-3649
4. Emergency Phone 913-561-7730

Note: If owner of vehicles is different than operator of vehicles, complete information required in Items 1 through 3 for wner on separate sheet)

5. List Illinois Cities with Branch Offices
St. Clair, Jefferson, Madison, Lake, Adams, Cole, Wayne, Winnebago, Whiteside, and Cook

6. List Illinois Counties That Are Served
Arkansas, Iowa, Kentucky, Minnesota, Nebraska, Oklahoma, Tennessee, Texas, and Indiana

7. List Other States That Are Served

8. Do you have an Illinois Commerce Commission Certificate? YES___ NO X If yes list Certificate Number ___

9. Do you have an Interstate Commerce Commission Certificate? YES___ NO X If yes list Certificate Number ___

10. VEHICLE DESCRIPTIONS: Provide information for each vehicle to be approved to haul special waste. This includes tank trailer units, flatbeds, and rolloff containers.

| STATE LICENSE PLATE NO. | VEHICLE a. Make-Model-Year b. Identification No. | TANK DESCRIPTION a. Type (tank trailer, flatbed, rolloff, etc.) b. Capacity (gal., barrels, cu.ft.) | FOR AGENCY USE ONLY ILLINOIS EPA VEHICLE NUMBERS |
|---|---|---|---|
| 210TCR Missouri | a. 1963 Lubbock<br>b. GT 1057 | a. Tank Trailer<br>b. 3800 Gallons | 0074 1 007 |
| 50573 Indiana 16 | a. 1979 Trailmobile<br>b. V40181 | a. Tank Trailer<br>b. 4250 Gallons | 0074 1 011 |
| 50571 Indiana | a. 1973 Fruehauf<br>b. OMR631901 | a. Tank Trailer<br>b. 5000 Gallons | 0074 1 003 |
| 50574 Indiana 14 | a. 1972 Fruehauf<br>b. OMP602101 | a. Tank Trailer<br>b. 5000 Gallons | 0074 1 002 |
| 600TPE Missouri 21 | a. 1982 Trailmobile<br>b. 1PTL43SJ0C400411 | a. Tank Trailer<br>b. 5000 Gallons | 0074 1 012 |

(If additional space is necessary, use reverse side)

, the undersigned, certify that the information contained herein is true and complete and that the removal, transporting and isposal, storage or treatment of special wastes will comply with all requirements of Chapter 9: Special Waste Hauling egulations. I further certify that all requirements of Rule 202(C) of Chapter 9 will be complied with.

Signature of Owner (or Authorized Representative) — Date 3/21/84
Signature of Operator (or Authorized Representative) — Date 3/21/84

Mail Completed Application to:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND/NOISE POLLUTION CONTROL
SPECIAL WASTE HAULING UNIT
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62706

RECEIVED
MAR 26 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter III 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

FOR AGENCY USE ONLY
Reviewed By — Date 3/28/84
Issued — Date 03-28-84

IL 532-0333
LPC 37 (Rev. 7/81)

A-13

090-001

# HAZARDOUS WASTE TRANSPORTER LICENSE CERTIFICATE

MISSOURI DEPARTMENT OF NATURAL RESOURCES
P.O. Box 1368 1915 Southridge Drive Jefferson City, Missouri 65102 (314) 751-3241

NAME OF TRANSPORTER: CONSERVATION CHEMICAL COMPANY OF ILLINOIS

5201 Johnson Drive, Suite 400, Mission, Kansas 66205

LICENSE NUMBER: MoDNR H-1005

EXPIRATION DATE: October 4, 1984

This certifies that the above-named carrier has been issued a Hazardous Waste Transporter License by the Missouri Department of Natural Resources. Operations conducted under this license shall comply with the provisions of the Missouri Hazardous Waste Management Law (Sections 260.350 to 260.430, RSMo, 1978) and the rules adopted thereunder.

ENFORCEMENT: Section 260.425, subsection 2, of the Missouri Hazardous Waste Management Law provides that transportation violations of the Missouri Hazardous Waste Management Law, rules, or license terms or conditions thereunder are a misdemeanor offense.

Subsection 2 authorizes the Missouri State Highway Patrol and other law enforcement officers to detain any equipment involved in violations and arrest the person controlling or operating such equipment in the event such violation is committed in the presence of the officer or upon information provided by a reliable source.

This certificate must be carried in vehicle at all times when transporting materials defined as hazardous waste in 10 CSR 25-4.010. This certificate shall be shown to representatives of the Department, Officers of the Missouri State Highway Patrol, and other law enforcement officials on demand.

Fred A. Lafser

DIRECTOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES

October 4, 1983
Date

SEAL

Christopher S. Bond Governor
Fred A. Lafser Director

Division of Environmental Quality
Robert J. Schreiber Jr., P.E. Director

A-19

# DOUS WASTE TRANSPORTER LICENSE

d to: CONSERVATION CHEMICAL COMPANY OF ILLINOIS

5201 Johnson Drive, Suite 400, Mission, Kansas 66205

LICENSE NUMBER: MoDNR H-1005

EXPIRATION DATE: October 4, 1984

NUMBER OF VEHICLES: 1 vehicle

In accordance with Section 260.395 of the "Missouri Hazardous Waste Management Law," the Missouri Department of Natural Resources hereby approves the application of the above-named transporter and issues this license to Transport Hazardous Waste.

All equipment used for the transport of hazardous wastes shall meet and be operated in accordance with the provisions of the Missouri Hazardous Waste Management Law (Sections 260.350 to 260.430, RSMo, 1978) and the rules promulgated thereunder. The Department does not inspect each vehicle to be used for the transport of hazardous waste and the issuance of this license does not imply approval of such equipment.

The Department reserves the right to suspend, revoke or modify this license after due notice if it is found that the holder of this license is in violation of the Missouri Hazardous Waste Management Law, the Missouri Hazardous Waste Management Rules, or failed to operate in accordance with license terms or conditions, or is creating a public nuisance or posing a threat to the health of humans or other living organisms. Furthermore, if it is found that additional terms or conditions are necessary to comply with any and all rules and regulations promulgated in accordance with the Missouri Hazardous Waste Management Law, then, and in that event, the Department has and does hereby reserve the right to revoke or modify this license. In the event that this license is suspended or revoked this document and all attachments shall be surrendered to the Department upon demand.

This license to transport hazardous waste is issued only to the person named in the application and shall not be transferable. This license is issued contingent upon and may be revoked for failure to comply with any and all conditions described on the attached letter of transmittal under "Terms & Conditions."

October 4, 1983
Date

Fred A. Lafser
Director, Department of Natural Resources

by David E. Bedan
David E. Bedan by CRE
Director, Waste Management Program

MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

WASTE MANAGEMENT PROGRAM

A-15

# Commonwealth of Virginia

## DEPARTMENT OF HEALTH

*HAZARDOUS WASTE TRANSPORTER PERMIT*

Conservation Chemical Co., of Illinois *is hereby granted permission to operate as a hazardous waste transporter in accordance with the provisions of Section 32.1-180, Title 32.1, Code of Virginia (1950) as amended, and Section 7.04, Hazardous Waste Management Regulations as adopted by the State Board of Health, effective May 21, 1981.*

*The transporter of hazardous wastes must meet all provisions of Section 7.00 of the Regulations as set forth by the State Board of Health.*

*The term of the transporter permit shall be ten years from the date of issue, unless terminated earlier in accordance with Section 7.04 of the Regulations.*

Conservation Chemical Co., of Illinois *has been assigned control numbers shown below which must appear on all cooresponding related to the transport of hazardous waste, all manifests and all documents related to the reporting of a spill or accident. These numbers may not be transferred without the approval of the Commissioner.*

*Hazardous Waste Transporter ID Number* IND 040888992

*Virginia Hazardous Waste Transporter Permit Number* IND 0408889923

*Date of Issue* September 15, 1982

*Director, Division of Solid and Hazardous Waste Management*

*State Health Commissioner*

Control 1524

# State Of Indiana
## Environmental Management Board
## Liquid Industrial Waste Hauler
## Permit

Operation Permit No. IN4514-0080-11 Money Receipt No. K77917
Page 1 of 6 Fee $ 170.00

In compliance with the provisions of the Indiana Environmental Management Board Rule 320 IAC 5-10-1 et. seq.,

Conservation Chemical Company of Illinois
P.O. Box 6066
6500 Industrial Highway
Gary, IN 46406

is authorized to remove and transport liquid industrial waste in accordance with requirements and conditions set forth in this permit.

This permit shall become effective on February 1, 1984

This permit and the authorization to remove and transport liquid industrial waste shall expire at midnight, January 31, 1985. In order to receive authorization to continue operation beyond this date of expiration, the Permittee shall submit such information and forms as are required by the Indiana Environmental Management Board no later than 60 days prior to the date of expiration.

Signed this 17th day of January 1984 for the Indiana Environmental Management Board

Technical Secretary

State Form 3085R
SBH 66-019

Approved By State Board of Accounts for State Board of Health - 1980

A-17

APR 9 REC'D

CONSERVATION CHEMICAL

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT

Bureau of Environment
T.E.R.R.A. BUILDING
150 NINTH AVENUE, NORTH
NASHVILLE, TENNESSEE 37203

March 7, 1984

Conservation Chemical Company
P.O. Box 6066
Gary, IN 46406

Re: Tennessee Hazardous Waste Transporter Permit EPA I.D. #IND-04-088-8992
Issued to Conservation Chemical Company of Illinois

Dear Ms. Gillette:

We are in receipt of your written request to surrender your Tennessee Hazardous Waste Transporter's Permit.

This letter will serve as your official notice that your permit is hereby withdrawn this date and you will no longer be allowed to transport hazardous waste shipments that originate or terminate in Tennessee.

Should you wish to resume transportation of hazardous wastes regulated by Tennessee at some future date, it will be necessary to resubmit, to the Department, a Hazardous Waste Transporter's Permit Application, along with the appropriate application fee, and receive a new permit.

Should you have questions, or if we can be of future assistance, please do not hesitate to contact this office.

Sincerely,

Bobby W. Morrison

Bobby W. Morrison
Permits & Quality Assurance
Division of Solid Waste Management

BWM/BL/ch SW-33

A-18

TO: Jim Poisel

FROM: Kay Gillette

DATE: 4/30/84

SUBJECT: Pennsylvania Turnpike Hazardous Waste Transporter Permit

Attached hereto you will find the Pennsylvania Turnpike permit per our conversation. Please acknowledge receipt by signing and dating and making a copy of this for your files. Return the original to me. Thank you.

Jim Poisel
Jim Poisel Date

Kay Gillette 4/30/84
Kay Gillette Date

KDG/dr

PENNSYLVANIA TURNPIKE COMMISSION
Hazardous Materials Transportation Permit No. 177

Card ID 2506 Expiration Date MARCH 31 1985
is issued to
CONSERVATION CHEMICAL CO. OF ILLINOIS

who has agreed in writing to comply fully with all the Rules and Regulations of the Pennsylvania Turnpike Commission. Permission is hereby granted to transport hazardous materials provided the shipments are in full compliance with the U.S. Dept. of Transp. Code of Fed. Reg. (49 CFR 170-179). Only three placards are permitted through the tunnels. COMBUSTIBLE, NON-FLAMMABLE COMPRESSED GAS or FUEL OIL. ALL OTHER placards must detour around the tunnel area. Permission will continue until further notice subject to the payment of regular fares.

VALID ONLY WHEN USED BY ABOVE NAMED COMPANY

James B. Wilson
Secretary - Treasurer Office

SECTION. B

## SECTION B

## FACILITY DESCRIPTION

### General Description

Conservation Chemical Company of Illinois is located at 6500 Industrial Highway, Gary, Indiana, 46406. Our EPA I.D. Number is #IND040888992.

Conservation Chemical Company of Illinois manufactures iron salts which are used as coagulant aids in the treatment of both potable and waste waters. Some of the raw materials used to produce our finished products are hazardous wastes pickle liquor from the steel industries.

In some instances, we are paid to remove pickle liquor and other hazardous wastes from the generator's facility. As a consequence, we are also a service facility providing an outlet for specific types of hazardous wastes that can be recycled.

Our primary business activity prior to 1980 was the storage, treatment and transportation of chemical hazardous wastes. The only hazardous wastes currently being brought into the facility is a waste pickle liquor.

Plant produces finished product iron salt from the pickle liquor, and in this process, plant does not produce any hazardous waste. We do not produce any waste which is hazardous at present time. However, from prior years' operations, we do have hazardous waste which is stored at the facility. These wastes consist of:

1. F014 & F015 Cyanide waste
2. F001 & F002 Spent halogenated solvents
3. D002 Silica tetrachloride
4. D003 Plating solution containing $HNO_3$ as acid CuNi
5. Tar residues, paint sludges, soil clean up residue and miscellaneous chemicals stored in containers at the facility.
6. Contaminated fuel oil with PCB
7. Phenol-water U188

At present, we serve only the steel industry to remove pickle liquor from their facility.

## SECTION B

### LOCATION INFORMATION

B-3a Seismic Considerations: We are aware of the intent of the regulation requiring consideration of seismic activity when locating a facility is to protect these facilities from the deformation and displacement of earth's surface when an earthquake occurs and to prevent the release of hazardous waste that could result from damage to the facilities.

Conservation Chemical Company of Illinois is located in Gary, Indiana. Appendix VI does not list Indiana and therefore, we have provided no further information to demonstrate compliance with 264.18(a).

Flood Plain Standard: The intent of the regulation is to prevent the release of hazardous wastes from a facility during a flood. Our facility is not located in a 100 years flood plain. We are attaching a "Flood Insurance Rate Map", City of Gary, Indiana, Lake County, Panel 17 of 19. Community Panel Number is #1801320017C. The map effective date is March 16; 1981, therefore, we have provided no further information to demonstrate compliance with 264.18(b).

N
100-year Flood
Zone A
Zone B
500-year
Zone C
Zone C
Minimal Flooding
Zone A
Elgin Joliet Eastern R.R.
Abandoned Bldg.
Conservation Chemical Co. of Ill.
Date 4-7-84
Scale 1"=100'

B-3

## TABLE 5-23. APPENDIX VI POLITICAL JURISDICTIONS

Political Jurisdictions in Which Compliance With §264.18(a) Must Be Demonstrated

### Alaska

Aleutian Islands
Anchorage
Bethel
Bristol Bay
Cordova-Valdez
Fairbanks-Fort Yukon
Juneau
Kenai-Cook Inlet
Ketchikan Prince of Wales
Kodiak
Lynn Canal-Icy Straits
Palmer-Wasilla-Talkeena
Seward
Sitka
Wade Hampton
Wrangell Petersburg
Yukon-Kuskokwim

### Arizona

Cochise
Graham
Greenlee
Yuma

### California

All

### Colorado

Archuleta
Conejos
Hinsdale
Mineral
Rio Grande
Saguache

### Hawaii

Hawaii

### Idaho

Bannock
Bear Lake
Bingham
Bonneville
Caribou
Cassia
Clark
Franklin
Fremont
Jefferson
Madison
Oneida
Power
Teton

### Montana

Beaverhead
Broadwater
Flathead
Gallatin
Granite
Jefferson
Lake
Lewis and Clark
Madison
Meagher
Missoula
Cascade
Deer Lodge
Park
Powell
Sanders
Silver Bow
Stillwater
Sweet Grass
Teton
Wheatland

(continued)

TABLE 5-23 (continued)

Nevada

All

New Mexico

Bernalillo
Catron
Grant
Hidalgo
Los Alamos
Rio Arriba
Sandoval
Santa Fe
Sierra
Socorro
Taos
Torrance
Valencia

Utah

Beaver
Box Elder
Cache
Carbon
Davis
Duchesne
Emery
Garfield
Iron
Juab
Millard
Morgan
Piute
Rich
Salt Lake
Sanpete
Sevier
Summit
Tooele
Utah
Wasatch
Washington
Wayne
Weber

Washington

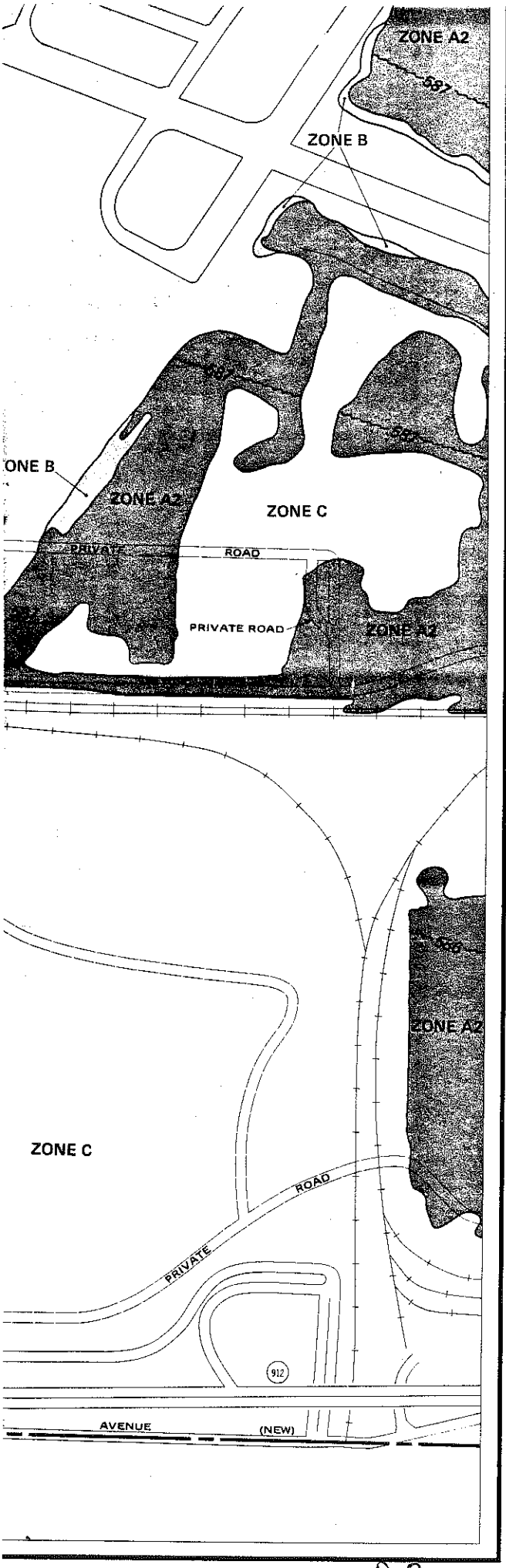
Chelan
Clallam
Clark
Cowlitz
Douglas
Ferry
Grant
Grays Harbor
Jefferson
King
Kitsap
Kittitas
Lewis
Mason
Okanogan
Pacific
Pierce
San Juan Islands
Skagit
Skamania
Snohomish
Thurston
Wahkiakum
Whatcom
Yakima

Wyoming

Fremont
Lincoln
Park
Sublette
Teton
Uinta
Yellowstone National Park



B-6




FLOOD INSURANCE RATE MAP EF TIVE:
MARCH 16, 1981

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

# FIRM
## FLOOD INSURANCE RATE MAP

CITY OF
GARY,
INDIANA
LAKE COUNTY

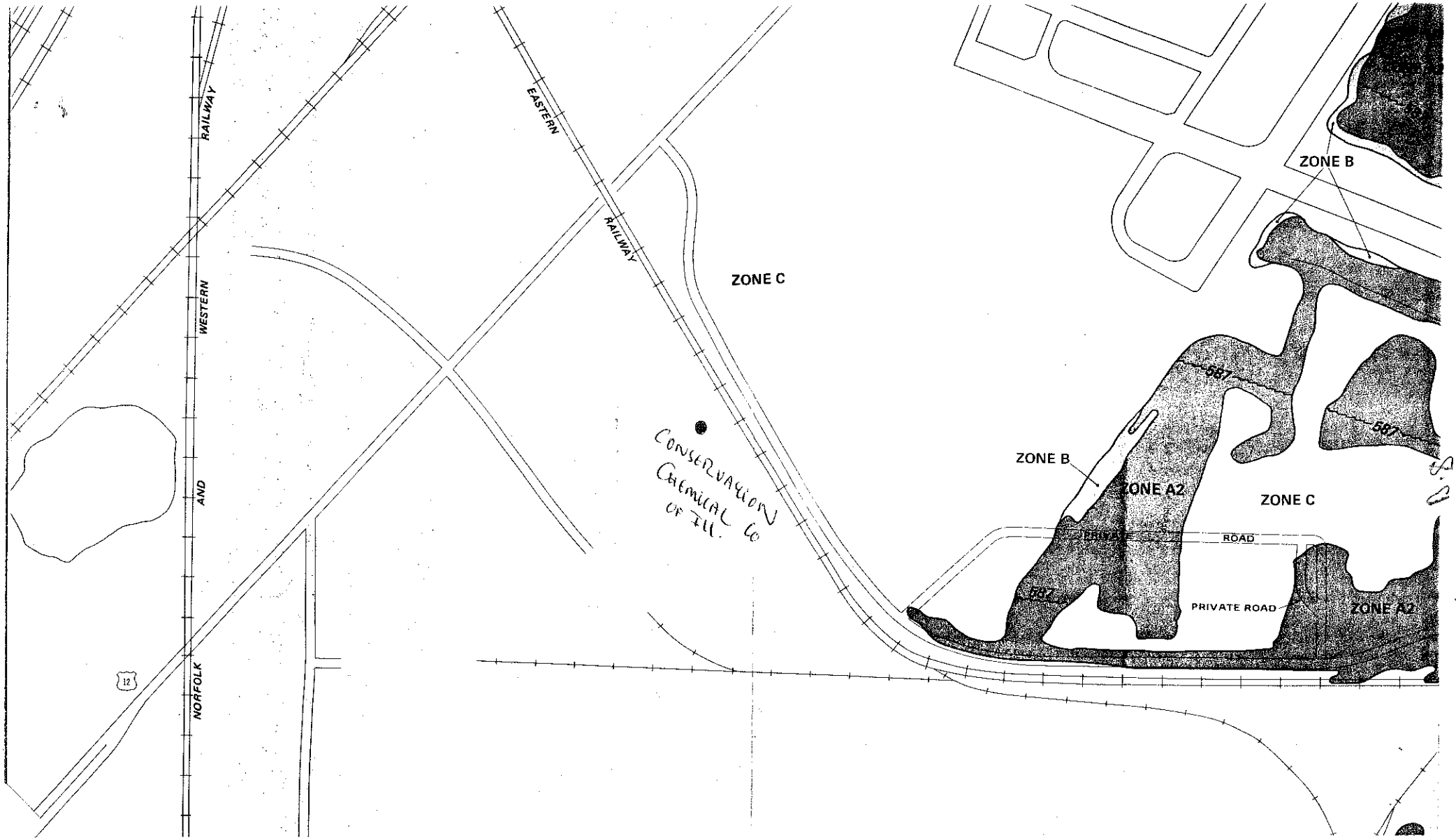
**PANEL 17 OF 19**
(SEE MAP INDEX FOR PANELS NOT PRINTED)

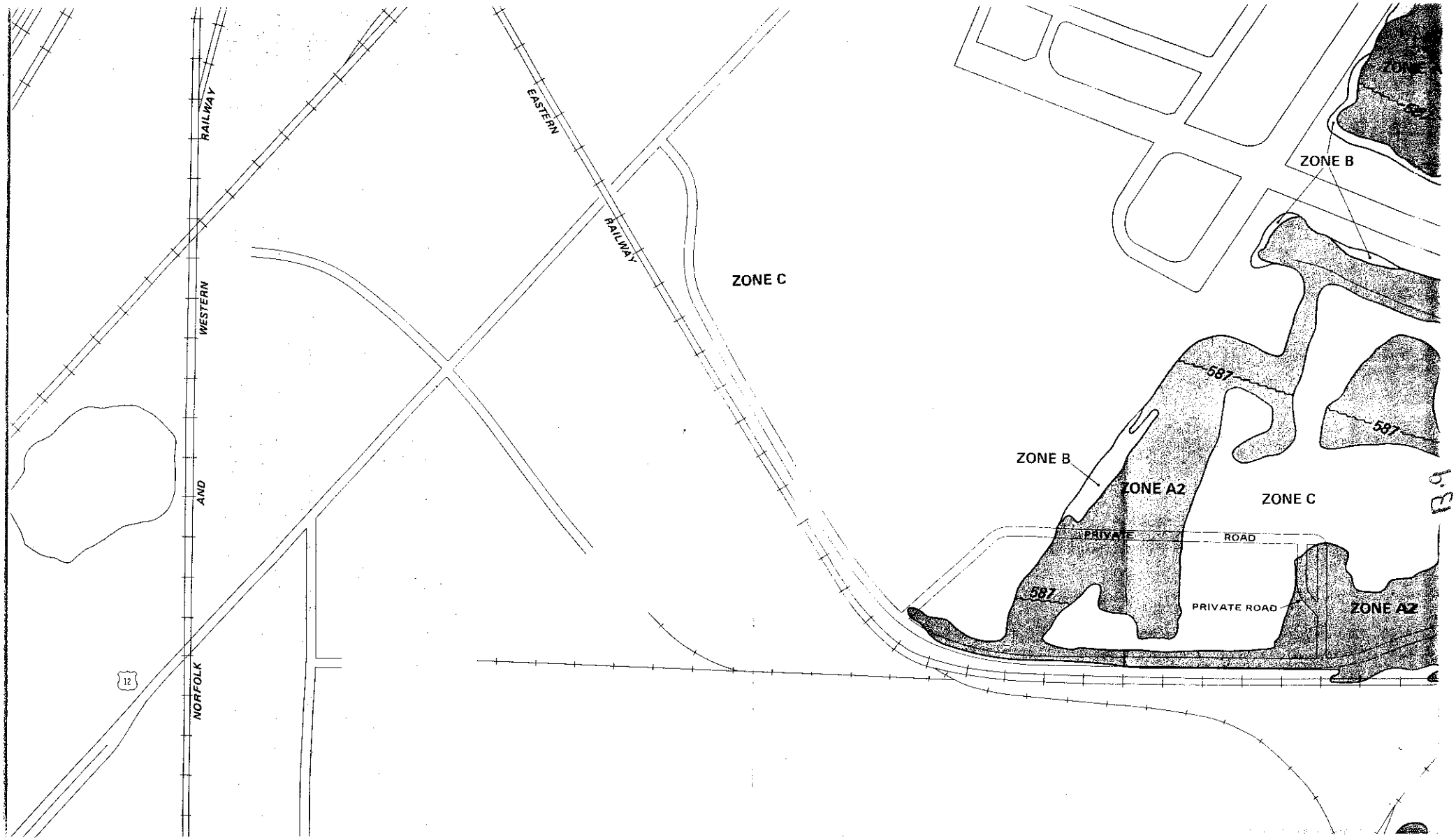
**COMMUNITY-PANEL NUMBER**
**180132 0017 C**

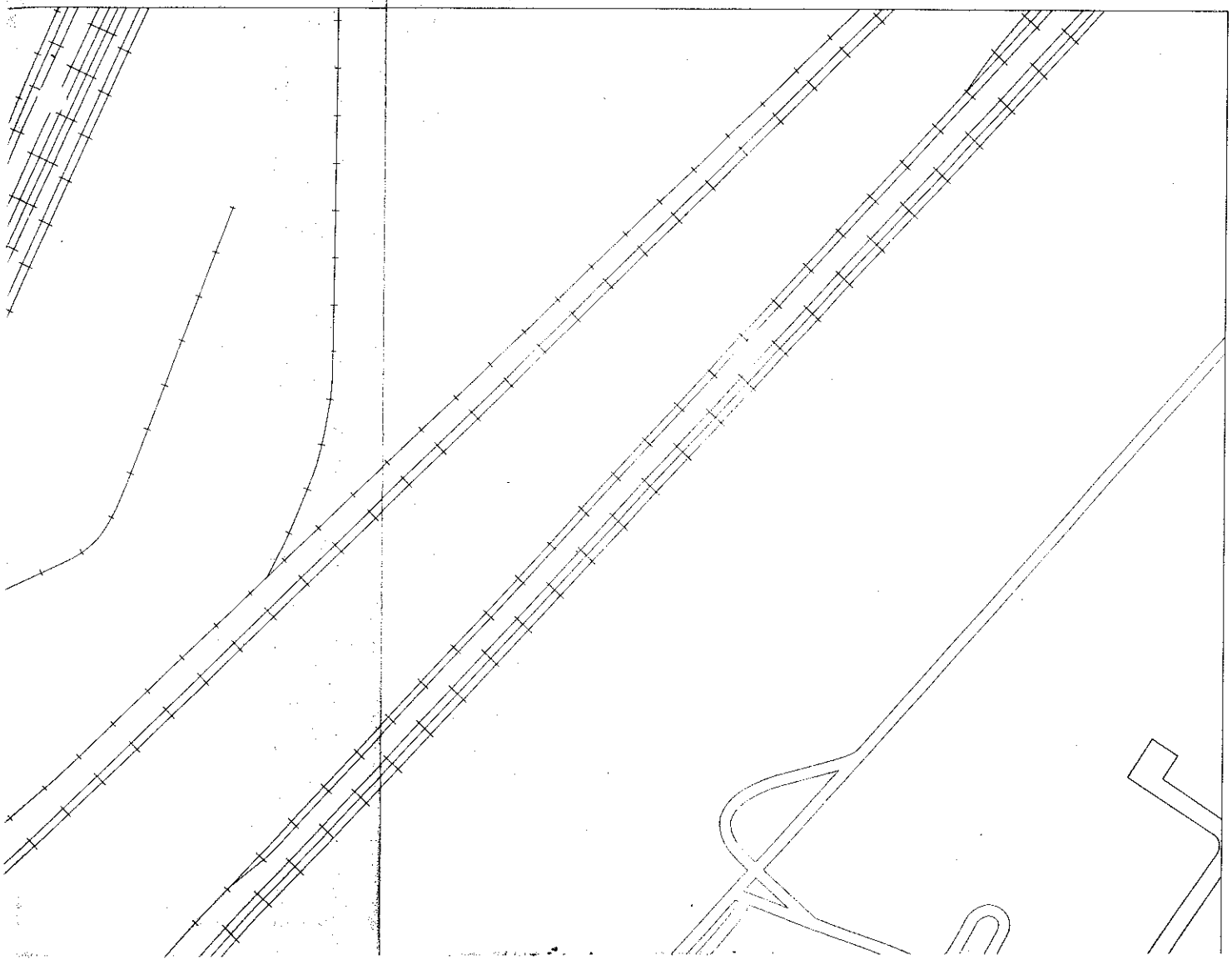
**EFFECTIVE DATE:**
**MARCH 16, 1981**

federal emergency management agency
federal insurance administration

B-7


NORFOLK AND WESTERN RAILWAY
EASTERN RAILWAY
ZONE C
CONSERVATION CHEMICAL CO OF ILL.
ZONE B
ZONE B
ZONE A2
ZONE C
PRIVATE ROAD
PRIVATE ROAD
ZONE A2
587
587
587
12


NORFOLK AND WESTERN RAILWAY
EASTERN RAILWAY
12
ZONE C
ZONE B
ZONE A2
ZONE C
ZONE B
587
587
587
587
PRIVATE ROAD
PRIVATE ROAD
ZONE A2



## KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary
500-Year Flood Boundary

ZONE B
ZONE B

Base Flood Elevation Line With Elevation In Feet** — 513

Base Flood Elevation in Feet Where Uniform Within Zone** — (EL 987)

Elevation Reference Mark — RM7 ×

River Mile — • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

## *EXPLANATION OF ZONE DESIGNATIONS

| ZONE | EXPLANATION |
|---|---|
| A | Areas of 100-year flood; base flood elevations and flood hazard factors not determined. |
| AO | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined. |
| AH | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined. |
| A1-A30 | Areas of 100-year flood; base flood elevations and flood hazard factors determined. |
| A99 | Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined. |
| B | Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading) |
| C | Areas of minimal flooding. (No shading) |
| D | Areas of undetermined, but possible, flood hazards. |
| V | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined. |
| V1-V30 | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined. |

NOTES TO USER

B-10

TRAFFIC INFORMATION

The only hazardous waste at present company brings into the facility is "Pickle Liquor". This waste, most of the time, we pick up from steel mills, as we are licensed hazardous waste hauler by tank trucks. Our tank trucks are rubberlined.

Plot plan shows the roadways in and around our facility. Access gates are off Industrial Highway. There is very little and no traffic except our employees to the access road to our facility. We have only 11 employees, and we work round the clock, so only 11 cars at the most may be at our facility at one time. We are estimating (2) tank trucks a day bringing hazardous waste to the facility.

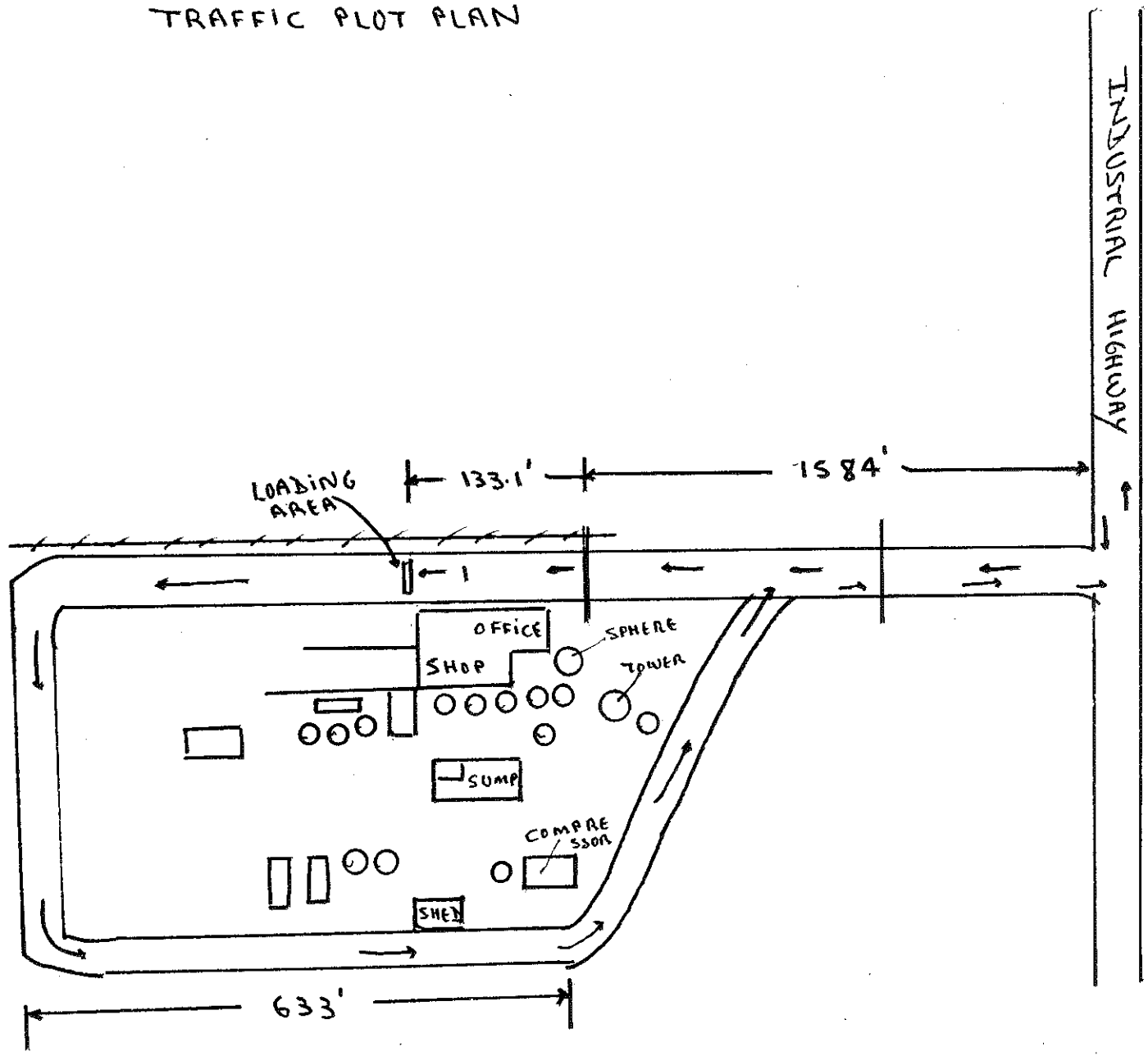
We have stop signs at front gate and we have sign posted 10 MPH speed limit. Industrial Highway is a four lane with a posted speed limit of 40 MPH. It is moderately traveled during the morning and evening rush hours by passenger vehicles and trucks, and lightly traveled during all other daylight hours during which our facility operates. Industrial Highway is not a school bus route.

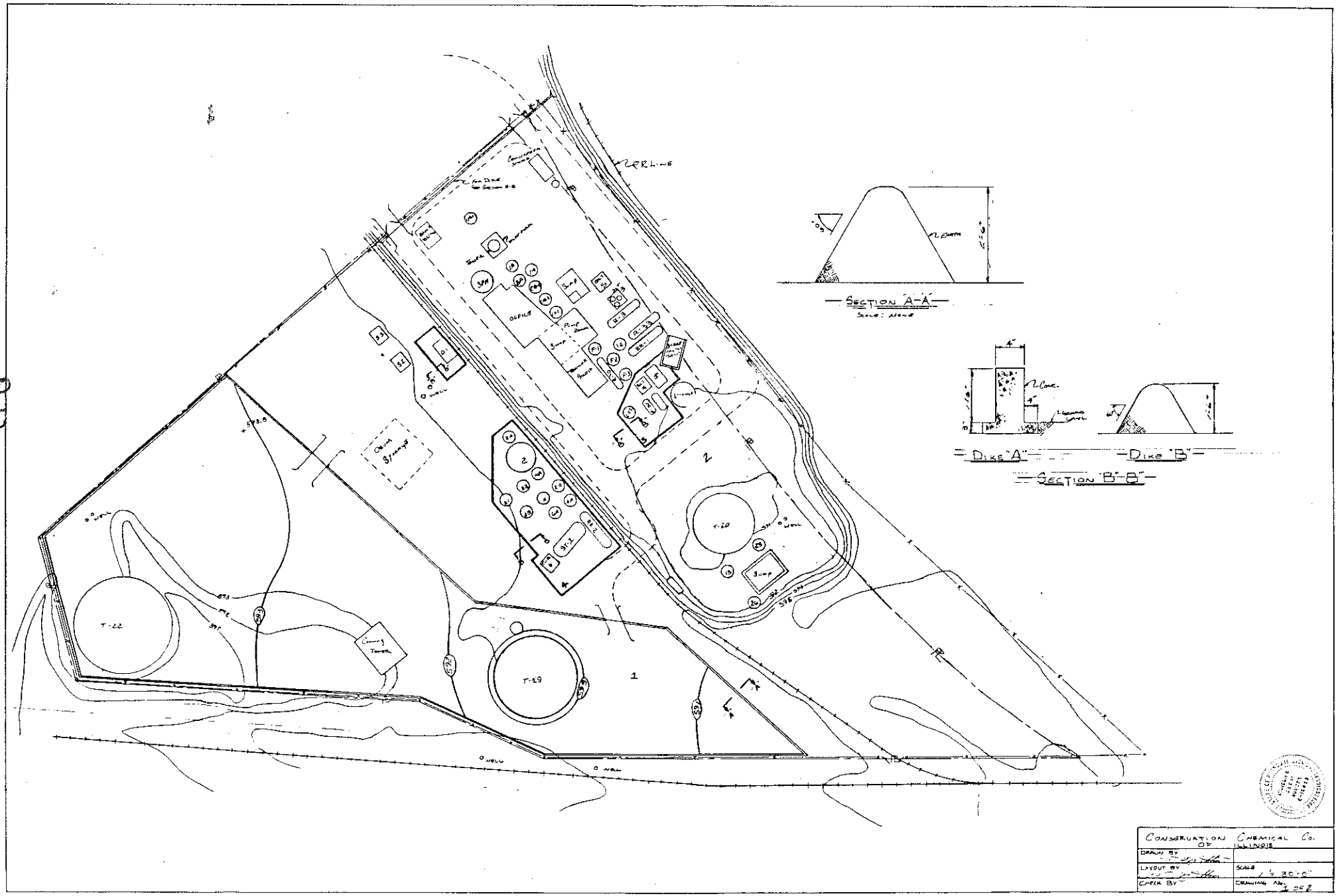
We have only one entrance to our facility for truck and passenger vehicles. Over the past year, an average of 3 trucks entered our facility per day. They are ten-wheel tank trucks or flatbed. During Spring and Fall, our production rate increases about 10-20 percent, and at that time we may get maybe 4 tank trucks per day.

As shown on plot plan, tank trucks of hazardous waste traveled to the point of unloading. Drivers put the sign about 10' on back: "Tank car is connected". He applies the brakes.

We have railroad tracks also at our facility. Chlorine, the raw material, and some times pickle liquor enters from the back railcar gate to the facility. Rail car is spotted at the point of unloading by the railroad company. Brakes are applied and we put the sign on both sides.

TRAFFIC PLOT PLAN





ER LINE
OFFICE
T-22
T-19
T-20
Sump
Cooling Tower
Drum Storage
SECTION "A-A"
SCALE: NONE
DIKE "A"
DIKE "B"
SECTION "B-B"
CONSERVATION CHEMICAL CO. OF ILLINOIS
DRAWN BY
LAYOUT BY
CHECK BY
SCALE
DRAWING No.


B13

SECTION · C

## SECTION C

### GENERAL WASTE ANALYSIS

Conservation Chemical Company of Illinois' primary business activity prior to 1980 was the storage, treatment and transportation of chemical hazardous waste. The only hazardous waste currently being brought into the facility is a waste pickle liquor (K062 & K063), which is used as a raw material to produce a salable finished product. However, hazardous waste from prior years' operations is still stored at the facility. These wastes consist of:

1. F007 & F009 cyanide waste
2. F001 & F002 spent halogenated solvents
3. D002 silica tetrachloride
4. D003 sodium nitrate
5. Contaminated fuel oil
6. Tar residues, paint sludges, soil clean up residue and miscellaneous chemicals stored in containers at the facility
7. Waste pile and surface impoundments
8. U188 2-pits - Phenol-Water

### WASTE ANALYSIS PLAN 40 CFR 265.13

In the inspection report, a notation should be made for the general condition of other containers. Specifically, if we have stored waste in drums, then a notation should be made on the weekly inspection report on their general condition.

(1) Before disposing or processing any of the waste, a detailed chemical and physical analysis of a representative sample should be obtained.

(2) Analyses must be repeated when, in the operator's judgment, a change in the properties of the waste may have occurred. In our case, after pumping away the liquid waste or products, a residue in the bottom of the tanks was observed. This solid residue, of course, can be different than the liquid lying above it or that had lay above it.

Materials should be tested for cyanide, heavy metals, density, solids content. Where residues are known to come from fertilizer storage tanks, the residue should also be tested for total solids. Test methods to be used appear below. The reference for each of these testing methods is the 14th Edition of Standard Methods.

cyanide - distillation followed by titration with silver nitrate, lower levels by colometric, p. 361

heavy metals - atomic absorption

solids content and total solids - volatile and fixed matter Method 208G, p. 96

density - Method 210, p. 121

total nitrates - Devard's alloy reduction Method 419F, p. 431

(3) Sampling method consists of taking six core specimens of the tank residue. Material should be combined, mixed thoroughly and then an adequate part sent to the laboratory.

(4) Since this material is very stable and no changes are expected with time, no repetitions of analyses is planned.

(5) The operator should take all precautions that inadvertently would make cyanide reactive. Since no acids are stored in the facility, this situation seems highly unlikely.

WASTE ANALYSIS - Any waste analysis should be recorded in the operations record. In addition to the analysis, the date the sample was taken should be shown. The operator must record in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the regional administrator. The report must include (1) name, address, and telephone number of the owner or operator, (2) name, address, and telephone number of the facility, (3) date, time and type of incident, (4) name and quantity of materials involved, (5) the extent of injuries, if any, (6) an assessment of actual or potential hazards to health or the environment and (7) estimated quantity and disposition of recovered material that resulted from the incident.

The inspection report should have the date and time of the inspection, the name of the inspector, notations of the observations made and the date and nature of any repairs or other remedial action. All closure costs estimated must be kept in the operating record. The above can include items needed for the written operating record that should be added to the inspection report.

As per 40 CFR 264.13 requirements:

Before treats, stores or disposes of any hazardous waste, we will obtain a detailed chemical and physical analysis of a representative sample of the waste. At minimum, our analysis will contain all the information which must be known to treat, store or dispose of the waste, We had arrangements made with

the generators of the hazardous waste to supply us with the analysis of the waste. We will repeat the analysis, or ask the generators to provide us with another analysis, when in our opinion, the waste load seems to be different; for example, too much suspended solids, color change, change in specific gravity, change in pH.

Before accepting any waste at the facility, facility operating personnel will grab the sample of the waste. Our sampling method is briefly described in Section H. Operating personnel and plant manager is trained to check the primary parameters. They will check and record:

1. Color
2. Suspended solids
3. pH
4. Specific gravity
5. Iron content
6. Two phases in a sample
7. Odor
8. Free acids

SPENT PICKLE LIQUOR WASTE ANALYSIS PLAN

Prior to accepting any waste from a specific generator at the facility, Conservation Chemical Company of Illinois will obtain an analysis that indicates the waste is suitable for resource recovery as a raw material for products manufactured at the facility. The analysis will include an assay of total iron content and select other heavy metals such as zinc, lead, chromium, cadmium, and manganese. The extent of the testing for heavy metals besides iron will be dependent upon the generator's pickling process (i.e., the process determines likelihood that a given metal will be found in the waste stream). In those instances where a generator is using an organic inhibitor or surfactant, the waste stream will be analyzed for that particular organic or for total organic carbon content. We would also determine the free acid content and the specific gravity.

The analyses mentioned in the paragraph above will be conducted by an outside independent laboratory. Although their methodologies may vary depending upon their instrumentation, we would expect that most of the results will be obtained through a titration process or the use of a gas chromotograph.

A representative sample of the waste we analyze will be obtained by the generator by simply "grabbing" a sample of the liquid pickle liquor varying in size from one pint to one gallon. This sample will be taken from the storage tank or pickling tank located at the generator's facility. Since pickle liquor is not subject to stratification, pulling a sample from either the top or bottom of the tank would be representative.

The initial analysis of the waste will be repeated or reviewed in the event that the generator changes the pickling process in such a way that might cause the material to become contaminated in some way. For example, pickling steel coils that had been oiled previously or dipping metal that had been galvanized previously could cause the level of oil to be increased in the first case and the level of zinc to be increased in the second case. Unless a change in process of that sort was instituted, a new analysis would not be obtained. In most cases, the generators of the pickle liquor will provide us with an analysis showing the ferrous iron content and the free acid content of their spent pickle liquor.

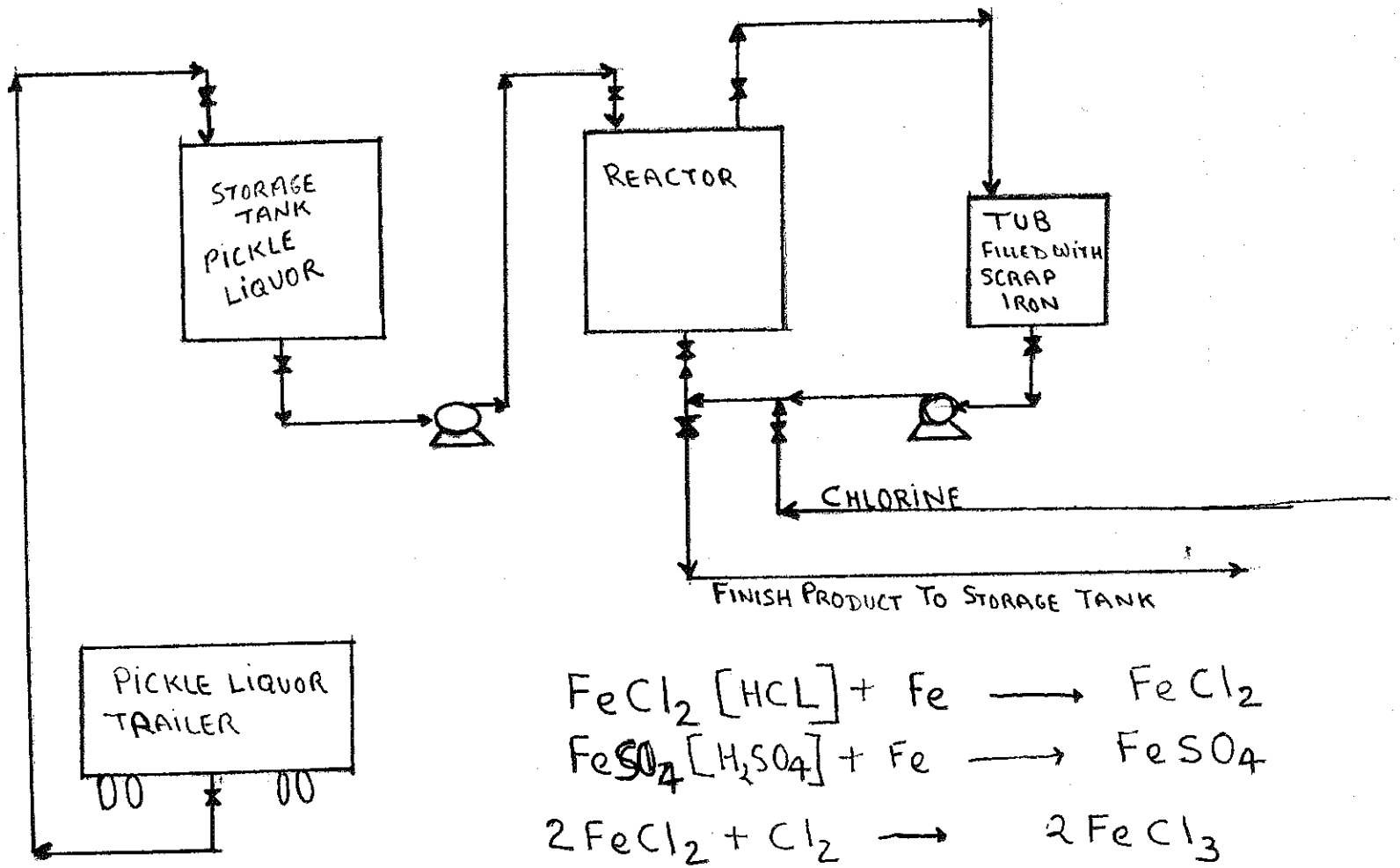
For each truckload or tank car of spent pickle liquor brought into the facility for resource recovery, a sample will be drawn. At a minimum, the sample will be analyzed for iron content and the specific gravity will be determined. If the correlation between the specific gravity and iron content is consistent with the known relationships, it will be assumed that there is no excess of any other heavy metal besides iron in the material. In addition, each sample will be visually inspected to make certain that it is free of oil or grease and does not contain excessive amounts of insolubles. A representative sample will be drawn from the truckload or tank car by putting a sample bottle in the bulk shipping container using a wooden rod. The identity of each movement of waste delivered to the facility will be determined by matching up the bill of lading and manifest with a log sheet maintained by the operators.

PICKLE LIQUOR ANALYSIS FROM DIFFERENT GENERATORS

| ITEMS | BETHELEM STEEL 9/14/81 | J & L STEEL EAST CHICAGO 9/14/81 | CHICAGO STEEL 9/14/81 | PEERLESS CHAIN COMPANY 4/15/81 | J & L CLEVELAND 9/22/81 | WORTHINGTON STEEL 11/2/77 |
|---|---|---|---|---|---|---|
| pH @ 20°C | | | | 1.62 | | |
| Total Iron (mg/l) | | | | 62,500 | | 15.51% |
| Ferrous Iron w/w% | 12.75% | 10.51% | 9.78% | | | |
| Ferric Iron w/w% | 0.30% | 0.15% | 0.08% | | | |
| Hydrochloric Acid | 1.84% | 0.66¢ | 0.98% | | 0.42 meq/gm | 4.15% |
| Zinc | 3.6 PPM | 3.4 PPM | 4.4 PPM | | | |
| Copper | 13 PPM | 22 PPM | 23 PPM | | | |
| Nickel | 31 PPM | 28 PPM | 35 PPM | | | |
| Lead | 70.71 PPM | 0.69 PPM | 0.89 PPM | 2.79mg/l | 2.3mg/kg | |
| Chromium | 11 PPM | 6.2 PPM | 8.1 PPM | 550mg/l | 5.6mg/kg | |
| Cadmium | 0.09 PPM | 0.11 PPM | 0.10 PPM | | | |
| Manganese | | | | | 365mg/kg | |
| Phosphorus as $PO_4$ | | | | | 71mg/kg | |
| Specific Gravity | | | | | 1.212% | 1.410% |
| Free Sulfuric Acid | | | | 1.47wt% | | |

FIG. C-1

CONVERSION OF PICKLE LIQUOR (K062) WASTE TO FINISH PRODUCT




$$FeCl_2\,[HCL] + Fe \longrightarrow FeCl_2$$

$$FeSO_4\,[H_2SO_4] + Fe \longrightarrow FeSO_4$$

$$2FeCl_2 + Cl_2 \longrightarrow 2FeCl_3$$

$$6FeSO_4 + 3Cl_2 \longrightarrow 2Fe_2(SO_4)_3 - 2FeCl_3$$

Facility buys pickle liquor from various steel mills. The waste contains ferrous chloride and is used as a raw material in manufacturing ferric chloride or a more concentrated ferrous chloride solution. The ferrous sulfate containing pickle liquor is used to manufacture Ferri-Chlor or a more concentrated ferrous sulfate solution.

When the waste arrives at the facility, we check the manifest and grab the sample. If our preliminary analysis shows that waste is similar in nature, we pump that waste in storage tank. We have separate storage tanks to receive ferrous chloride and ferrous sulfate waste.

Waste from the storage tank is pumped into the reactor and passed over and circulated through tub which is filled with scrap iron. If we want to produce more concentrated ferrous sulfate or ferrous chloride solution, we circulate the material until the final analysis shows our required iron content:

$$FeCl_2(HCl) + Fe \longrightarrow FeCl_2$$

$$FeSO_4(H_2SO_4) + Fe \longrightarrow FeSO_4$$

When facility wants to produce ferric chloride or Ferri-Chlor, we introduce chlorine in circulating line:

$$2FeCl_2 + 1Cl_2 \longrightarrow 2FeCl_3$$

$$6FeSO_4 + 3Cl_2 \longrightarrow 2Fe_2(SO_4)_3 - 2FeCl_3$$

The process does not produce any waste. Finished product is pumped to storage tanks or to trailer for shipments. The block diagram shows the equipment and general flow of materials. All the equipment used in this process are rubber-lined and piping valves are made of CPVC material to prevent leaks due to equipment failure. See Figure C-1.

CYANIDE WASTE ANALYSIS PLAN

At present, facility does not receive any cyanide waste. Facility presently has from his prior activity, about 150,000 gallons of cyanide waste. Facility has process to convert this waste and produce Potassium Cyanide. We have planned to sell this product, and at the same time eliminate the hazardous waste from the storage.

EQUIPMENT:

Glass-lined reactor, glass or glass-lined stripper, reflux condenser, filter, 2 scrubbers, vacuum pump, cyanide detector, hot-oil system for heating.

MATERIALS:

Cyanide waste, sulfuric acid, potassium hydroxide, filter aid

PROCESS:

Charge both the scrubber with KOH solution. Pump cyanide waste from storage tank to the glass-lined reactor. Make sure you have water on reflux condenser. Start the agitator. Slowly add sulfuric acid; put the heat on reactor. Bring the cyanide waste solution to reflux. Let it reflux gently for one hour. Cut the heat off, and filter the material. Filtrate pump back to the reactor. After filtering, recycle the material over stripping tower. Check the $CN^-$ level in reactor and scrubber. Let it reflux until the $CN^-$ livel in reactor goes down to less than 20 PPM. Cool down the reactor and pump the solution which has $CN^-$ concentration less than 20 PPM to the storage tank. Solid $CN^-$ waste from the filter, drummed for off-site disposal. Pump the scrubber-1KCN solution to the storage tank. We are going to sell this solution. KCN solution from the scrubber-2 will pump to scrubber-1 for the next batch.

$$HCN + KOH \longrightarrow KCN + H_2O$$

The cyanide free solution (less than 20 PPM $CN^-$) we are going to ship off-site for disposal. We have already committed with 2 firms. Solid $CN^-$ waste also, we are going to ship off-site for disposal. See Figure C-2.

$CN^-$ ANALYSIS PROCEDURE

General Discussion

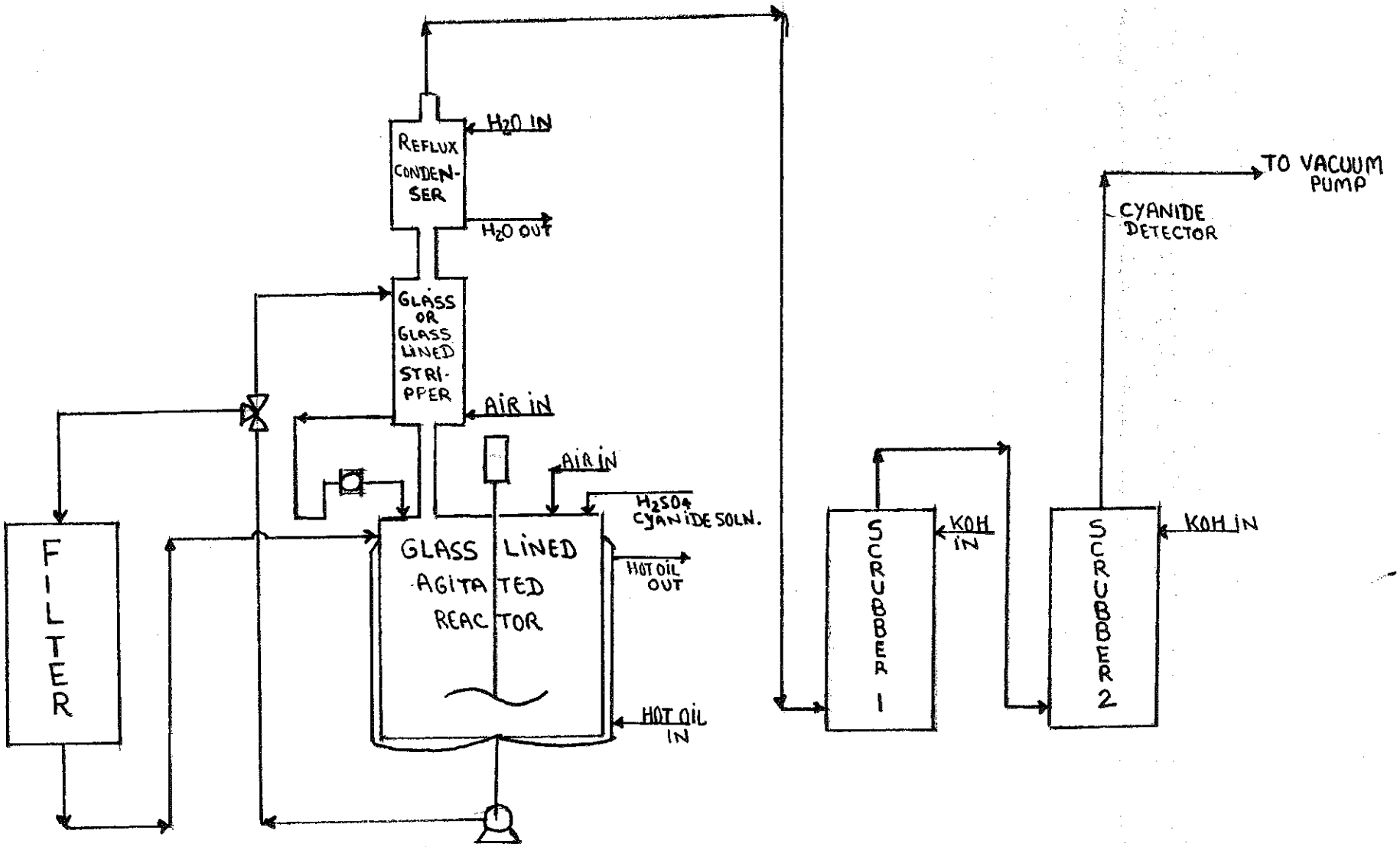
The nature of the preliminary treatment will vary according to the interfering substance present. Sulfides, fatty acids, and oxidizing agents are removed by special procedures. Most other interfering substances are removed by distillation. The importance of the distillation procedure cannot be overemphasized.

Preservation of Samples

Oxidizing agents, such as chlorine, decompose most cyanides. Test by placing a drop of sample on a strip of potassium iodide (KI) starch paper. If a bluish discoloration is noted, add a few crystals of sodium thiosulfate, $Na_2S_2O_3$, to the sample, stir, and retest. If necessary, repeat procedure until no bluish discoloration of test paper occurs; then add 0.1g $Na_2S_2O_3$/L to the sample in excess. Manganese dioxide, nitrosyl chloride, etc., if present, also may cause discoloration of the test paper. If possible, carry out this procedure before preserving sample as described below. When the following test indicates presence of sulfide, oxidizing compounds would not be expected.

Fig C.2

# CYANIDE REMOVAL PROCESS



Sulfide will convert $CN^-$ to $CNS^-$ rapidly, especially at high pH. Test for $S^{2-}$ by placing a drop of sample on lead acetate test paper previously moistened with acetic acid buffer solution, pH 4 (Section 408B.3e). Darkening of the paper indicated presence of $S^{2-}$. Add powdered cadmium nitrate, $Cd(NO_3)_2 \cdot 4H_2O$, to precipitate yellow cadmium sulfide (CdS). If $S^{2-}$ content is high, add instead powdered cadmium carbonate ($CdCO_3$), lead carbonate ($PbCO_3$), lead acetate, or bismuth citrate. Repeat this operation until a drop of treated sample no longer darkens the acidified lead acetate test paper. Filter sample before raising pH for stabilization. When particulate, metal cyanide complexes are suspected in the sample, filter solution before $S^{2-}$ is removed. Reconstitute sample by returning filtered particulates to the sample bottle after $S^{2-}$ removal. Homogenize particulates before analyses.

Because most cyanides are very reactive and unstable, analyze samples as soon as possible. If sample cannot be analyzed immediately, add NaOH pellets or a strong NaOH solution to raise sample pH to 12 to 12.5 and store in a closed, dark bottle in a cool place.

To analyze for CNCl collect a separate sample and omit NaOH addition because CNCl is converted rapidly to $CNO^-$ as high pH. Make colorimatric estimation immediately after sampling.

Interferences

a. Oxidizing agents may destroy most of the cyanide during storage and manipulation. Add $Na_2S_2O_3$ as directed in Section 2, Preservation of Samples.

b. Sulfide will distill over with cyanide and, therefore, adversely affect colorimetric, titrimetric, and electrode procedures. Test for and remove $S^{2-}$ as directed above. Treat 25mL more than required for the distillation to provide sufficient filtrate volume.

c. Fatty acids that distill and form soaps under alkaline titration conditions, make the end point almost impossible to detect. Remove fatty acids by extraction. Acidify sample with acetic acid (1+9) to pH 6.0 to 7.0 (Caution-Perform this operation in a hood as quickly as possible). Immediately extract with iso-octane, hexane, or $CHCl_3$, preference in order named). Use a solvent volume equal to 20% of sample volume. One extraction usually is adequate to reduce the fatty acid concentration below the interference level. Avoid multiple extractions or a long contact time at low pH to minimize loss of HCN. When extraction is completed, immediately raise pH to $>12$ with NaOH solution.

d. Carbonate in high concentration may affect distillation by causing excessive gasing when acid is added. The carbon dioxide ($CO_2$) released also may significantly reduce the NaOH content in the absorber.

When sampling effluents such as coal-gasification wastes, atmospheric emission scrub waters, and other high-carbonate wastes, use hydrated lime to stabilize the sample; slowly add with stirring

to raise pH to 12 to 12.5. Decant sample into sample bottle after precipitate has settled.

e. Other possible interferences include substances that might contribute color or turbidity. In most cases, distillation will remove these.

f. Aldehydes convert cyanide to cyanohydrin, which forms nitrile under the distillation conditions. Only direct titration without distillation can be used, which reveals only non-complex cyanides. Formaldehyde interference is noticeable in concentrations exceeding 0.5mg/L; eliminate by adding silver nitrate ($AgNO_3$) to the sample. Use the following spot test to establish absence or presence of aldehydes (detection limit 0.05mg/L):

1. Reagents----

a. MBTH indicator solution---Dissolve 0.05g 3-methyl, 2-benzothiazolone hydrazone hydrochloride in 100mL water. Filter if turbid.

b. Ferric chloride oxidizing solution---Dissolve 1.6g sulfamic acid and 1g $FeCl_3 \cdot 6H_2O$ in 100mL water.

c. Silver nitrate solution, 0.1N---Dissolve 17.0g $AgNO_3$ crystals in water and dilute to 1L.

d. EDTA solution, 0.1M---Dissolve 37.2g disodium ethylenediaminetetraacetate in water and dilute to 1L.

2. Procedure----Place 1 drop of sample and 1 drop distilled water for a blank in separate cavities of a white spot plate. Add 1 drop MBTH solution and then 1 drop $FeCl_3$ oxidizing solution to each spot. Allow 10 min. for color development. The color change will be from a faint green to a deeper color, tending to blue-green at higher concentrations. Add 0.1N $AgNO_3$ solution dropwise and retest on the spot plate. For each drop of $AgNO_3$, add 2 drops EDTA solution. A formaldehyde concentration of 1mg/L in a 100mL sample will require approximately 2 drops $AgNO_3$ solution and 4 drops EDTA solution.

g. Glucose and other sugars, expecially at the pH of preservation, lead to cyanohydrin formation by reaction of cyanide with aldose. Cyanohydrin can be reduced to cyanide with $AgNO_3$ but the MBTH is not applicable.

## TOTAL CYANIDE AFTER DISTILLATION

### General Discussion

Hydrogen cyanide (HCN) is liberated from an acidified sample by distillation and purging with air. The HCN gas is collected by passing it through an NaOH scrubbing solution. Cyanide concentration to the scrubbing solution is determined by either titrimetric, colormetric, or potentiometric procedures.

a. Boiling flask, 1L, with inlet tube and provision for water-cooled condenser.

b. Gas absorber, with gas dispersion tube equipped with medium porosity fritted outlet.

c. Heating element, adjustable.

d. Ground glass ST joints, TFE-sleeved or with an appropriate lubricant for the boiling flask and condenser. Rubber stopper joints also may be used.

Reagents

a. Sodium hydroxide solution: Dissolve 10g NaOH in water and dilute to 1L.

b. Magnesium chloride reagent: Dissolve 510g $MgCl_2 \cdot 6H_2O$ in water and dilute to 1L.

c. Sulfuric acid, $H_2SO_4$, 1+1.

Procedure

a. Add 500mL sample, containing not more than 100mg CN/L (diluted if necessary with distilled water) to the boiling flask. Add 50mL NaOH solution to the gas washer and dilute, if necessary. with distilled water to obtain an adequate depth of liquid in the absorber. Connect the train, consisting of boiling flask air inlet flask, condenser, gas washer, suction flask trap and aspirator. Adjust suction so that approximately 1 air bubble/sec enters the boiling flask. This air rate will carry HCN gas from flask to absorber and usually will prevent a reverse flow of HCN through the air inlet. If this air rate does not prevent sample backup in the delivery tube, increase air-flow rate to 2 air bubbles/sec. Observe air purge rate in the absorber where the liquid level should be raised not more than 6.5 to 10mm. Maintain air flow throughout the reaction.

b. Add 50mL 1+1 $H_2SO_4$ through the air inlet tube. Rinse tube with distilled water and let air mix flask contents for 3 mins. Add 20mL $MgCl_2$ reagent through air inlet and wash down with stream of water. A precipitate that may form redissolves on heating.

c. Heat with rapid boiling, but do not flood condenser inlet or permit vapors to rise more than halfway into condenser. Adequate refluxing is indicated by a refulx rate of 40 to 50 drops/min from the conderser lip. Reflux for at least 1 hr. Discontinue heating but continue air flow. Cool for 15 min and drain gas washer contents into a separtae container. Rinse connecting tube between condenser and gas washer with distilled water, add rinse water to drained liquid, and dilute to 250mL in a volumetric flask.

d. Determine cyanide content by titration method (C) if cyanide concentration exceeds 1mg/L or by the colorimetric method (D) if the cyanide concentration is less. Use titration, the elctrode probe method, or the spot test to approximate CN content. Alternatively, use the cyanide-selective electrode in the concentration range 0.05 to 10mg CN/L (Method E).

e. Distillation gives quantitative recovery of even refractory cyanides such as iron complexes. To obtain complete recovery of cobalticyanide use ultraviolet radiation pretreatment. If imcomplete recovery is suspected, distill again by refilling the gas washer with

a fresh charge of NaOH solution and refluxing 1 hr. more. The cyanide from the second reflux, if any, will indicate completeness of recovery.

f. As a quality control measure, periodically test apparatus, reagents, and other potential variables in the concentration range of interest. As an example a minimum 98% recovery from 1mg CN/L standard should be obtained.

## TITRIMETRIC METHOD

### General Discussion

a. Principle: $CN^-$ in the alkaline distillate from the preliminary treatment procedure is titrated with standard silver nitrate ($AgNO_3$) to form the soluble cyanide complex, $Ag(CN)_2^-$. As soon as all $CN^-$ has been complexed and a small excess of $Ag^+$ has been added, the excess Ag+ is detected by the silver-sensitive indicator, P-dimethylaminobenzalrhodanine, which immediately turns from a yellow to a salmon color. The distillation has provided a 2:1 concentration. The indicator is sensitive to about 0.1mg Ag/L. If titration shows that $CN^-$ is below 1mg/L, examine another portion colorimetrically.

### Reagents

a. Sodium hydroxide solution, NaOH, 1N.

b. Sulfuric acid solution, $H_2SO_4$, 1N.

c. Indicator solution: Dissolve 20mg p-dimethylaminobenzalrhodanine in 100mL acetone.

d. Standard silver nitrate titrant, 0.0192N: Dissolve 3.27g $AgNO_3$ in 1L distilled water. Standardize against standard NaCl solution, using the argentometric method with $K_2CrO_4$ indicator, as directed in Chloride.

Dilute 500mL $AgNO_3$ solution according to the titer found so that 1.00 mL is equivalent to 1.00mg CN.

### Procedure

a. From the absorption solution take a measure volume of sample so that the titration will require approximately 1 to 10 mL $AgNO_3$ titrant. Dilute to 250mL or some other convenient volume to be used for all titrations. For samples with low cyanide concentration($<$ 5mg/L) do not dilute. Add 0.5mL indicator solution.

b. Titrate with standard $AgNO_3$ titrant to the first change in color from a canary yellow to a salmon hue. Titrate a blank containing the same amount of alkali and water. As the analyst becomes accustomed to the end point, blank titrations decrease from the high values usually experienced in the first few trials to 1 drop of less, with a corresponding improvement in precision.

Calculation

$$\text{mg CN/L} = \frac{(A - B) \times 1000}{\text{mL original sample}} \times \frac{250}{\text{mL portion used}}$$

where:

A = mL standard $AgNO_3$ for sample and

B = mL standard $AgNO_3$ for blank

Precision and Accuracy

For samples containing more than 1mL CN/L that have been distilled or for relatively clear samples without significant interference, the coefficient of variation is 2%. Extraction and removal of $S^{2-}$ or oxidizing agents tend to increase the coefficient of variation to a degree determined by the amount of manipulation and the type of sample. The limit of sensitivity is approximately 0.1mg CN/L, but at the concentration the end point if indistinct. At 0.4mg/L the coefficient of variation is four times that at CN concentration levels $>$1.0mg/L.

## SECTION C

## SILICA TETRACHLORIDE

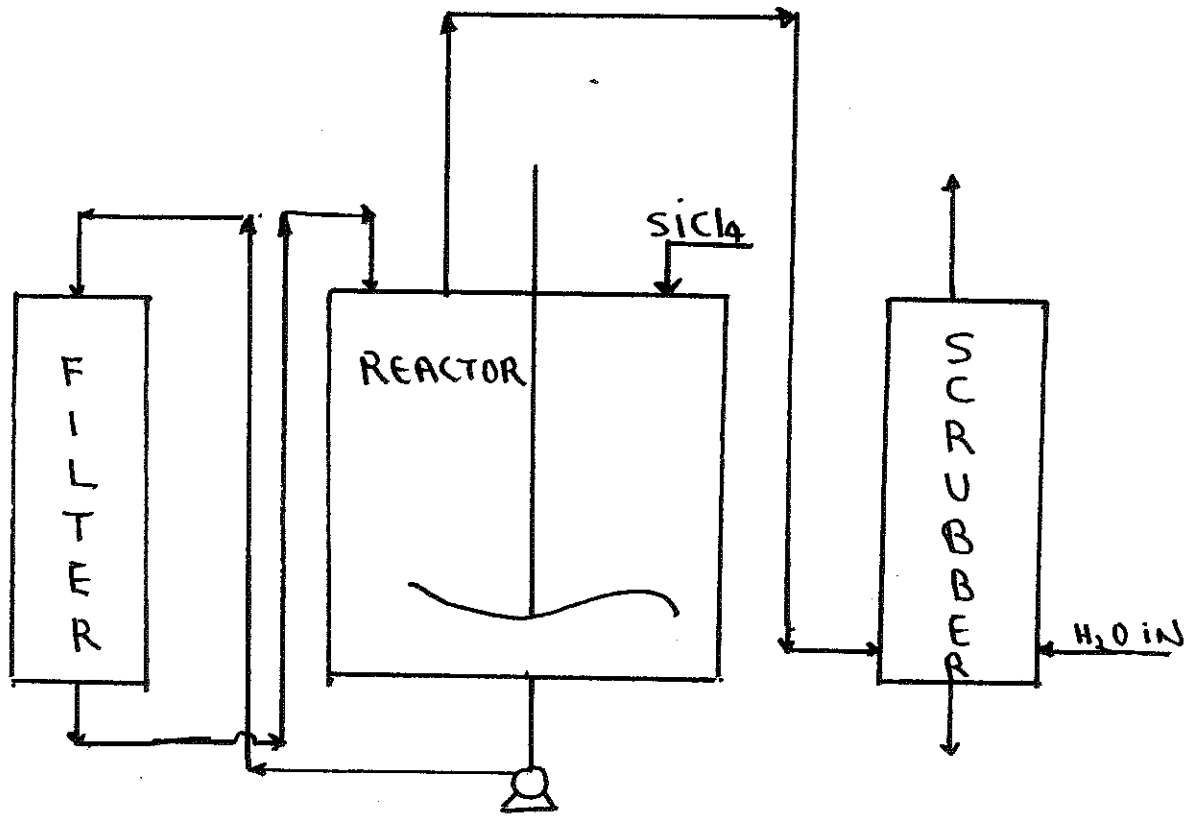
Facility has about 3,000 gallons of silica tetrachloride from facility's activity prior to 1980. We are not planning to receive this kind of waste in near future. We would like to make this material non-hazardous by the process described below.

This material is hazardous waste only because it may emit hydrogen chloride fumes, in contact with water. So, we are classifying this waste as reactive with D003 hazardous waste number.

As shown in the diagram, we will pump this material in reactor slowly into water with mixing. The reactor will be vented to the scrubber to collect HCl if any escapes. After the reaction is over, we will filter the material. Filter cake which is silica ($SiO_2$) will be washed first and put into the container for off-site disposal. $SiO_2$ would not be a hazardous waste. The mother liquor we will use to make ferrous chloride. See Figure C-3.

CONVERSION OF $SiCl_4$ TO $SiO_2$

FIG C-3




$$SiCl_4 + 2H_2O \longrightarrow SiO_2 + 4HCl$$

$$2Fe + 4HCl \longrightarrow 2FeCl_2$$

Facility has 135 drums which contain hazardous waste:

| | | | |
|---|---|---|---|
| 24 | recovery drums | contains | solvent dirt F001-F002 |
| 14 | 55 gal. drums | contains | lab chemicals |
| 14 | 55 gal. drums | contains | copper salt |
| 6 | 55 gal. drums | contains | paint sludge |
| 23 | 55 gal. drums | contains | lapping oil sludge |
| 4 | 55 gal. drums | contains | white crystal |
| 1 | 55 gal. drum | contains | herbicide |
| 5 | 55 gal. drums | contains | cobalt (red) |
| 2 | 55 gal. drums | contains | green orange black sludge |
| 1 | 55 gal. drum | contains | copper chloride |
| 8 | 55 gal. drums | contains | chrome liquid sludge-D007 |
| 4 | 55 gal. drums | contains | - unknown |
| 1 | 55 gal. drum | contains | iron salt |
| 1 | 55 gal. drum | contains | solvent F001-F002 |
| 4 | 55 gal. drums | contains | waste acid D002 |
| 2 | 55 gal. drums | contains | water |
| 3 | Large black containers | | empty |
| 1 | 55 gal. drum | contains | tar |
| 9 | 55 gal. drums | contains | cyanide dirt and cyanide liquid |
| 8 | 55 gal. drums | contains | tiles |

We are at present time, not accepting any hazardous waste in drums.

Facility has 50 tanks which store hazardous waste and finished products. 5 tanks (1A,3A,14,F-1 and F-2) holds finished products $FeCl_3$; 3 tanks (CB-2,CB-3, and CB-4) are process tanks. 5 tanks store pickle liquor - K062 , they are R-3,R-30,12,F-3 and RR-1. Cyanide waste is stored in 16 tanks - F014 & F015. Tank numbers and analyses are in Section D-2. Waste acid is stored (D002) in (R-31, 20 and 16), 3 tanks. Chlorinated solvents (F001-F002) is stored in F-11,2,D-1,1-S,2-S and Con-1 (6) tanks. Tanks 22 and 19 have No. 5 fuel oil, which is contaminated with PCB. Tank No. 5 has silica tetrachloride (D003). 6 tanks, T-11,41,R-38,17, 18 and 1 are empty and we are going to scrape those tanks.

*ENVIRONMENTAL ANALYSIS, INC.*

*ANALYTICAL CHEMISTRY - RESEARCH - FIELD STUDIES*

*3278 N. LINDBERGH BLVD.* *FLORISSANT, MO. 63033* *PHONE 1-314-921-4488*

Date 06-15-84
Report No. 15097
Lab No. 505622 thru 27
P.O. No.

Mr. D. Conley
CONSERVATION CHEMICAL CO.
#10 Breman Avenue
St. Louis, MO 63147

## REPORT OF ANALYSIS

Subject: Analysis of waste samples performed in accordance with the Resource Conservation and Recovery Act 40 CFR; 261.24 - Characteristic of EP Toxicity; and Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980.

Sample Identification:

#1 - Cyanide Solution, 5-31-84. Mixture of all the tanks
#2 - Herbicide Drums, 5-31-84. 1 Drum
#3 - Paint Residue, 5-31-84. 6 Drums
#4 - Paint Residue - Green, 5-31-84. 2 Drums
#5 - Copper Drums, 5-31-84. 14 Drums
#6 - White Crystals, 5-31-84. 4 Drums

Results of Analysis:

| | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 |
|---|---|---|---|---|---|---|
| EP Toxicity, Test Method No. | 261.24 | 261.24 | 261.24 | 261.24 | 261.24 | 261.24 |
| Arsenic, mg As/l | 6.25 | 0.007 | 0.150 | 0.008 | 0.008 | 0.023 |
| Barium, mg Ba/l | 0.080 | <0.50 | 1.73 | <0.05 | <0.05 | <0.05 |
| Cadmium, mg Cd/l | 14.4 | 0.037 | 0.110 | 0.052 | 0.070 | 2.09 |
| Chromium, (hex.) mg Cr/l | <0.125 | <0.125 | 187000 | 38.5 | <0.125 | 0.125 |
| Lead, mg Pb/l | 3.80 | 3.86 | 9.26 | 0.74 | 0.29 | 0.11 |
| Mercury, mg Hg/l | <0.002 | <0.002 | 0.172 | 0.014 | <0.002 | <0.002 |

*ENVIRONMENTAL ANALYSIS, INC.*

*ANALYTICAL CHEMISTRY - RESEARCH - FIELD STUDIES*

*3278 N. LINDBERGH BLVD.* *FLORISSANT, MO. 63033* *PHONE 1-314-921-4488*

Results of Analysis:

Date 06-15-84
Report No. 15097

| | # 1 | # 2 | # 3 | # 4 | # 5 | # 6 |
|---|---|---|---|---|---|---|
| Selenium, mg Se/l | 0.030 | <0.010 | 0.022 | 0.069 | <0.010 | <0.010 |
| Silver, mg Ag/l | 0.442 | 0.007 | 2.58 | 0.069 | 0.009 | 0.010 |

Respectfully submmitted,

R. M. Ferris, Director

*ENVIRONMENTAL ANALYSIS, INC.*

*ANALYTICAL CHEMISTRY - RESEARCH - FIELD STUDIES*

*3278 N. LINDBERGH BLVD.* *FLORISSANT, MO. 63033* *PHONE 1-314-921-4488*

Date 06-15-84
Report No. 15098
Lab No. 505628,29,30
P.O. No.

Mr. D. Conley
CONSERVATION CHEMICAL CO.
#10 Breman Avenue
St. Louis, MO 63147

## REPORT OF ANALYSIS

Subject: Analysis of waste samples performed in accordance with the Resource Conservation and Recovery Act 40 CFR; 261.24 - Characteristic of EP Toxicity; and Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980.

Sample Identification:
#1 - Paint - Red, 5-31-84. 5 Drums
#2 - Neutralized Acid, 5-31-84. Tank 20
#3 - Lapping Oil, 5-31-84. 23 Drums

Results of Analysis:

| | # 1 | # 2 | # 3 |
|---|---|---|---|
| EP Toxicity, Test Method No. | 261.24 | 261.24 | 261.24 |
| Arsenic, mg As/l | <0.005 | 0.015 | 0.002 |
| Barium, mg Ba/l | <0.05 | <0.05 | 0.32 |
| Cadmium, mg Cd/l | <0.001 | 0.492 | 0.016 |
| Chromium, (hex.) mg Cr/ | <0.125 | <0.125 | <0.125 |
| Lead, mg Pb/l | 1.62 | 0.14 | 1.28 |
| Mercury, mg Hg/l | <0.002 | <0.002 | <0.002 |
| Selenium, mg Se/l | <0.010 | <0.010 | <0.010 |
| Silver, mg Ag/l | 0.015 | 0.010 | <0.001 |

Respectfully submmitted,

R. M. Ferris, Director C-20

Solids Surface Impoundments

Corrosivity pH 4.8

EP Toxicity (Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.005mg/liter |
| Barium | - | < 0.05mg/liter |
| Cadmium | - | < 0.06mg/liter |
| Chromium Total (TOT) | - | < 0.01mg/liter |
| Lead | - | < 0.05mg/liter |
| Mercury | - | < 0.0002mg/liter |
| Chromium hetavalent (VI) | - | < 0.01mg/liter |
| Selenium | - | < 0.005mg/liter |
| Silver | - | < 0.01mg/liter |
| TOC | - | 5.46mg/liter |

Liquids Surface Impoundments

| | | |
|---|---|---|
| Corrosivity | pH | 1.8 |

EP Toxicity )Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | 0.005mg/liter |
| Barium | - | 2.8mg/liter |
| cadmium | - | 0.14mg/liter |
| Chromium Total (TOT) | - | 7.0mg/liter |
| Lead | - | 4.7mg/liter |
| Mercury | - | $<$ 0.001mg/liter |
| Chromium hetavalent (VI) | - | $<$ 0.10mg/liter |
| Selenium | - | $<$ 0.005mg/liter |
| Silver | - | 0.54mg/liter |
| TOC | - | 25mg/liter |

Solvents

| | |
|---|---|
| Methylene Chloride | 104microgram/liter |
| Chloroform | 124microgram/liter |
| Trichloroethylene | 150microgram/liter |
| 1,1,1 Trichloroethane | 41microgram/liter |
| Toluene | 19microgram/liter |

Solids Oil Separator

| | | |
|---|---|---|
| Corrosivity | pH | 5.4 |

EP Toxicity (Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.005mg/liter |
| Barium | - | < 0.05mg/liter |
| Cadmium | - | 0.07mg/liter |
| Chromium Total (TOT) | - | < 0.01mg/liter |
| Lead | - | 0.05mg/liter |
| Mercury | - | 0.011mg/liter |
| Chromium hetavalent (VI) | - | < 0.001mg/liter |
| Selenium | - | < 0.005mg/liter |
| Silver | - | < 0.01mg/liter |
| TOC | - | 7.67mg/liter |

Oil Separator Liquid

| | | |
|---|---|---|
| Corrosivity | pH | 6.8 |

EP Toxicity )Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | 0.043mg/liter |
| Barium | - | 0.10mg/liter |
| Cadmium | - | 0.03mg/liter |
| Chromium Total (TOT) | - | 0.30mg/liter |
| Lead | - | < 0.025mg/liter |
| Mercury | - | < 0.0001mg/liter |
| Chromium hetavalent (VI_ | - | < 0.01mg/liter |
| Selenium | - | < 0.005mg/liter |
| Silver | - | 0.06mg/liter |
| TOC | - | 11mg/liter |

Solvents

| | |
|---|---|
| Methylene Chloride | 250microgram/liter |
| Chloroform | 25microgram/liter |
| Trichloroethylene | 178microgram/liter |
| 1,1,1, Trichloroethane | 61microgram/liter |
| Toluene | 22microgram/liter |

Solids Pie-Shaped Basin (Waste Pile)

| | | |
|---|---|---|
| Corrosivity | pH | 5.2 |

EP Toxicity (Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.005mg/liter |
| Barium | - | < 0.05mg/liter |
| Cadmium | - | 0.24mg/liter |
| Chromium Total (TOT) | - | 0.11mg/liter |
| Lead | - | 0.20mg/liter |
| Mercury | - | < 0.0002mg/liter |
| Chromium hetavalent (VI) | - | < 0.01mg/liter |
| Selenium | - | < 0.005mg/liter |
| Silver | - | < 0.02mg/liter |
| TOC | - | 8.35mg/liter |

Oil T-19

Corrosivity pH 5.6

EP Toxicity (Leachate). Federal Register/vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.10PPM |
| Barium | - | < 0.10PPM |
| Cadmium | - | < 0.66PPM |
| Chromium Total (TOT) | - | 14PPM |
| Lead | - | 15PPM |
| Mercury | - | 0.01PPM |
| Chromium hetavalent (VI) | - | < 0.01PPM |
| Selenium | - | 0.10PPM |
| Silver | - | < 1.0PPM |
| TOC | - | |
| Flash Point | - | No flash point below 220°F due to water |
| Viscosity | - | 9.3 ZAHN/sec. @ 110°F |

Oil Tank -22

Corrosivity pH 5.6

EP Toxicity (Leachate). Federal Register/vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.10PPM |
| Barium | - | < 1.0PPM |
| Cadmium | - | 0.37PPM |
| Chromium Total (TOT) | - | 19PPM |
| Lead | - | 5.1PPM |
| Mercury | - | < 0.01PPM |
| Chromium hetavalent(VI) | - | NONE |
| Selenium | - | < 0.01PPM |
| Silver | - | < 1.0PPM |
| TOC | - | |
| Flash Point | - | No flash below 220°F due to water. |
| Viscosity | - | 87 ZAHN/sec. @ 105°F |

We made composite of all the pickle liquor and ran EP Toxicity.

EP Toxicity (Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 46, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | 0.05mg/liter |
| Barium | - | 2.5mg/liter |
| Cadmium | - | 0.60mg/liter |
| Chromium Total (TOT) | - | 6.1mg/liter |
| Lead | - | 5.8mg/liter |
| Mercury | - | 0.001mg/liter |
| Chromium hetavalent (VI) | - | 1.0mg/liter |
| Selenium | - | 0.05mg/liter |
| Silver | - | 3.0mg/liter |

Solids Process Sump

| | | |
|---|---|---|
| Corrosivity | pH | 1.8 |

EP Toxicity )Leachate). Federal Register/Vol. 45, No. 98/ Monday, May 19, 1980, Vol. 45, No. 212/Thursday, Oct. 30, 1980, Vol. 45, No. 129/Tuesday, July 7, 1981.

| | | |
|---|---|---|
| Arsenic | - | < 0.005mg/liter |
| Barium | - | 6.0mg/liter |
| Cadmium | - | 0.05mg/liter |
| Chromium Total (TOT) | - | 2.5mg/liter |
| Lead | - | 0.75mg/liter |
| Mercury | - | 0.0002mg/liter |
| Chromium hetavalent (VI) | - | < 1.0mg/liter |
| Selenium | - | 0.005mg/liter |
| Silver | - | 0.03mg/liter |
| TOC | - | 9.5mg/liter |
| Purgible Solvents | | |
| Methylene Chloride | | 16microgram/liter |
| Toluene | | 14microgram/liter |

We took 3 samples from paint drums. Paint residue was just solids in it and found it has no flash point below 220$^{o}$F. Another paint which has green color on solids, it has also no flash below 220$^{o}$F. The same way paint residue from another drum also does not have flash below 220$^{o}$F.

We made composite of all the cyanide tanks material and ran the TOC on it and found that it has 17,300.0mg/liter total organic carbon in it.

# CHLORINATED SOLVENTS

| ITEMS | TANK 1-S | TANK 2-S | TANK D-1 | TANK 2 | CONL CDU-1 | TANK F-11 | SUMP S-1 | TANK 19 | TANK 22 | CONTAINER |
|---|---|---|---|---|---|---|---|---|---|---|
| Physical State | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid | Viscous Liquid | Viscous Liquid | Solid |
| Solubility in water | Missible | Missible | Insol. | Insol. | Soluble | Insol. | Insol. | Insol. | Insol. | Insol. Dirt |
| Amount Gallons | 18,200 | 15,100 | 9,300 | 41,100 | 8,000 | 5,000 | 1,000 | 191,000 | 470,850 | 24 |
| Specific Gravity | 1.0 | 0.956 | 1.238 | 0.02 | 1.0 | 1.0 | 1.0 | 0.92 | 0.92 | - |
| pH | 5.3 | 8.2 | 5.2 | 7.2 | 5.6 | 7.0 | 5.2 | 5.6 | 5.6 | - |
| Viscosity ZAHN/sec. at 80°F | 7.2 | 6.7 | 6.4 | 8.3 | 7.2 | 6.8 | - | 9.2 @ 110°F | 8.7 @ 105°F | - |
| Flash Point °F | No flash below 220°F | 100°F | No flash Boils at 136°F | 200°F | No flash below 220°F | No Flash below 220°F | NONE | No flash below 220°F | No flash below 220°F | - |
| Methylene Chloride microgram | 4865 | Has | 50% | Has | 6770 | 3285 | Has | | | We had |
| Kcal/gram Heat Value liter | 1.70 | Volatile | 1.70 | Petr. | 1.70 | 1.70 | Chlo- | | | spill of |
| 1,1 Dichloro microgram | 29 | Solvents | | Distil- | 3086 | 54 | rona- | | | solvents |
| Kcal/gram Heat Value liter | 3.0 | Maybe | | late | 3.0 | 3.0 | ted | | | and we |
| Chloroform microgram | 116 | Acetone | | | 114 | 153 | solv- | | | cleaned |
| Kcal/gram Heat Value liter | 0.75 | or Alcohol | | | 0.75 | 0.75 | ents | | | that spill |
| Trichloroethylene microgram | 255 | | 65% | | 1517 | 1116 | in | | | and picked |
| Kcal/gram Heat Value liter | 1.74 | | 1.74 | | 1.74 | 1.74 | it | | | up dirt |
| 1,1,2 Trichloroethane microgram | | | | | 3554 | 356 | | | | in spill |
| Kcal/gram Heat Value liter | | | | | 1.99 | 1.99 | | | | which is |
| 1,1,1 Trichloroethane microgram | 420 | | 13% | | 2224 | 3347 | | | | in con- |
| Kcal/gram Heat Value liter | 1.99 | | 1.99 | | 1.99 | 1.99 | | | | tainers. |
| Toluene microgram | | | | | 175 | 20 | | | | |
| Kcal/gram Heat Value liter | | | | | 10.14 | 10.14 | | | | |

C-31

# LIST OF MATERIALS IN CONTAINERS

| NO. OF DRUMS | CONTENT | EPA HW NO. | DOT HW NO. | NFPA CODE | SPECIFIC GRAVITY | SOLUBILITY IN WATER | $CN^-$ PPM | pH | |
|---|---|---|---|---|---|---|---|---|---|
| 24 | Chlorinated Solvent | F001 & F002 | NA1993 | | No liquids just dirt soak with solvent. | | | 7.0 | Vapor will cause dizziness or suffocation Contact will irritate the skin and eyes. Fire may produce irritating or poisonous gases. Will burn. Ignited by heat, sparks and flame. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors, or in sewers. Runoff from fire control or dilution water will cause pollution |
| 14 | Laboratory Chemicals | | | | Just the samples and lab chemicals in it. | | | | |
| 23 | Lapping oil & oil sludges | | | | Solids | Insoluble | | | |
| 15 | Copper salt & copper chloride | | | | Solids | Insoluble | | | |
| 13 | Paint sludges & dyes | | | | Solids | Insoluble | | 5.7 | |
| 4 | Unknown chemicals | | | | | | | | |
| 1 | Iron Salt | | | | Solids | Insoluble | | | |
| 1 | Tar | | | | Solids | Insoluble | | | |
| 9 | Empty drums in water | | | | 1.0 | Soluble | | | |
| 4 | Acid waste | D002 | NA9189 | | 1.025 | Soluble | | 1.5 | |
| 8 | Chrome liquid & sludge | | | | 1.095 | Soluble | | 1.5 | |
| 5 | Miscellaneous | | | | | | | | |
| 9 | Cyanide dirt | | | | | | 65 | | |
| 8 | Tiles | | | | | | | | |

C.32

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| Sphere | 22,800 | Spent Cyanide Soln. 11'3" outage | F007 & F009 | UN1935 | 1.095 | 6.7 | 12400 | Soluble | 13.5 | Material is considered as poison. If inhaled, may be fatal. May be fatal also if swallowed or absorbed through skin. Contact may cause burns to the skin and eyes. Runoff from fire control or dilution water will cause water pollution. It may burn but does not ignite readily. |
| Tower | 30,000 | Spent Cyanide Soln. | F007 & F009 | UN1935 | 1.1 | --- | 1438 | Soluble | 11.4 | |
| RR-2 | 10,000 | Spent Cyanide Soln. 3790 gallons | F007 & F009 | UN1935 | 1.125 | 6.5 | 12650 | Soluble | 12.1 | |
| TR-38 | 6,500 | Spent Cyanide Soln. 1300 gallons | F007 & F009 | UN1935 | 1.09 | 6.6 | 17062 | Soluble | 13.1 | |
| ST-1 | 20,000 | Spent Cyanide Soln. 19,500 gallons | F007 & F009 | UN1935 | Has oil 0.88 | 7.3 | 62 | In-soluble | 7.6 | |
| DB-1 | 12,000 | Spent Cyanide Soln. 1500 gallons | F007 & F009 | UN1935 | NO SAMPLE | | | | | |
| 2A | 21,400 | Spent Cyanide Soln. 12,400 gallons | F007 & F009 | UN1935 | 1.14 | 6.5 | 3112 | Soluble | 13.6 | |
| 4A | 21,400 | Spent Cyanide Soln. 19,925 gallons | F007 & F009 | UN1935 | 1.005 | 6.5 | 975 | Soluble | 12.8 | |
| 6A | 21,400 | Spent Cyanide Soln. 500 gallons | F007 & F009 | UN1935 | NO SAMPLE | EMPTY | | | | |
| 8A | 17,625 | Spent Cyanide Soln. 14,100 gallons | F007 & F009 | UN1935 | 1.03 | 6.8 | 5150 | Soluble | 12.9 | |
| 26 | 14,350 | Spent Cyanide Soln. 11,050 gallons | F007 & F009 | UN1935 | 1.025 | 6.9 | 5838 | Soluble | 12.9 | |
| 28 | 19,100 | Spent Cyanide Soln. 16,800 gallons | F007 & F009 | UN1935 | | 6.8 | 6812 | | | |
| 23 | 19,100 | Spent Cyanide Soln. 10,830 gallons | F007 & F009 | UN1935 | 1.075 | 6.7 | 19,925 | Soluble | 12.7 | |
| X | 19,430 | Spent Cyanide Soln. 12,570 gallons | F007 & F009 | UN1935 | 1.01 | 6.6 | 937.5 | Soluble | 12.9 | |
| 21 | 21,000 | Spent Cyanide Soln. 6056 gallons | F007 & F009 | UN1935 | | 6.4 | 9812 | Soluble | | |
| CY-1 | 22,100 | Spent Cyanide Soln. 1480 gallons | F007 & F009 | UN1935 | NO SAMPLE | | | Soluble | | |
| SUMP-2 | | Spent Cyanide Soln. | F007 & F009 | UN1935 | 1.11 | 6.3 | 10150 | Soluble | 13.6 | |

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | Chlorinated Solvents 5000 gallons | F001 & F002 | NA1993 | 1.0 | 6.8 | | In-soluble | 7.0 | Vapors will cause dizziness or suffocation. Contact will irritate the skin and eyes. Fire may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution. Will burn. Ignited by heat, sparks and flames. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors or in sewers. |
| 2 | 46,200 | Chlorinated Solvents 41,100 gallons | F001 & F002 | NA1993 | 0.92 | 8.3 | | In-soluble | 7.2 | |
| D-1 | 12,000 | Chlorinated Solvents 9300 gallons | F001 & F002 | NA1993 | 1.238 | 6.4 | | In-soluble | 5.2 | |
| 1-S | 23,400 | Chlorinated Solvents 18,200 gallons | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.3 | |
| 2-S | 17,200 | Chlorinated Solvents 15,100 gallons | F001 & F002 | NA1993 | 0.956 | 6.7 | | Missible | 8.2 | |
| CONL | 13,366 | Chlorinated Solvents | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.6 | |
| ontainers Raw | | Chlorinated Solvents | F001 & F002 | NA1993 | | | | | | |
| Sump-2 | | Solvents/Water | | NA1993 | 1.075 | 6.1 | | Insoluble | 3.5 | |
| R-15 | 8,000 | Waste Acid-Empty | D002 | NA9189 | EMPTY | | | | | May ignite combustibles. May cause reaction with water. Explosive concentrations of gas may accumulate in tanks. Runoff to sewer will cause water pollution. Contact will cause burns to skin and eyes. Fire produces irritating and/or poisonous gases. |
| R-31 | 8,000 | Waste Acid-4000 | D002 | NA9189 | 1.44 | 6.6 | | | <1 | |
| R-38 | 2,400 | Waste Acid-Empty | D002 | NA9189 | EMPTY | | | | | |
| 20 | 550,000 | Neutralized Acid Sludge, 8'2" outage 305,000 gallons | D002 | NA9189 | 1.15 | Too much solids | 12.5 | | 6.7 | |
| 16 | 6,040 | Neutralized Acid Sludge, 4000 | D002 | NA9189 | 1.19 | 6.9 | | | 2.3 | |
| ontainers Raw | | | | | | | | | | |

# LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | Pickle Liquor, $FeCl_2$ 4000 gallons | K062 | NA1760 | 1.346 | 6.6 | | Soluble | <1 | Contact causes burns to skin and eyes. If inhaled, it may be harmful. If the material is included in a fire, it may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution. it will not ignite readily. Explosive concentrations of gas may accumulate in tanks. |
| CB-2 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-3 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-4 | 14,200 | Pickle Liquor | K062 | NA1760 | EMPTY | | | | | |
| R-3 | 10,250 | Pickle Liquor, $FeCl_2$ 500 gallons | K062 | NA1760 | NO SAMPLE | | | | | |
| R-33 | 7,420 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| R-30 | 7,000 | Pickle Liquor, $FeCl_2$ 7000 gallons | K062 | NA1760 | 1.37 | 6.5 | | Soluble | <1 | |
| 12 | 12,200 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| F-3 | 16,000 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.324 | 6.5 | | Soluble | <1 | |
| 1A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | 1.356 | 6.4 | | | <1 | |
| 3A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| 14 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-1 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-2 | 21,100 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| Rubber Lined sump | | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.37 | 6.4 | | | <1 | |

C-35

## INSTRUCTIONS FOR USE

A. Record temperature of material with a thermometer.

B. Hold cup absolutely vertical by using the *ring at top of handle.

C. Completely immerse cup into liquid in an area free from bubbles or foam.

D. Withdraw the cup quickly and start the timer at the precise moment that the cup leaves the liquid.

E. While the material is effluxing hold the cup in solvent atmosphere just above the liquid level. This will also avoid air drafts.

F. Watch the stream carefully. Stop the timer at the precise instant the stream breaks at the base of the cup.

G. Report the results in Zahn seconds Viscosity. (Example: Twenty-five Zahn Cup No. 2 seconds.

* A Stainless Steel split key ring is furnished to assure vertical alignment and to avoid dropping instrument.

Caution: Clean cup immediately after use. Do not use mechanical objects when cleaning the orifice.

When these steps are followed by an experienced operator, in a normally good atmosphere, with an approved and accurate timer, individual readings varying from 0.1 to 0.2 seconds can be made. Our Ultra Calibrated Cups as furnished from stock vary 0.1 seconds.

## VISCOSITY READING ERRORS

Viscosity reading errors can be made even though the Ultra Calibrated Zahn Cup demonstrates 100% reproducibility. Any reading errors must be attributed to (a) operator reaction speed, (b) timer variables, or (c) failure to follow use instructions accurately.

An operator normally does vary his timer button reaction from 0.2 to 0.5 seconds depending on his experience and the conditions in the operating locations.

When there are intermittant air drafts in the working area the timing can be effected by from 0.5 to 1.0 seconds.

If the viscosity reading is made by filling the cup and timing the drain time rather than immersing it, an error equal to 2.0 seconds can occur.

A hand-wound stopwatch can read from 0.2 to 0.3 seconds slower than a fully wound watch, and a battery operated digital timer can possibly show a 0.2 second slower reading than a plug-in timer.

## VISCOSITY-TEMPERATURE RELATIONSHIP CHART

In actual production painting, we very seldom have the ideal temperature conditions and, more often than not, the area temperature is not under complete control. Depending on the geographical location, temperatures from morning to night may vary as much as forty degrees. The viscosity of material used early in the morning cannot possibly be the same in the late afternoon. Where extreme temperature variables do exist a viscosity-temperature relationship chart can be very valuable. The user can very readily prepare such a chart which indicates Zahn seconds versus temperature in degrees F. (See Below). Where a large volume of mixed paint is used the paint supplier will obviously be happy to furnish such a chart for use with his materials. The paint control operator then merely reads the required viscosity from the chart to coincide with the prevailing temperature of his paint mixture.

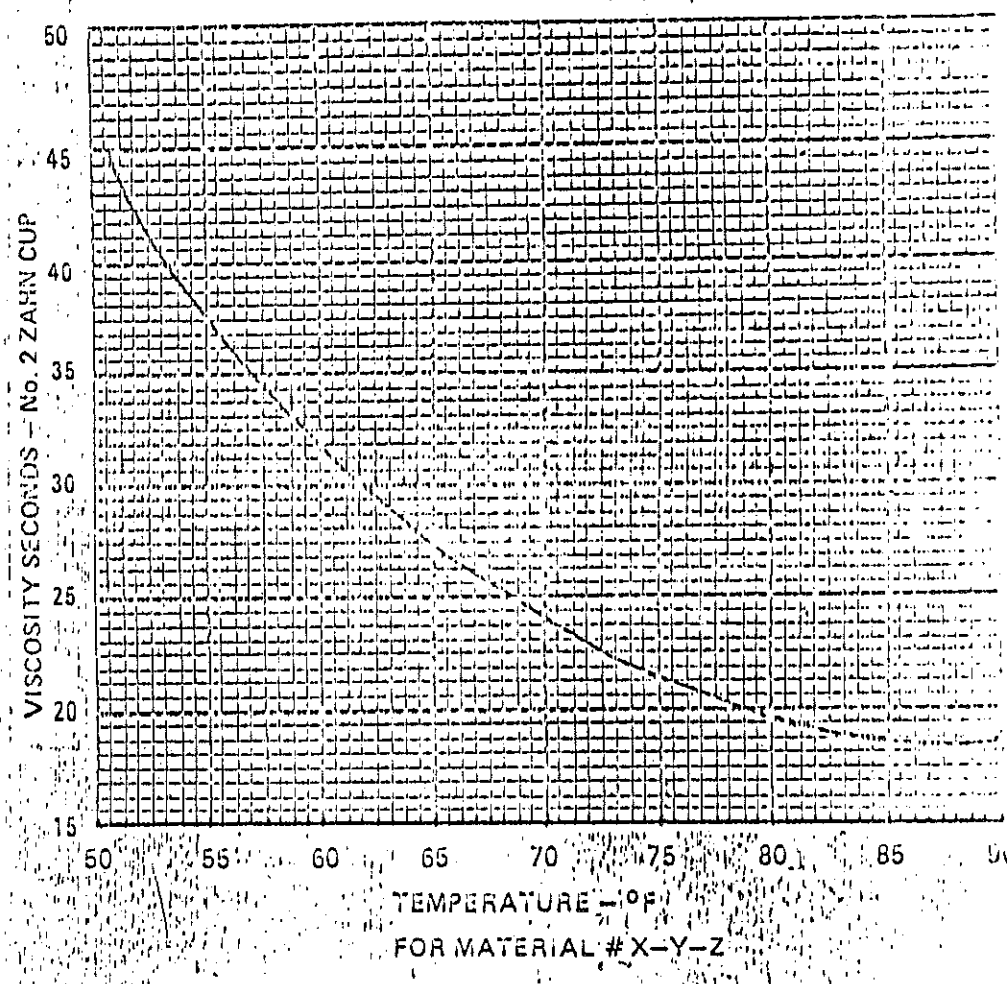
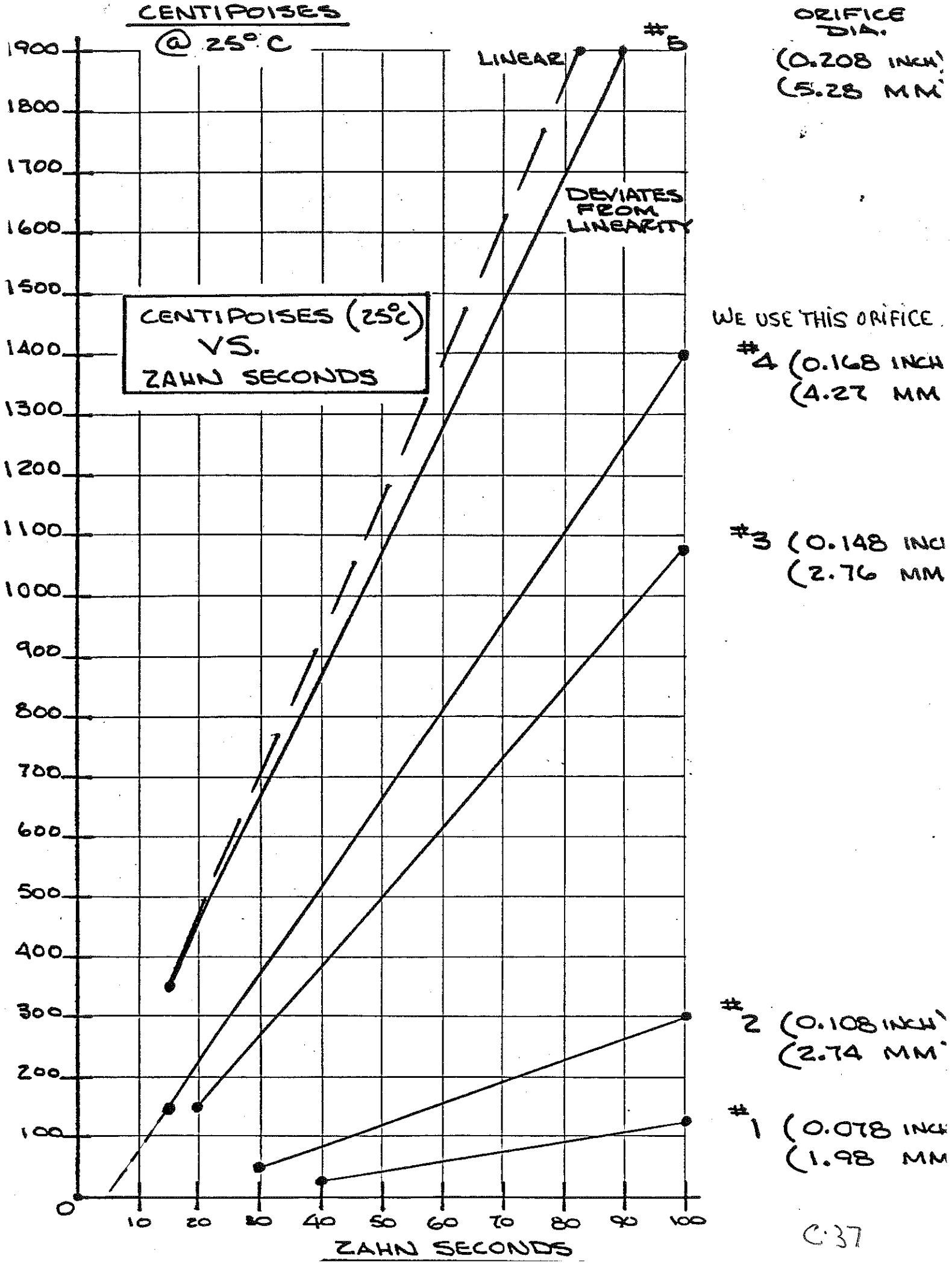



CHART SHOWS A TYPICAL VISCOSITY – TEMPERATURE RELATIONSHIP. EACH FORMULATED THINNED MATERIAL HAS A DIFFERENT VISCOSITY–TEMPERATURE RELATIONSHIP.


CENTIPOISES
@ 25° C
CENTIPOISES (25°C)
VS.
ZAHN SECONDS
LINEAR
#5
DEVIATES FROM LINEARITY
ORIFICE DIA.
(0.208 INCH)
(5.28 MM)
WE USE THIS ORIFICE
#4 (0.168 INCH
(4.27 MM
#3 (0.148 INCH
(2.76 MM
#2 (0.108 INCH)
(2.74 MM)
#1 (0.078 INCH
(1.98 MM
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
10
20
30
40
50
60
70
80
90
100
ZAHN SECONDS

C-37

## LIST OF MATERIALS

T-19 Has No. 5 fuel oil and water. It is a steel tank. It has about 191,000 gallons of water and fuel oil. Only 25,000 gallons of oil and rest is water. Oil has specific gravity of 0.02 and it has viscosity of 9.3 ZAHN/sec. at 110°F. pH of the oil is 5.6. Oil is contaminated with PCB.

T-22 Has No. 5 fuel oil/asphalt mixture. It is also a steel tank. It has about 470,850 gallons of material in it. Oil has specific gravity of 0.92 and has viscosity of 8.7 ZAHN/sec. at 105°F. pH of the oil is 5.6. Oil is also contaminated with PCB.

Plant has surface impoundment. This surface impoundment has solids and liquids in it. Liquids has pH of 1.8; specific gravity of 1.0. Solids from the surface impoundment has pH of 4.8.

Waste pile has only solids in it. pH of these solids is 5.8. Oil separator has also liquids and solids in it. Liquid has pH of 6.8 and specific gravity of 1.0; Solids pH is 5.4. Process sump before neutralization has pH of 1.8 and specific gravity of 1.0.

SECTION D

## SECTION D

### CONTAINER MANAGEMENT: SECTIONS 270.15, 264.173

Facility does not produce any wastes that we have to use containers. Facility presently has 135 containers holding hazardous waste. Most of the containers facility currently has come from company's activity prior to 1980.

Facility stores the containers near old cooling tower at north side of the property. For simplicity and regulations, we segregate the containers into the following groups:

| | | |
|---|---|---|
| 1. | Chlorinated solvent | 24 drums |
| 2. | Acid and acid sludge D002 | 4 drums |
| 3. | Chromate and paint sludge | 13 drums |
| 4. | Lab chemicals in drums | 14 drums |
| 5. | Oil and oil sludge | 24 drums |
| 6. | Copper salt - copper chloride | 15 drums |
| 7. | Unknown - dyes | 17 drums |
| 8. | Empty container and water | 5 drums |

Section 264.175 requires that container storage areas must have a containment system. Containers storage area is surrounded by 12" high dirt berm. We placed the drums on pallets which is about 3" to 4" high from the ground. This will protect the containers from contact with accumulated liquids, spilled or leaked waste and accumulated precipitation from the dike are pumped into a container. If the collected material is a hazardous waste under Part 261, we will manage the waste in accordance with all applicable requirements of Part 262-266.

Regulations for containers generally require nothing more than simple good practices in the management of containers of hazardous wastes; a level of care commensurates with the hazardous nature of the waste stored. Regulations require:

1. Wastes in leaking or damaged containers be recontainerized in containers in good condition; 264.171
2. Containers or their inner liners be compatible with the wastes stored in them; 264.172
3. A container holding hazardous waste must be always closed during storage; 264.173(a)
4. Containers be managed so that they do not rupture or leak; 264.173(b)

5. Regulations for containers call for weekly inspection of container storage areas for leaks and deterioration of the containers. 264.174

Our storage area for hazardous waste containers is more than 15 meters (50 feet) from the facility's property line, (264.176), as it is National Fire Protection Association's requirement for ignitable or reactive waste and it is already applied under OSHA regulations of facility.

It is our common practice to store any chemicals regardless of hazardous waste or not, only in washed containers in good condition. We store materials in an open head drum only, and close the drum tightly with the lid on, and secure the lid with a 5/8" bolt and nut to prevent the leak. We also make sure that the lid has proper gasket in it. When we use washed containers, we change the gasket in the lid, just to make sure ourselves that container would not leak. When we fill the drum, we make sure that container is not overfilled; usually our normal procedure is to leave about 3" of free space for expansion of material.

Containers are properly marked on side and on top with contrasting color, permanent ink. We also affix a hazardous waste label (shown on the next page) on the container on side between two reems and top. We also paste a label according to the waste classification, e.g., corrosive label for acidic waste.

Presently, we do not have any ignitable or incompatible waste in containers. If we get or produce any time in future, incompatible waste, we will store them in a new or triple rinse container. Also we will keep those containers at least 6' away from the other containers and we will build a 6" berm between two different kinds of waste.

Plant does not have or get any chemicals listed in 261.33 (e) or (f) categories presently. We did not have any containers of which has discarded or off-specification chemicals listed in 261.33(e) or (f). If we get those chemicals in future, we will discard them according to the rules and regulations. Empty paper bags or liners of those chemicals, we will put them in a container for off-site disposal.

We will install "Danger: No Smoking and HW storage area" signs near container storage area.

We are going to install a 40'x24' concrete pad to store hazardous waste containers. Between two rows we will have 4' space and on both sides we will keep 2' space. The pad will have at least 4" slope from North to South and from West to East, so that all the spills can go in the direction of the sump. We will install a 4'x4'x6' deep sump to collect the spills or leaks. We will install a fence.

The pad will hold 5 rows of drums and in each row we can hold 4 pallets. Each pallet will have 4 drums on it. We will stack 2 level high of containers holding liquid waste and 3 stack high if it contains solid waste. We will get a yard lift truck to move the drums. At the most, the pad will hold between 160 to 240 drums. We will use 55 gallons 17E or 17H drums to store hazardous waste.

We will install sump pump with level control. Material from sump will be pumped into containers after taking sample of the sump. Containers will be properly labeled and stacked again in storage area.

WEEKLY GENERAL INSPECTION OF

CONTAINERS STORAGE AREA

DATE _____ TIME _____ INSPECTED BY _____

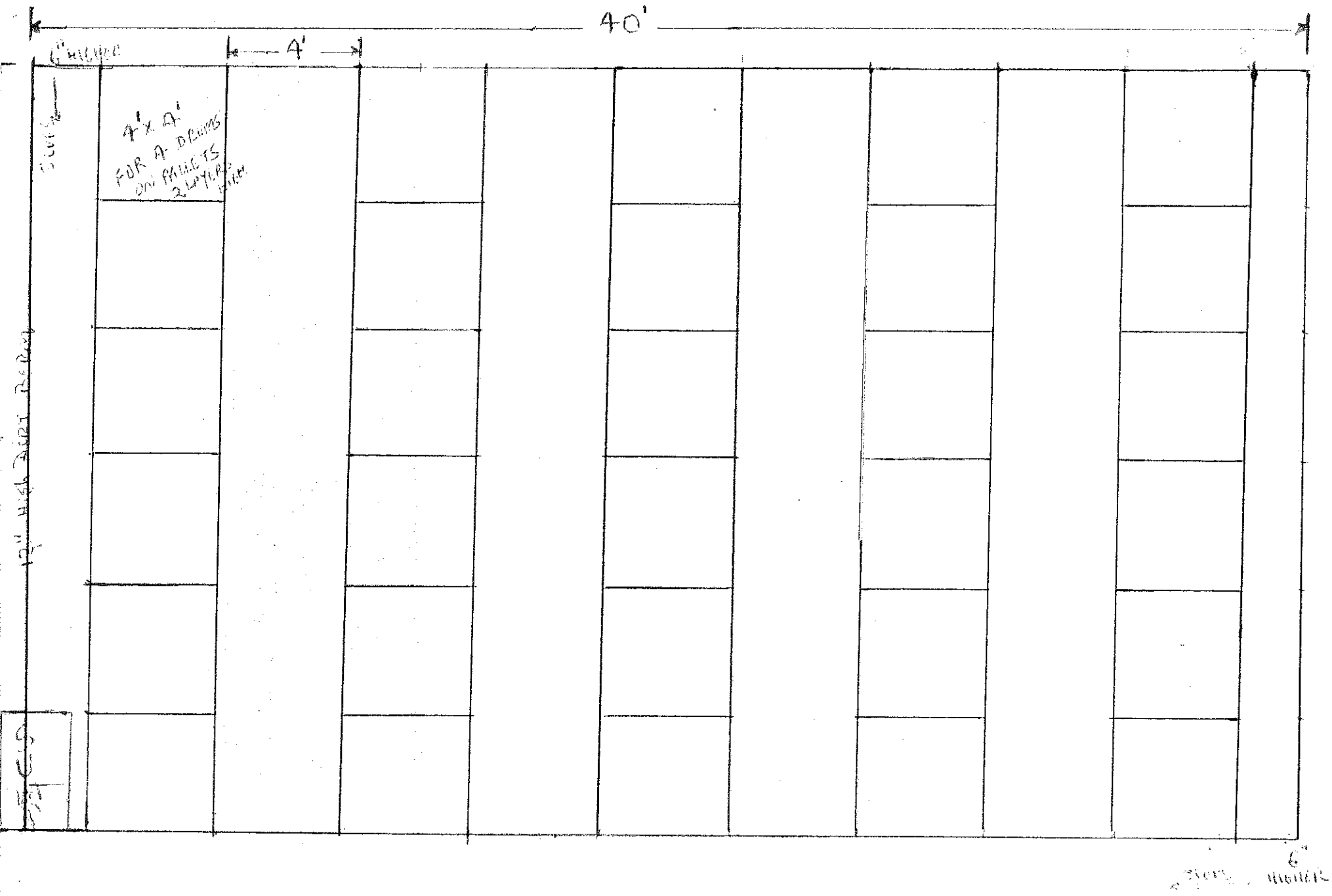
| ITEMS | | O.K. | ACTION NEEDED | WORK COMPLETED |
|---|---|---|---|---|
| HW Storage Sign | | | | |
| Danger Sign | | | | |
| Containers: | Proper Marking | | | |
| | Date Started Filling | | | |
| | Proper Label | | | |
| | Sign of Deterioration | | | |
| | Sign of Pressure Build Up | | | |
| | Tightly closed | | | |
| | Any sign of movements | | | |
| | Any leaky containers | | | |
| | No. of containers | | | |
| Safety Equipment: | | | | |
| | Fire Extinguisher | | | |
| | First Aid Kit | | | |
| | Eye Wash | | | |
| General Condition of Area | | | | |
| | Any smell in area | | | |
| Containment Area | | | | |
| | Any accumulated material | | | |
| | Leaks | | | |

# LIST OF MATERIALS IN CONTAINERS

| NO. OF DRUMS | CONTENT | EPA HW NO. | DOT HW NO. | NFPA CODE | SPECIFIC GRAVITY | SOLUBILITY IN WATER | $CN^-$ PPM | pH | |
|---|---|---|---|---|---|---|---|---|---|
| 24 | Chlorinated Solvent | F001 & F002 | NA1993 | | No liquids just dirt soak with solvent. | | | 7.0 | Vapor will cause dizziness or suffocation. Contact will irritate the skin and eyes. Fire may produce irritating or poisonous gases. Will burn. Ignited by heat, sparks and flame. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors, or in sewers. Runoff from fir control or dilu tion water will cause pollution |
| 14 | Laboratory Chemicals | | | | Just the samples and lab chemicals in it. | | | | |
| 23 | Lapping oil & oil sludges | | | | Solids | Insoluble | | | |
| 15 | Copper salt & copper chloride | | | | Solids | Insoluble | | | |
| 13 | Paint sludges & dyes | | | | Solids | Insoluble | | 5.7 | |
| 4 | Unknown chemicals | | | | | | | | |
| 1 | Iron Salt | | | | Solids | Insoluble | | | |
| 1 | Tar | | | | Solids | Insoluble | | | |
| 9 | Empty drums in water | | | | 1.0 | Soluble | | | |
| 4 | Acid waste | D002 | NA9189 | | 1.025 | Soluble | | 1.5 | |
| 8 | Chrome liquid & sludge | | | | 1.095 | Soluble | | 1.5 | |
| 5 | Miscellaneous | | | | | | | | |
| 9 | Cyanide dirt | | | | | | 65 | | |
| 8 | Tiles | | | | | | | | |

4
5

# CONTAINER STORAGE AREA




A.6

## SECTION D

## TANKS

40 CFR 265.190-265.219 requires that treatment or storage of hazardous waste in tank must be separated and protected from sources of ignition or reaction. To comply with this standard, facility has No Smoking signs posted around the tank farms. We do not do cutting or welding nearby tank farms area unless it is absolutely necessary. Pickle liquor storage tanks are on one side of the facility and cyanide waste storage tanks are on the other side; this will prevent mixing of these two wastes even in emergency. At the present time, we do not treat or dispose any ignitable or reactive waste, but if we treat, we will do treatment in such a way that it does not:

1. Generate extreme heat or pressure, fire or explosion or violent reaction.
2. Produce uncontrolled toxic fumes, mists, dusts or gases.
3. Produce uncontrolled flammable fumes or gases.
4. Damage the structural integrity of the device or facility containing the waste, or
5. Through other like means threaten human health or the environment.

Facility stores the following hazardous waste in storage tank at present time:

1. Pickle liquor K062-. , Rubber-lined tanks
2. Cyanide waste F014-F015, Steel tank
3. Spent chlorinated solvents F001-F002, Steel tank
4. Waste acid D002
5. Fuel oil contaminated

These show that facility stores or treats hazardous wastes in a manner that it will not cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

Regulations also require that uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard unless the tank is equipped with a containment structure with a capacity that equals or exceeds the volume of the top 60 centimeters of the tank. Facility does not store any hazardous waste in an open, uncovered tank.

Facility does not treat or continuously feed hazardous waste into a storage tank. At the present time, facility receives only pickle liquor which is hazardous waste according to the regulations. When we receive this waste, our normal procedure is to receive in

an empty tank which is 3 to 4 times in the capacity of the waste load. When we put the load in a tank which has materials in it, the operator will take initial measurement before pumping the waste. He will also double check in our log book the readings, whether it is the same or not. This will eliminate the possibility of running the tank over. Also, the operator or truckdriver will be at the scene during the entire unloading process.

Facility has normal procedures to put buckets underneath the valves and fittings to collect the drippings. Operating personnel checks those buckets before and after the loading or unloading in the tanks. Materials collected in buckets is usually dumped into the process right away. Underneath the pumps we have trays to collect the drippings from seal or packing gland to prevent runoff on ground. Process tanks are physically measured everytime before and after the loading or unloading. All other tanks are measured once a week. Facility has inspection sheet and we record the readings.

40 CFR 265.193 requires that facility should chemically treat or store a hazardous waste which is substantially different from waste previously treated or stored in that tank, and chemically treat hazardous waste with a substantially different process than any previously used in that tank. As explained before, the only hazardous waste presently facility treats or stores, is pickle liquor and we use the same process. When we will, in future, treat or store any other waste, we are going to clean the storage tank and make sure that the tank is empty and free from other foreign material. If it is necessary, we may use solvents to clean the viscous material or neutralize with suitable chemicals. If we will receive any other waste, we will ask the generators to provide us with the complete analysis and their recommendations about the material of construction for the storage of that waste in a tank. We will ask the generators, also, to provide us with sample so we can recheck the waste characteristics.

40 CFR 265.194 inspection requires we are checking everyday our discharge control equipment; in our case, the bottom unloading valves, pumps, loading line, vents, etc. We use the following tank inspection schedule. At closure, we will remove all the hazardous waste and hazardous waste residues from the tanks and from discharge control equipment and discharge confinement structures and make it non-hazardous or ship off-site for disposal.

Facility stores all the wastes whether it is not ignitable or reactive in a covered tank, which meets the National Fire Protection Association's buffer zone requirements for tanks contained in Table 2-1 through 2-6 of the "Flammable and Combustible Code-1977".

Facility will not store any waste in a tank unless the tank is properly cleaned and washed.

DATE_____ _____ INSPECTION OF STORAGE TANKS INSPECTED BY_____ _____

| ANK O. | CONTENTS | DAILY | | | | | | WEEKLY INSPECTION | | | | SIGNS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DISCHARGE OR SPILL | | | | | | | | | | | |
| | | VALVE | PUMP | LOADING OR UN-LOADING LINE | TEMP. | PRES. | LEVEL | TANK CONDITION | FITTINGS SEAMS | SURROUND-ING AREA | CONFINEMENT STRUCTURES | | |
| B-2 | | | | | | | | | | | | | |
| B-3 | | | | | | | | | | | | | |
| B-4 | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | |
| -3 | | | | | | | | | | | | | |
| -33 | | | | | | | | | | | | | |
| -30 | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |
| -1 | | | | | | | | | | | | | |
| -2 | | | | | | | | | | | | | |
| -3 | | | | | | | | | | | | | |
| R-1 | | | | | | | | | | | | | |
| -15 | | | | | | | | | | | | | |
| -31 | | | | | | | | | | | | | |
| -38 | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | |

DA_ _____ INSPECTION OF STORAGE TANKS INSPECTED BY _____

| TANK NO. | CONTENTS | DAILY | | | | | | WEEKLY INSPECTION | | | | SIGNS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DISCHARGE OR SPILL | | | | | | | | | | | |
| | | VALVE | PUMP | LOADING OR UN-LOADING LINE | TEMP. | PRES. | LEVEL | TANK CONDITION | FITTINGS SEAMS | SURROUND-ING AREA | CONFINEMENT STRUCTURES | | |
| 5 | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |
| D-1 | | | | | | | | | | | | | |
| L-S | | | | | | | | | | | | | |
| 2-S | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | |
| CONL | | | | | | | | | | | | | |
| 2-11 | | | | | | | | | | | | | |
| SPHERE | | | | | | | | | | | | | |
| TOWER | | | | | | | | | | | | | |
| RR-2 | | | | | | | | | | | | | |
| TR-38 | | | | | | | | | | | | | |
| ST-1 | | | | | | | | | | | | | |
| DB-1 | | | | | | | | | | | | | |
| 2-A | | | | | | | | | | | | | |
| 1-A | | | | | | | | | | | | | |
| 5-A | | | | | | | | | | | | | |

D. _____ INSPECTION OF STORAGE TANKS INSPECTED BY _____

| TANK NO. | CONTENTS | DAILY | | | | | | WEEKLY INSPECTION | | | | SIGNS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DISCHARGE OR SPILL | | | TEMP. | PRES. | LEVEL | TANK CONDITION | FITTINGS SEAMS | SURROUND-ING AREA | CONFINEMENT STRUCTURES | | |
| | | VALVE | PUMP | LOADING OR UN-LOADING LINE | | | | | | | | | |
| 3A | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | |
| X | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | |
| CY-1 | | | | | | | | | | | | | |
| FG TANK | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 41 | | | | | | | | | | | | | |
| R-17 | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| Al FUEL OIL TANK | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |

Mark ✓ if it's OK.

# Calumet Testing Services, Inc.

Mail to: P.O. Box 1510 ... Highland, Indiana 46322
Main Location: 1945 N. Griffith Blvd. ... Griffith, Indiana 46319
(219) 923-9800 ... (312) 474-5860 ... (815) 722-0878 ... (219) 269-6442 (Warsaw, IN)


CONSERVATION CHEMICAL 5-31-84

THICKNESS READINGS WERE TAKEN AT APPROXIMATELY 90° TO EACH OTHER.

| TANK NUMBER | THICKNESS READINGS | TANK NUMBER | THICKNESS READINGS |
|---|---|---|---|
| ST1 | .388 .346 .366 .332 | TK-19 | 304 310 .289 N/R |
| DB1 | .288 .276 .292 .284 | RR2 | .516 .525 .536 .506 |
| CB-3 | .689 .717 .677 .690 | 26 | 206 .222 .202 .218 |
| 12 | .373 .381 .367 .372 | 15 | .265 .244 .248 .254 |
| D1 | .178 .240 .248 .151 | 25 | 203 .217 .218 .208 |
| R17 | .271 .268 .291 .254 | TK 20 | 240 .238 .223 .230 |
| 2A | .258 .256 .270 .254 | CY1 | .203 .270 .268 .265 |
| 2 | .236 .206 .224 .244 | R31 | .358 .348 .368 .348 |
| 21 | .340 .332 .324 .337 | CDU1 | .298 .311 .305 .328 |
| 23 | .307 .305 .275 .312 | Tub 4 | .546 .546 .569 .555 |
| 4A | .290 .259 .297 .292 | 5 | .314 .306 .304 .306 |
| 24 | .268 .275 .264 .274 | RR1 | .540 .518 .510 .509 |
| X | .172 .187 .151 .194 | R3 | .338 .378 .389 .386 |
| 28 | .274 .278 .280 .280 | Tub 5 | .532 .527 .540 .552 |
| 6A | .319 .360 .366 .344 | R30 | .332 .351 .325 .318 |
| 8A | 289 .284 .292 .266 | F2 | .183 .222 .158 .148 |
| 11 | 250 .247 .256 .268 | F1 | .237 .170 .244 .188 |
| R38 | .304 .323 .290 .301 | CB2 | .678 .636 .638 .629 |
| 16 | .422 .444 .448 .432 | CR4 | .664 .655 .692 .700 |
| green | .158 .163 .165 .163 | 14 | .282 .342 .306 .286 |
| TR22-B | .502 .496 .476 .534 | 3A | .310 .287 .282 .332 |
| F-11 | .162 .178 .196 .172 | 1A | 347 .268 .290 N/R |

Douglas Marcum 5-31-84
Donald Daniel 5-31-84

D-12

## SECTION D

Facility has 50 storage tanks including sphere and tower, which holds hazardous waste and finished product. Five (5) tanks, (1A,3A,14,F-1 and F02) normally used to store finished product ($feCl_3$). CB-2, CB-3 and CB-4 (under repairs), are process tanks. Five (5) tanks, (R-3,R-30,12,F03 and RR-1) are used for the storage of pickle liquor. F-1,F-2 and F-3 are fiberglass tanks and east of the tanks are chlorobutyl rubber-lined steel tanks. Chlorobutyl rubber-lined steel tanks and fiberglass tanks are the suitable material for this kind of waste and finished product which is acidic in nature. (Chemical Engineering Handbook, John H. Perry, Third Edison-McGraw-Hill Publication).

We load and unload normally to these tanks from the bottom. Operators or drivers before loading or unloading check the initial level. Then checks the weight and gallons from manifest or shipping paper and calculates whether the tank or trailer will hold the load. After unloading or loading, he again checks the level in the tank and records it in the operating log. All these tanks have vent lines. Tanks 3A and 14 have level control. Pickle liquor or finished product stored at normal temperature and these materials do not have low vapor pressure; pickle liquor does not emit any fumes at normal outside temperature, so chances for air pollution are none. Pure Ferrous Chloride and Ferric Chloride vapor pressures are:

Ferrous Chloride: 100mmHg @ 842°C, 200mmHg @ 897°C 760mmHg @ 1026°C

Ferric Chloride: 100mmHg @ 272.5°C, 200mmHg @ 285°C 760mmHg @ 319°C

Specific Gravity of Pickle Liquor is 1.2 - 1.36 and finished product is 1.42.

Tank No. F-11,2,D-1,1-S,2-S and CONL contain chlorinated solvents. The chlorinated solvent waste is stored in the above tanks from the company's prior year's activity. Steel are a suitable material for storage of chlorinated solvent. At present, we do not load or unload anymore solvents in those tanks. As a matter of fact, we did not receive or dispose any chlorinated solvents from those tanks in the last 4 years. We are storing this material until we find the suitable way (maybe incinerator) to dispose this material safely.

At the present time, we are following general inspection, daily and weekly inspection requirements for those tanks. When the tanks are empty, we will install level control devices, temperature and pressure gauges on those tanks. We will firmly support those tanks to the ground. We will have proper ventilating devices and maybe dike before we will put those tanks back into service.

16 tanks, including Sphere and Tower, contains spent cyanide solution. This material comes from company's prior activity before 1980. We do not receive anymore of this kind of waste at the present time.

We did not (unload) dispose yet any material from this storage tank. Steel is also suitable material of construction for cyanide waste. Presently, we are storing this material.

We would like to dispose this material by converting $CN^-$ into KCN solution and sell the KCN as finished product. The process is to explain in detail in general waste analysis section. After we remove this material from our storage tank, we will convert these tanks into storage tanks by cleaning tanks first. We will install temperature and pressure gauges, level control, proper ventilation system and overfilling devices. We will support these tanks properly and build concrete pad and containment structure. At the present time, we would like EPA to give us a temporary permit for storage until we dispose this material and get the tanks emptied first.

Tank numbers R-31, 16 and 20 contain waste acid. These tanks are steel tanks. We would like to neutralize the content from the tanks and dispose the material at approved site.

Tank No. 5, which is 12,100 gallons steel tank, contain silica tetrachloride (D003). We are going to convert silica tetrachloride into silica and hydrochloric acid. Silica will be non-hazardous waste; we will dispose of it in approved landfill after analyzing the material. Hydrochloric acid, we will consume it to manufacture our finished product.

Tanks 22 and 19, which are steel tanks, has capacity 1,430,000 gallons and 842,000 gallons respectively. T-19 and T-22 both contain No. 5 fuel oil, which is contaminated with PCB and water. T-19 we are going to scrape it after the tank is empty. Present plan is to incinerate the material.

T-11, 41, R-38, 17, 18 and 1 are empty steel tanks. Our plan is to scrape the tanks.

Tank 24 has water in it (FOR TESTING). We have also one fiberglass tank, 7,800 gallons capacity, which is empty.

Present plan for the containment is to build a dike around the storage tank as shown in the enclosed plot drawing.

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | | | Chlorinated solvent | F001 & F002 | | 1 2 0 | |
| SPHERE | 22,800 | 18'dia. | Steel, rubber lined | Spent cyanide sol'n | F014 & F015 | UN1935 | 0 3 0 | Has a hole part way up. |
| TOWER | 30,000 | | Steel | Spent cyanide sol'n & sludge | F014 & F015 | UN1935 | 0 3 0 | |
| RR-2 | 10,000 | 7'3"x32'9" | Steel | Cyanide sol'n and solvent | F007 & F009 | UN1935 | 0 3 0 | |
| TR38 | 6,500 | Trailer | Stainless steel | Spent cyanide sol'n | F007 & F019 | UN1935 | 0 3 0 | |
| ST1 | 20,000 | 10'6"x31' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| DB1 | 12,000 | 11'9"x13'8" | Steel | Cyanide Sludge | F007 & F009 | UN1935 | 0 3 0 | |
| 2A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| 4A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| 6A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | Empty now;could be used for cyanide storage. |
| 8A | 17,625 | 10'x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| 26 | 14,350 | 10'5"x26'1" | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| 28 | 19,100 | 10'x30' | Steel, rubber lined | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| 23 | 19,100 | 10'x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 0 3 0 | |
| | | | | | | | | |

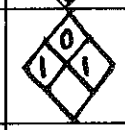
# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| X | 19,430 | 10'5"x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 3 0 0 | |
| 21 | 21,000 | 10'x30' | Steel | Spent cyanide sol'n | F007 & F009 | UN1935 | 3 0 0 | |
| 24 | 21,000 | 10'x30' | Steel | Water | | | 0 0 0 | To be used for cyanide sol'n. |
| CYI | 22,100 | 11'2"x30' | Steel | Spend cyanide sol'n | F007 & F009 | UN1935 | 3 0 0 | |
| FG Tank | 7,875 | 10'8"x11'10" | Fiberglass tank | Empty | | | | May be used whe scrubber is installed. |
| 11 | 4,300 | 10'x9'6" | Steel | Storage for bags of lime. | | | 0 0 0 | Empty now;we are going to scrape the tank |
| 41 | 4,300 | 10x0'6" | Steel | Caustic solution empty | D002 | UN1824 | 3 0 1 | Empty now;we are going to scrape the tank |
| R-17 | 14,488 | 24'8"x10' | | Empty | | | | We are going to scrape the tank |
| 16 | 6,040 | 11'x8'6" | Steel | Neutralized nitric acid plating sol'n | D002 | NA9189 | 2 0 0 | We will use thi tank to neutralize acid |
| Al Fuel oil tank | 1,174 | 5'x8' | Aluminum | Fuel oil,very small amount | | | 2 0 0 | No plans to scrape |
| 1 | 20,000 | 10'x32'8" | Steel | Empty | | | | Scrape tank |

# LIST OF TANKS

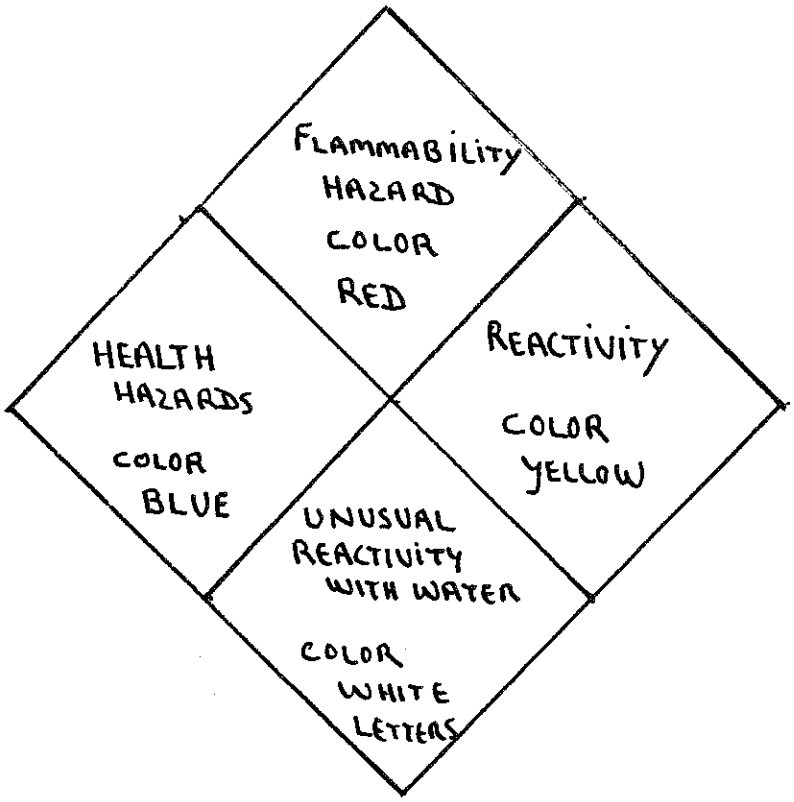
| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | 6'8"x31'8" | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 & K063 | NA1760 | 0 1 1 | |
| R-15 | 8,000 | 6'10"x28'9" | Steel | Waste acid | D002 | NA9189 | 2 0 2 | Scrap tank |
| R-31 | 8,000 | 6'7"x32' | Steel | Waste acid | D002 | NA9189 | 2 0 2 | |
| R-38 | 2,400 | 6'6"x12'5" | Steel, rubber lined | Waste acid (playing sol'n) | D002 | NA9189 | 2 0 2 | |
| 20 | 550,000 | 47'x32' | Steel | Neutralized acid sludge | D002 | NA9189 | 0 0 0 | |
| 5 | 12,100 | 10'x20'6" | Steel | Silica tetra-chloride | D003 | UN1818 Corrosive | 2 1 3 | |
| 2 | 46,200 | 21'x17'8" | Steel | Solvent-chlori-nated and oil | F001 & F002 | NA1993 | 2 1 0 | |
| D-1 | 12,000 | 10/6"x18' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 1-S | 23,400 | 11'x33' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 2-S | 17,200 | 11'x24'2" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 19 | 842,000 | 63'x36' | Steel | Oil sludge and water | | NA1993 | 3 1 0 | |
| 22 | 1,855,000 | 77'x41' | Steel | Fuel oil-water contaminated with PCB | D003 | NA1993 | 3 1 0 | |
| CONL | 13,366 | 10'6"x20'3" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| CB-2 | 14,200 | with cone bot- 12'x13' tom | Steel | Ferrous Chloride In process tank | K062- [illegible] | NA1760 | | |
| CB-3 | 14,200 | with cone bot- 11'3"x16' tom | Steel | In process tank | | NA1760/UN2582 | | |
| CB-4 | 14,200 | with come bot- 11'3"x16' tom | Steel | In process tank | | NA1760 | | |
| 1A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582/NA1760 | | |
| 3A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| 14 | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| R-3 | 10,250 | 7'6"x30'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 |  | |
| R-33 | 7,420 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Needs to be repaired. |
| R-30 | 7,000 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |
| 12 | 12,200 | 10'5"x19' | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Being repaired. |
| F-1 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-2 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-3 | 16,000 | 12'3"x21'5" | Fiberglass | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |

D-18

# NFPA CODES


FLAMMABILITY
HAZARD
COLOR
RED
HEALTH
HAZARDS
COLOR
BLUE
REACTIVITY
COLOR
YELLOW
UNUSUAL
REACTIVITY
WITH WATER
COLOR
WHITE
LETTERS

| | Identification of Health Hazards Color Code: BLUE | Identification of Flammability Color Code: RED | | Identification of Reactivity (Stability) Color Code: YELLOW | |
|---|---|---|---|---|---|
| | Type of Possible Injury | Susceptibility of Materials to Burning | | Susceptibility to Release of Energy | |
| Signal | | Signal | | Signal | |
| 4 | Materials which on very short exposure could cause death or major residual injury even though prompt medical treatment were given. | 4 | Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temeprature, or which are readily dispersed in air and which will burn readily. | 4 | Materials which in themselves are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures. |
| 3 | Materials which on short exposure could cause serious temporary or residual injury even though prompt medical treatment were given. | 3 | Liquids and solids that can be ignited under almost all ambient temperature conditions. | 3 | Materials which in themselves are capable of detonation or explosive reaction but require a strong initiating source or which must be heated under confinement before initiation or which react explosively with water. |
| 2 | Materials which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given. | 2 | Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. | 2 | Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. Also materials which react violently with water or which may form potentially explosive mixtures with water. |
| 1 | Materials which on exposure would cause irritation but only minor residual injury even if no treatment were given. | 1 | Materials that must be preheated before ignition can occur. | 1 | Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently. |
| 0 | Materials which on exposure under fire conditions would offer no hazard beyond that ordinary combustible material. | 0 | Materials that will not burn. | 0 | Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water. |

The fourth space in the diagram shall be used to indicate unusual reactivity with water. The recommended signal to indicate this unusual reactivity with water and to alert the fire fighting personnel to the possible hazard of using water is the letter W with a line through the center (W).

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| Sphere | 22,800 | Spent Cyanide Soln. 11'3" outage | F007 & F009 | UN1935 | 1.095 | 6.7 | 12400 | Soluble | 13.5 | Material is considered as poison. If inhaled, may be fatal. May be fatal also if swallowed or absorbed through skin. Contact may cause burns to the skin and eyes. Runoff from fire control or dilution water will cause water pollution. It may burn but does not ignite readily. |
| Tower | 30,000 | Spent Cyanide Soln. | F007 & F009 | UN1935 | 1.1 | --- | 1438 | Soluble | 11.4 | |
| RR-2 | 10,000 | Spent Cyanide Soln. 3790 gallons | F007 & F009 | UN1935 | 1.125 | 6.5 | 12650 | Soluble | 12.1 | |
| TR-38 | 6,500 | Spent Cyanide Soln. 1300 gallons | F007 & F009 | UN1935 | 1.09 | 6.6 | 17062 | Soluble | 13.1 | |
| ST-1 | 20,000 | Spent Cyanide Soln. 19,500 gallons | F007 & F009 | UN1935 | Has oil 0.88 | 7.3 | 62 | In-soluble | 7.6 | |
| DB-1 | 12,000 | Spent Cyanide Soln. 1500 gallons | F007 & F009 | UN1935 | NO SAMPLE | | | | | |
| 2A | 21,400 | Spent Cyanide Soln. 12,400 gallons | F007 & F009 | UN1935 | 1.14 | 6.5 | 3112 | Soluble | 13.6 | |
| 4A | 21,400 | Spent Cyanide Soln. 19,925 gallons | F007 & F009 | UN1935 | 1.005 | 6.5 | 975 | Soluble | 12.8 | |
| 6A | 21,400 | Spent Cyanide Soln. 500 gallons | F007 & F009 | UN1935 | NO SAMPLE | EMPTY | | | | |
| 8A | 17,625 | Spent Cyanide Soln. 14,100 gallons | F007 & F009 | UN1935 | 1.03 | 6.8 | 5150 | Soluble | 12.9 | |
| 26 | 14,350 | Spent Cyanide Soln. 11,050 gallons | F007 & F009 | UN1935 | 1.025 | 6.9 | 5838 | Soluble | 12.9 | |
| 28 | 19,100 | Spent Cyanide Soln. 16,800 gallons | F007 & F009 | UN1935 | | 6.8 | 6812 | | | |
| 23 | 19,100 | Spent Cyanide Soln. 10,830 gallons | F007 & F009 | UN1935 | 1.075 | 6.7 | 19.925 | Soluble | 12.7 | |
| X | 19,430 | Spent Cyanide Soln. 12,570 gallons | F007 & F009 | UN1935 | 1.01 | 6.6 | 937.5 | Soluble | 12.9 | |
| 21 | 21,000 | Spent Cyanide Soln. 6056 gallons | F007 & F009 | UN1935 | | 6.4 | 9812 | Soluble | | |
| CY-1 | 22,100 | Spent Cyanide Soln. 1480 gallons | F007 & F009 | UN1935 | NO SAMPLE | | | Soluble | | |
| SUMP-2 | | Spent Cyanide Soln. | F007 & F009 | UN1935 | 1.11 | 6.3 | 10150 | Soluble | 13.6 | |

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | Chlorinated Solvents 5000 gallons | F001 & F002 | NA1993 | 1.0 | 6.8 | | In-soluble | 7.0 | Vapors will cause dizzines or suffocation Contact will irritate the skin and eyes. Fire may produce irritatin or poisonous gases. Runoff from fire control or dilution water may cause pollutio Will burn. Ignited by heat, sparks and flames. Container may explode in heat or fire. Vapo explosion hazard indoors, outdoors or in sewers. |
| 2 | 46,200 | Chlorinated Solvents 41,100 gallons | F001 & F002 | NA1993 | 0.92 | 8.3 | | In-soluble | 7.2 | |
| D-1 | 12,000 | Chlorinated Solvents 9300 gallons | F001 & F002 | NA1993 | 1.238 | 6.4 | | In-soluble | 5.2 | |
| 1-S | 23,400 | Chlorinated Solvents 18,200 gallons | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.3 | |
| 2-S | 17,200 | Chlorinated Solvents 15,100 gallons | F001 & F002 | NA1993 | 0.956 | 6.7 | | Missible | 8.2 | |
| CONL | 13,366 | Chlorinated Solvents | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.6 | |
| Containers Raw | | Chlorinated Solvents | F001 & F002 | NA1993 | | | | | | |
| Sump-2 | | Solvents/Water | | NA1993 | 1.075 | 6.1 | | Insoluble | 3.5 | |
| R-15 | 8,000 | Waste Acid-Empty | D002 | NA9189 | EMPTY | | | | | May ignite combustibles. May cause reaction with water. Explosive concentrations of gas may accumulate in tanks. Runoff to sewer will cause water pollution. Contact |
| R-31 | 8,000 | Waste Acid-4000 | D002 | NA9189 | 1.44 | 6.6 | | | 1 | |
| R-38 | 2,400 | Waste Acid-Empty | D002 | NA9189 | EMPTY | | | | | |
| 20 | 550,000 | Neutralized Acid Sludge, 8'2" outage 305,000 gallons | D002 | NA9189 | 1.15 | Too much solids | 12.5 | | 6.7 | |
| 16 | 6,040 | Neutralized Acid Sludge, 4000 | D002 | NA9189 | 1.19 | 6.9 | | | 2.3 | |
| Containers Raw | | | | | | | | | | |

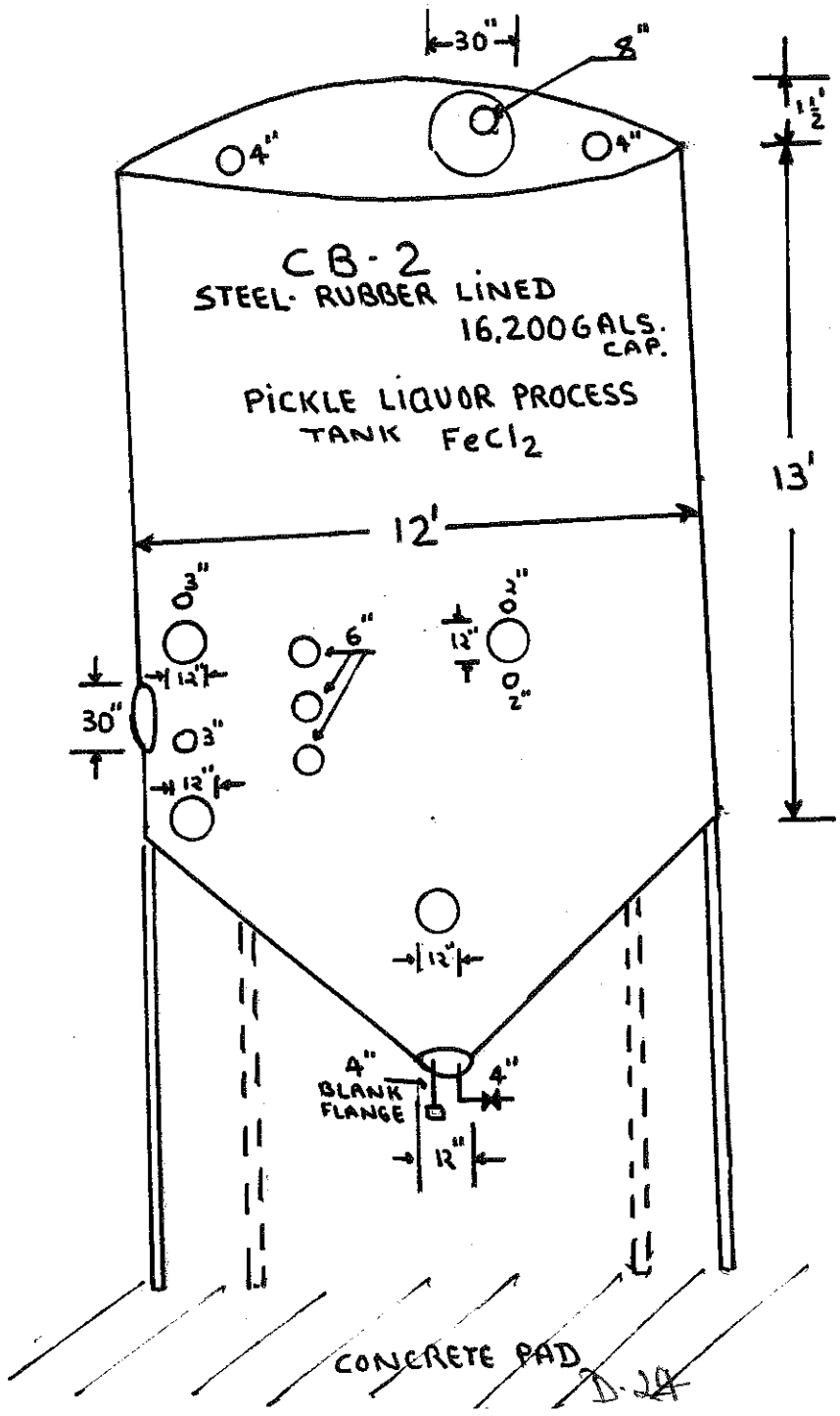
will cause burns to skin and eyes. Fire produces irritating and/or poisonous gases.

8.22

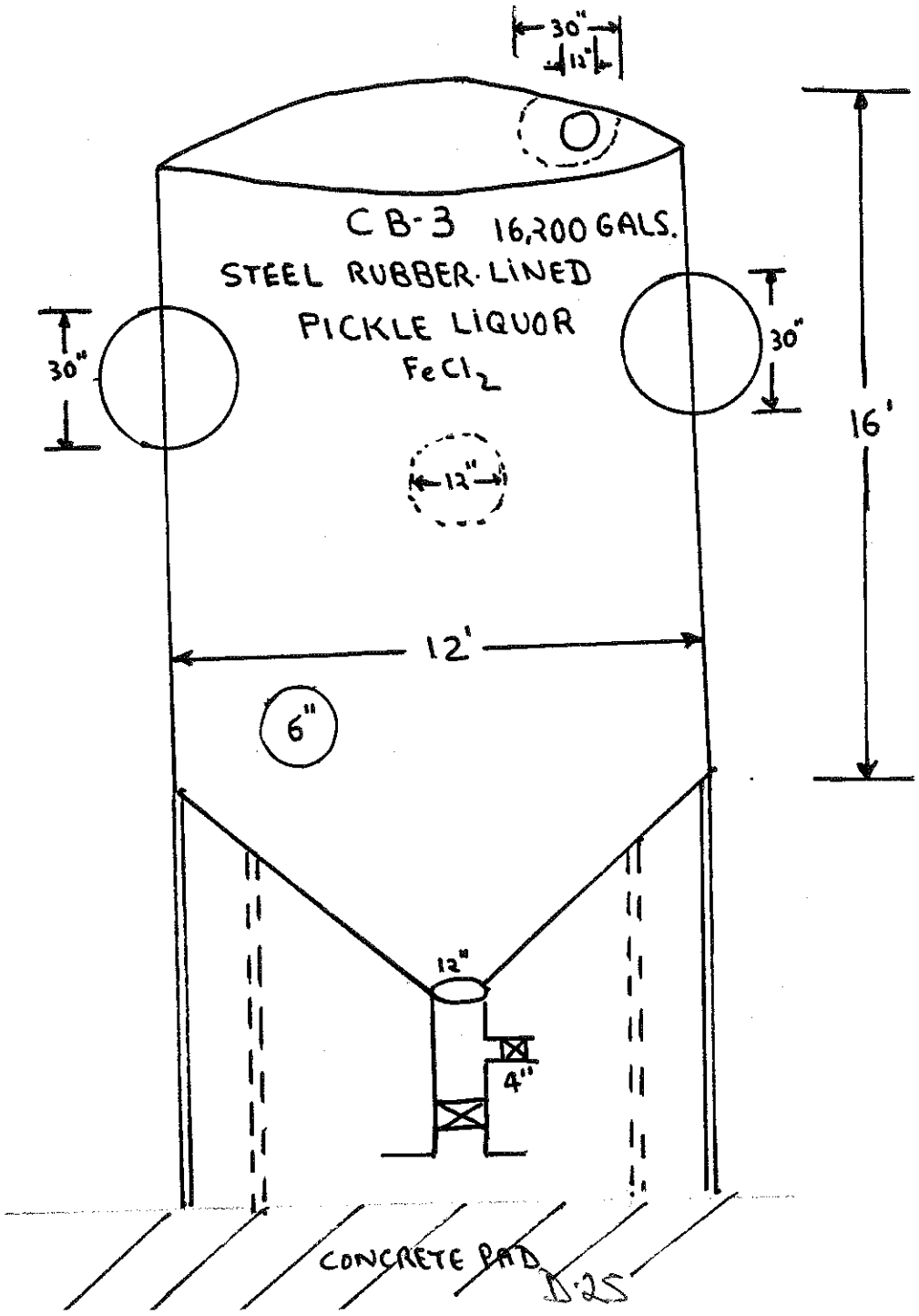
LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | Pickle Liquor, $FeCl_2$ 4000 gallons | K062 | NA1760 | 1.346 | 6.6 | | Soluble | 1 | Contact causes burns to skin and eyes. If inhaled, it may be harmful. If the material is included in a fire, it may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution. It may burn, but it will not ignite readily. Explosive concentrations of gas may accumulate in tanks. |
| CB-2 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-3 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-4 | 14,200 | Pickle Liquor | K062 | NA1760 | EMPTY | | | | | |
| R-3 | 10,250 | Pickle Liquor, $FeCl_2$ 500 gallons | K062 | NA1760 | NO SAMPLE | | | | | |
| R-33 | 7,420 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| R-30 | 7,000 | Pickle Liquor, $FeCl_2$ 7000 gallons | K062 | NA1760 | 1.37 | 6.5 | | Soluble | 1 | |
| 12 | 12,200 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| F-3 | 16,000 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.324 | 6.5 | | Soluble | 1 | |
| 1A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | 1.356 | 6.4 | | | 1 | |
| 3A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| 14 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-1 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-2 | 21,100 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| Rubber Lined sump | | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.37 | 6.4 | | | 1 | |

CB-2


30"
8"
4"
4"
1½'
CB-2
STEEL- RUBBER LINED
16,200 GALS. CAP.
PICKLE LIQUOR PROCESS
TANK $FeCl_2$
13'
12'
3"
6"
2"
12"
2"
30"
3"
12"
12"
4"
BLANK FLANGE
4"
12"
CONCRETE PAD

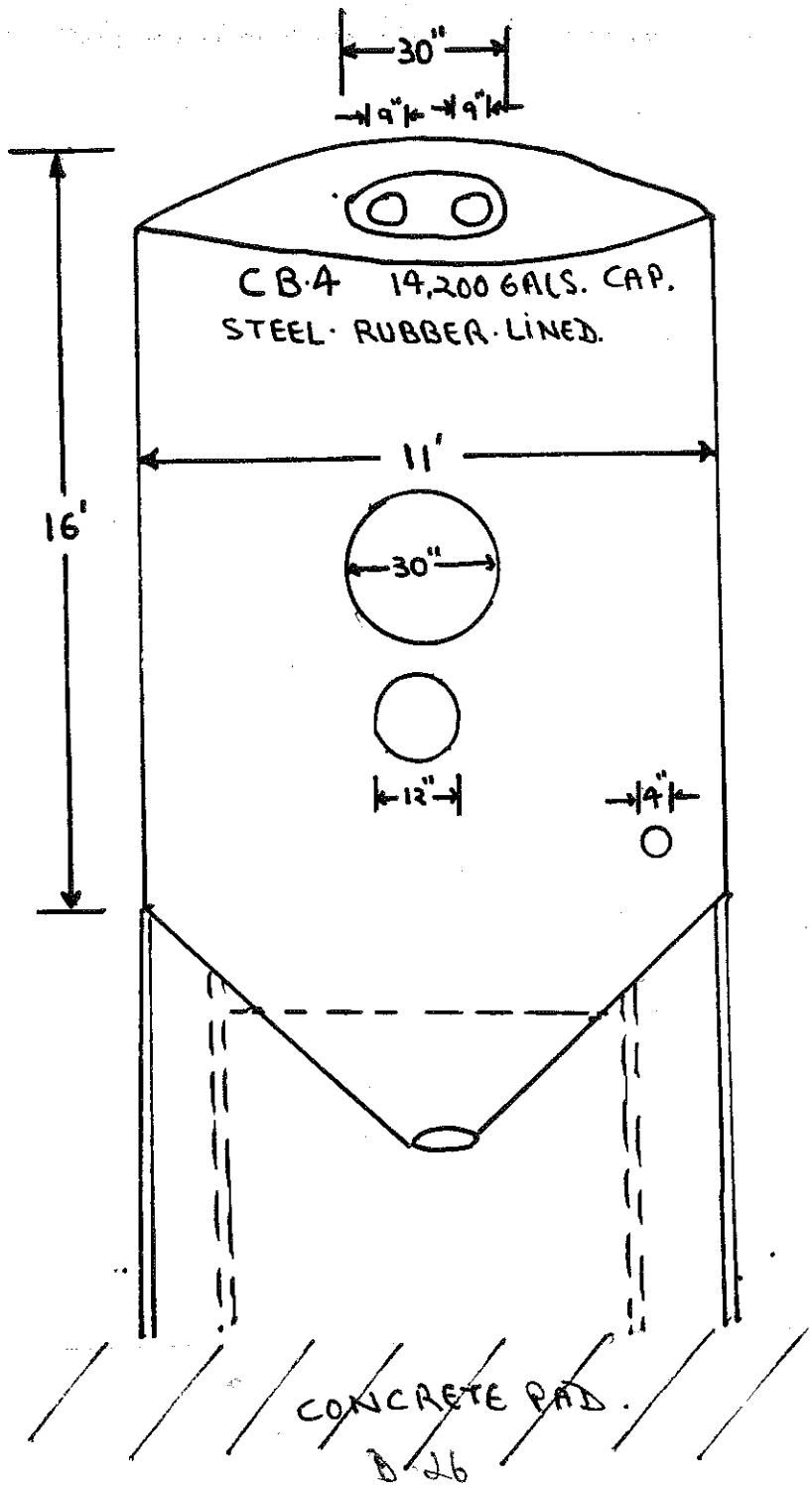
CB·3


30"
12"
CB-3 16,200 GALS.
STEEL RUBBER-LINED
PICKLE LIQUOR
$FeCl_2$
30"
30"
16'
12"
12'
6"
12"
4"
CONCRETE PAD

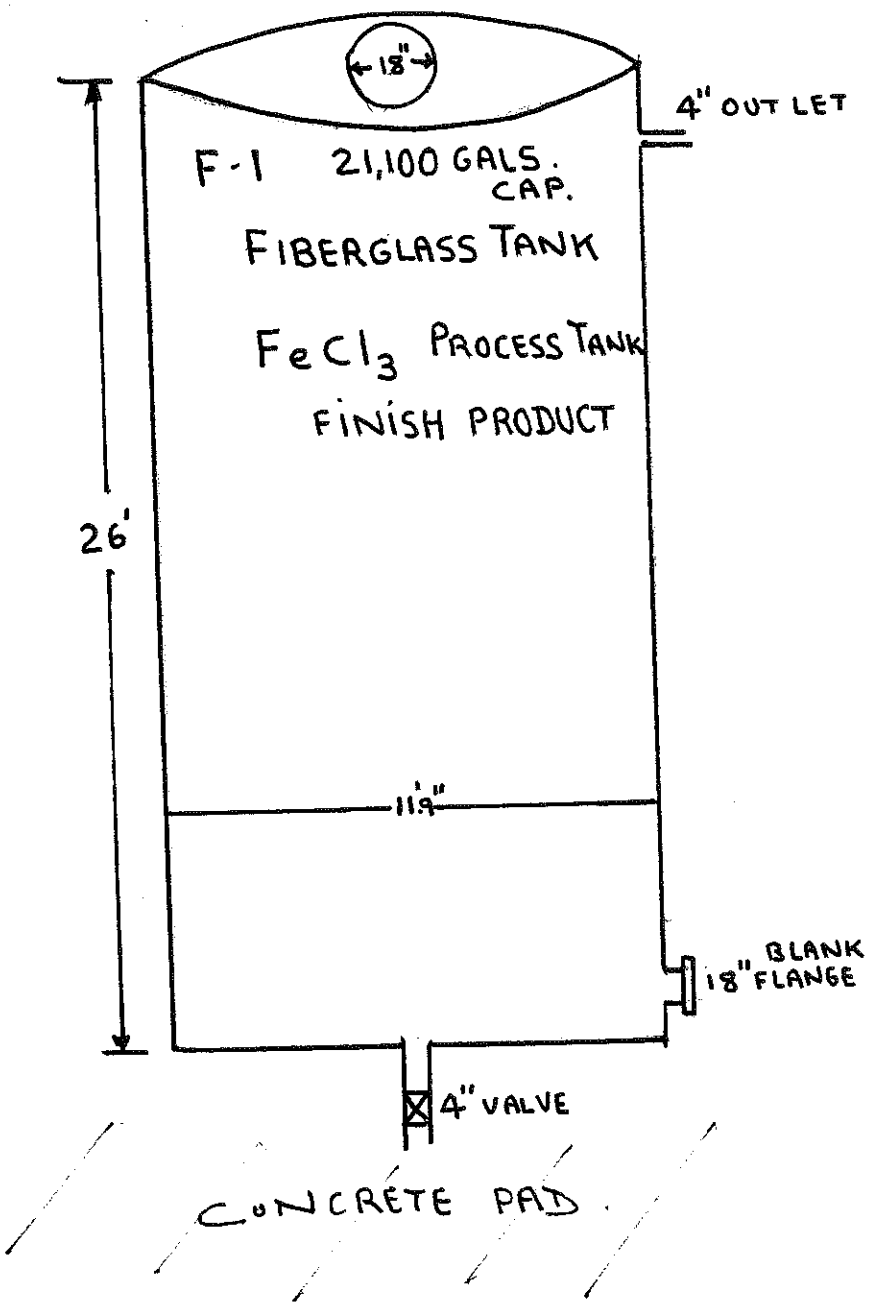
D·25

CB-4

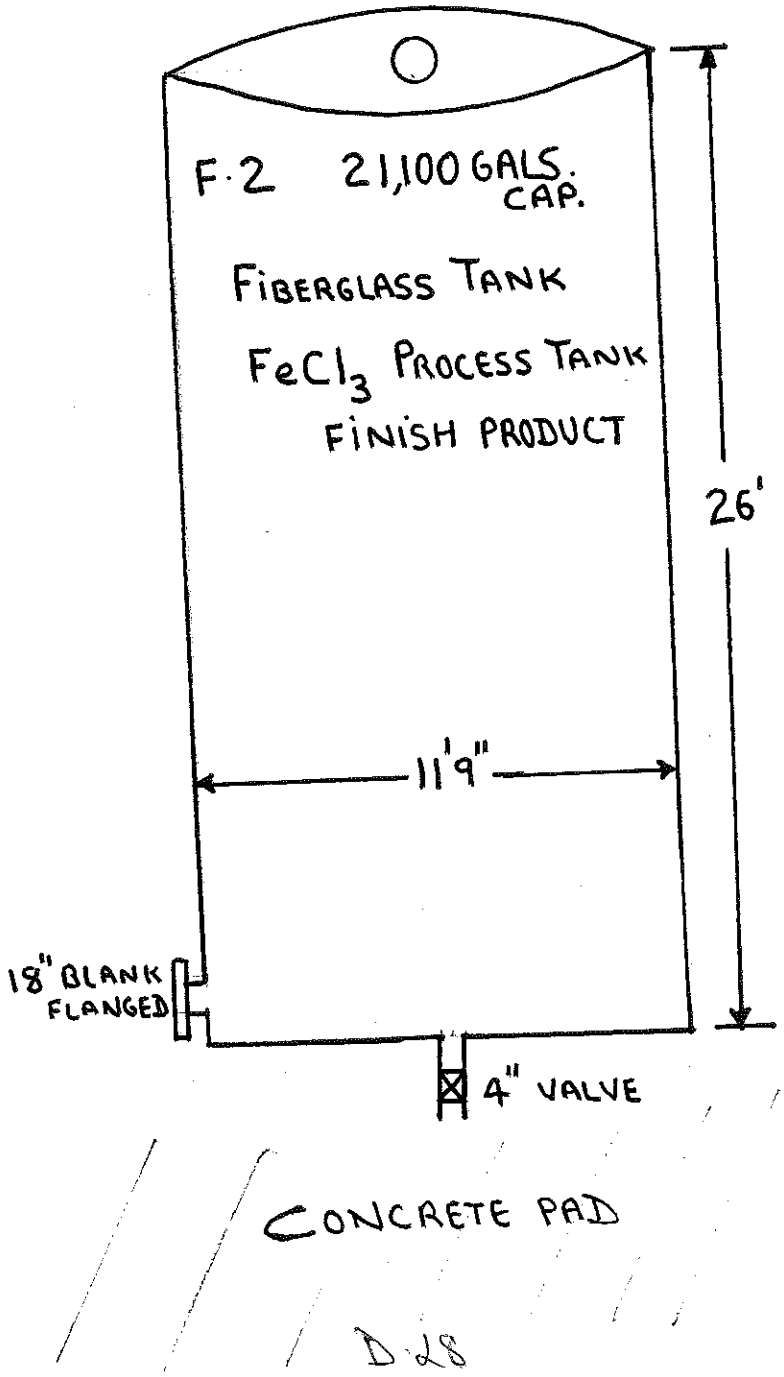
NOT IN SERVICE
UNDER REPAIR



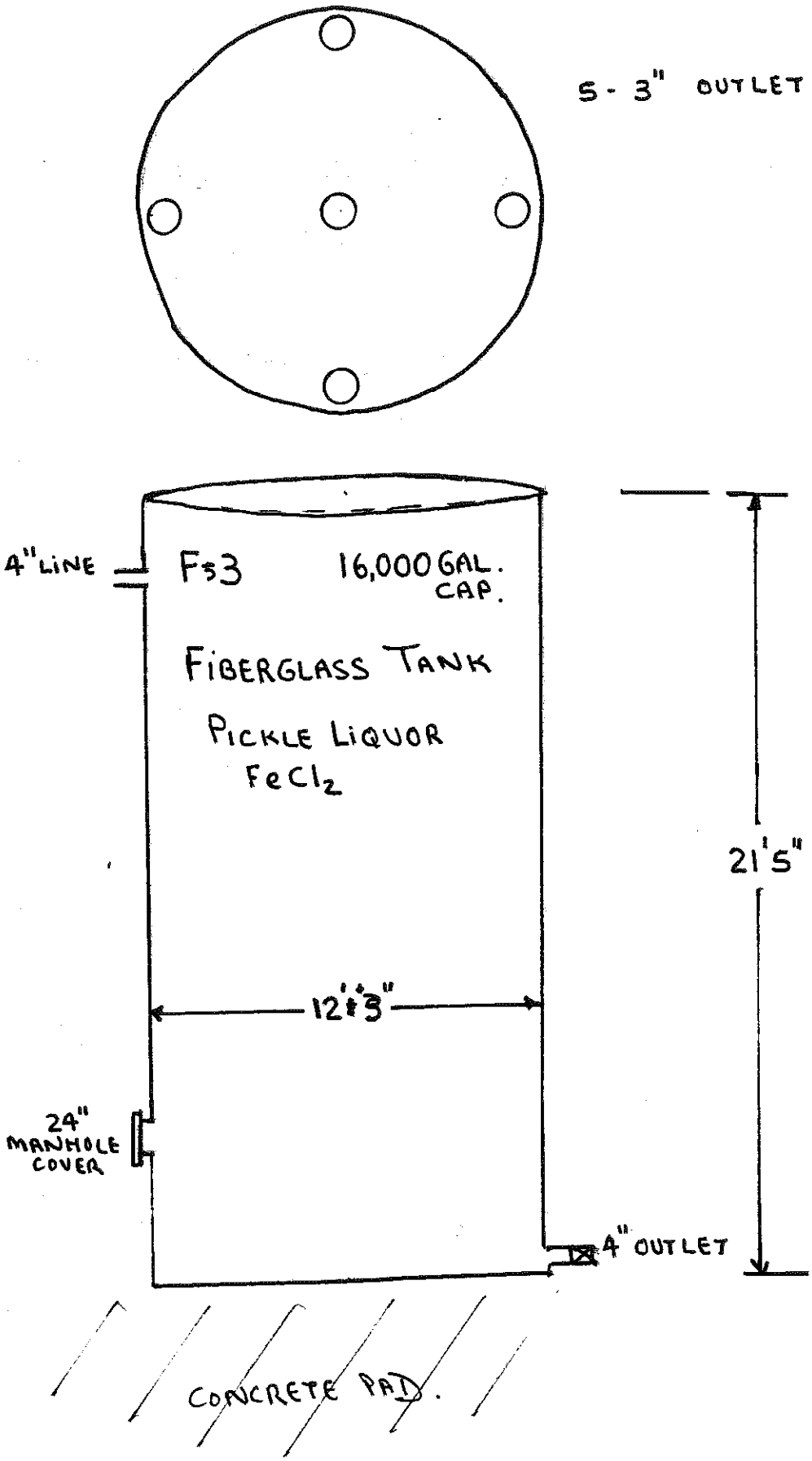
F-1


18"
4" OUT LET
F-1 21,100 GALS. CAP.
FIBERGLASS TANK
$FeCl_3$ PROCESS TANK
FINISH PRODUCT
26'
11'9"
BLANK
18" FLANGE
4" VALVE
CONCRETE PAD.

F-2

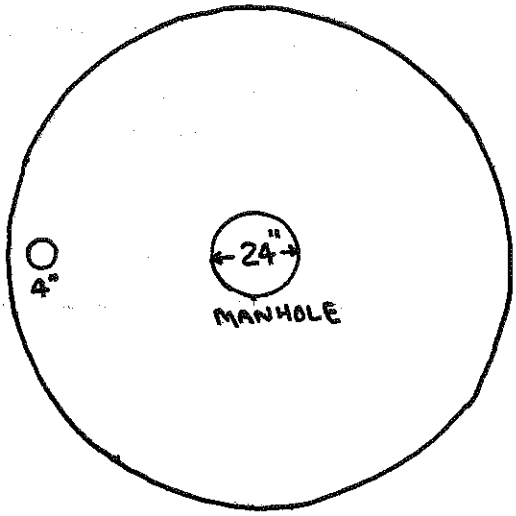

F·2 21,100 GALS. CAP.
FIBERGLASS TANK
$FeCl_3$ PROCESS TANK
FINISH PRODUCT
26'
11'9"
18" BLANK FLANGED
4" VALVE
CONCRETE PAD
D·28

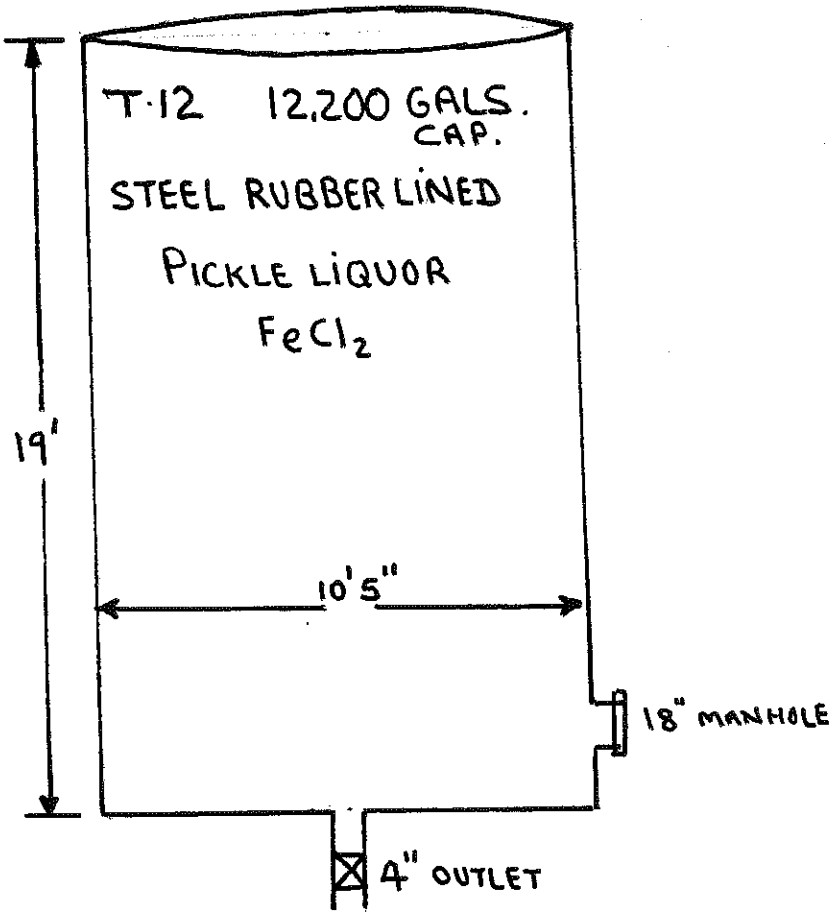
F·3


5 - 3" OUTLET
4" LINE
F-3
16,000 GAL. CAP.
FIBERGLASS TANK
PICKLE LIQUOR
$FeCl_2$
21'5"
12'-3"
24" MANHOLE COVER
4" OUTLET
CONCRETE PAD.

D·29

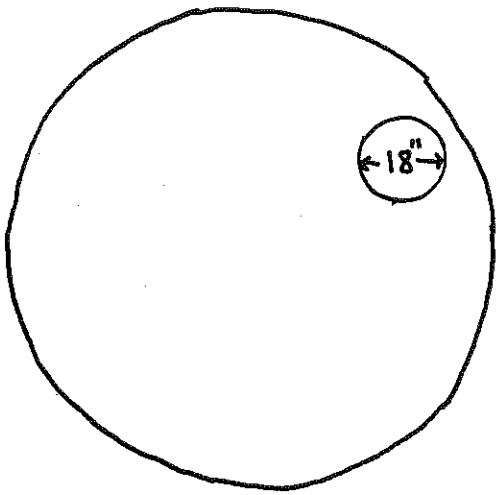
T·12

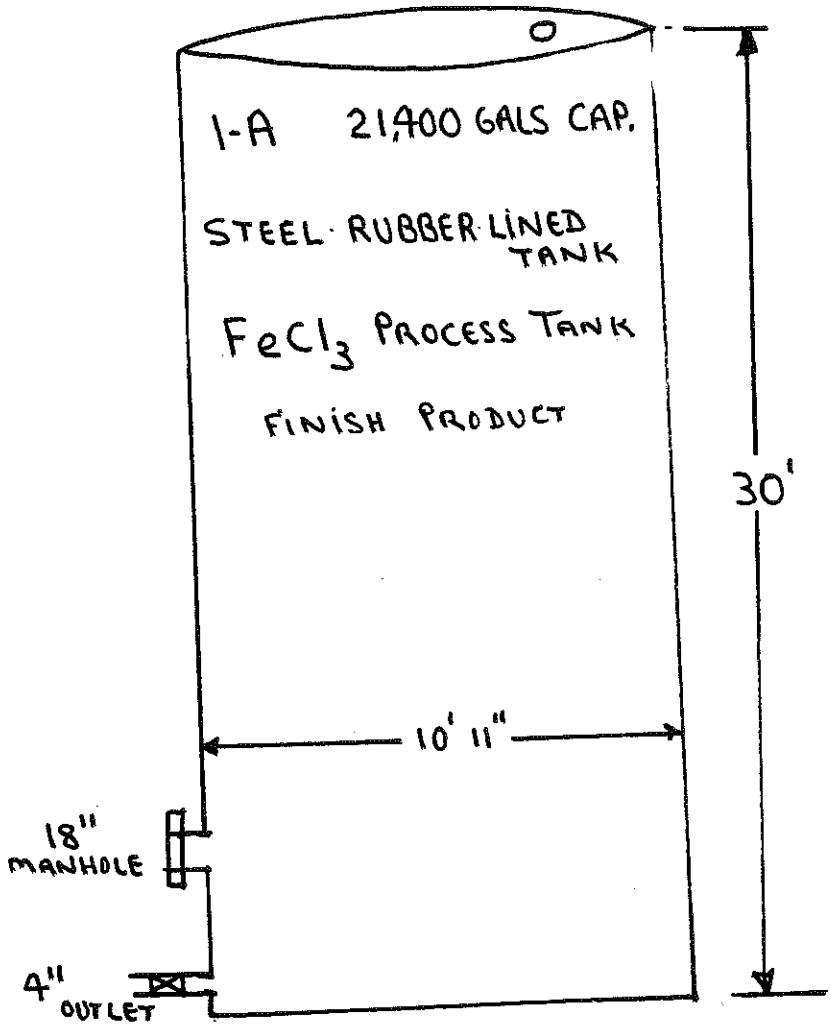

4"
24"
MANHOLE


T·12 12,200 GALS. CAP.
STEEL RUBBER LINED
PICKLE LIQUOR
$FeCl_2$
19'
10' 5"
18" MANHOLE
4" OUTLET

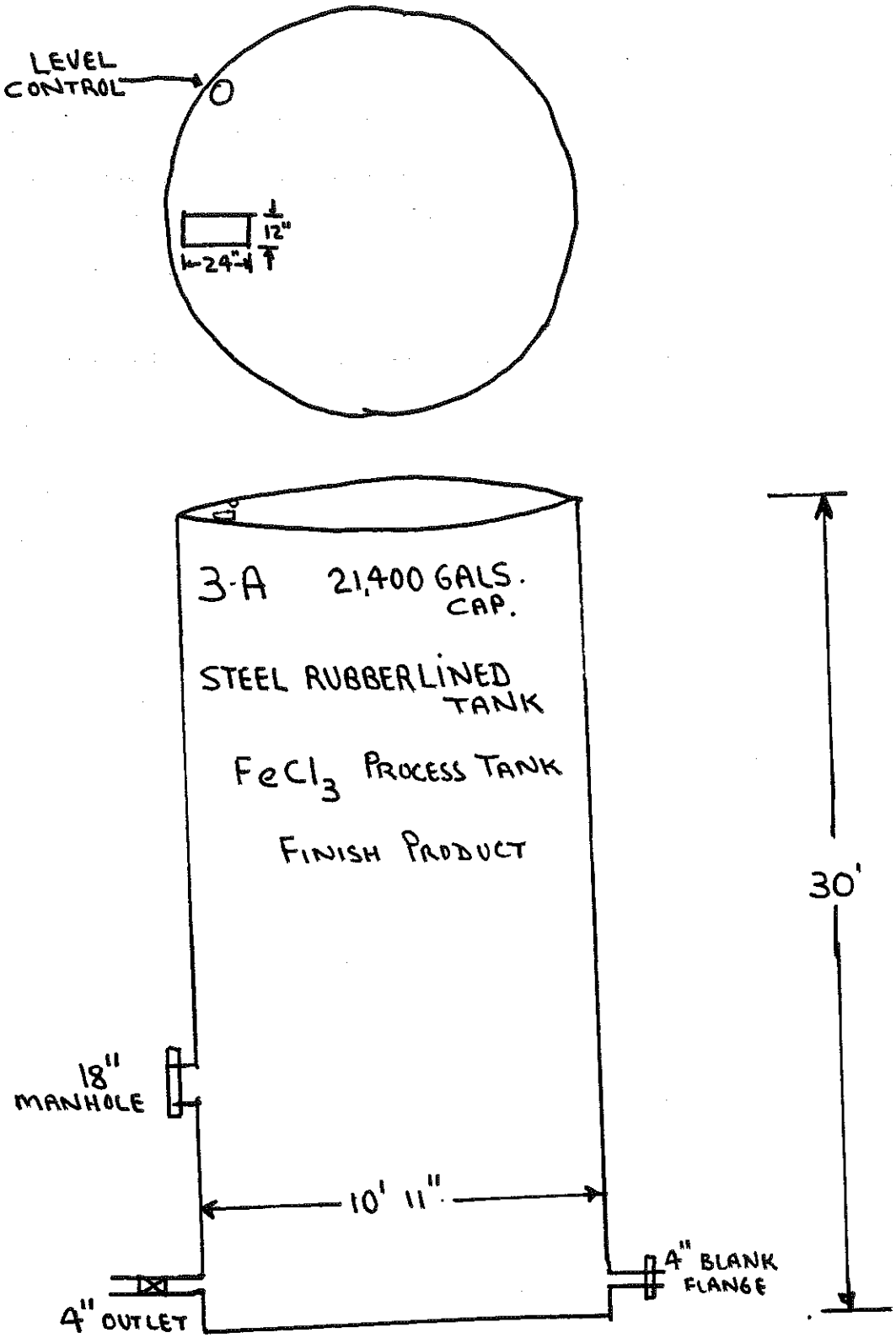
D 30

1-A

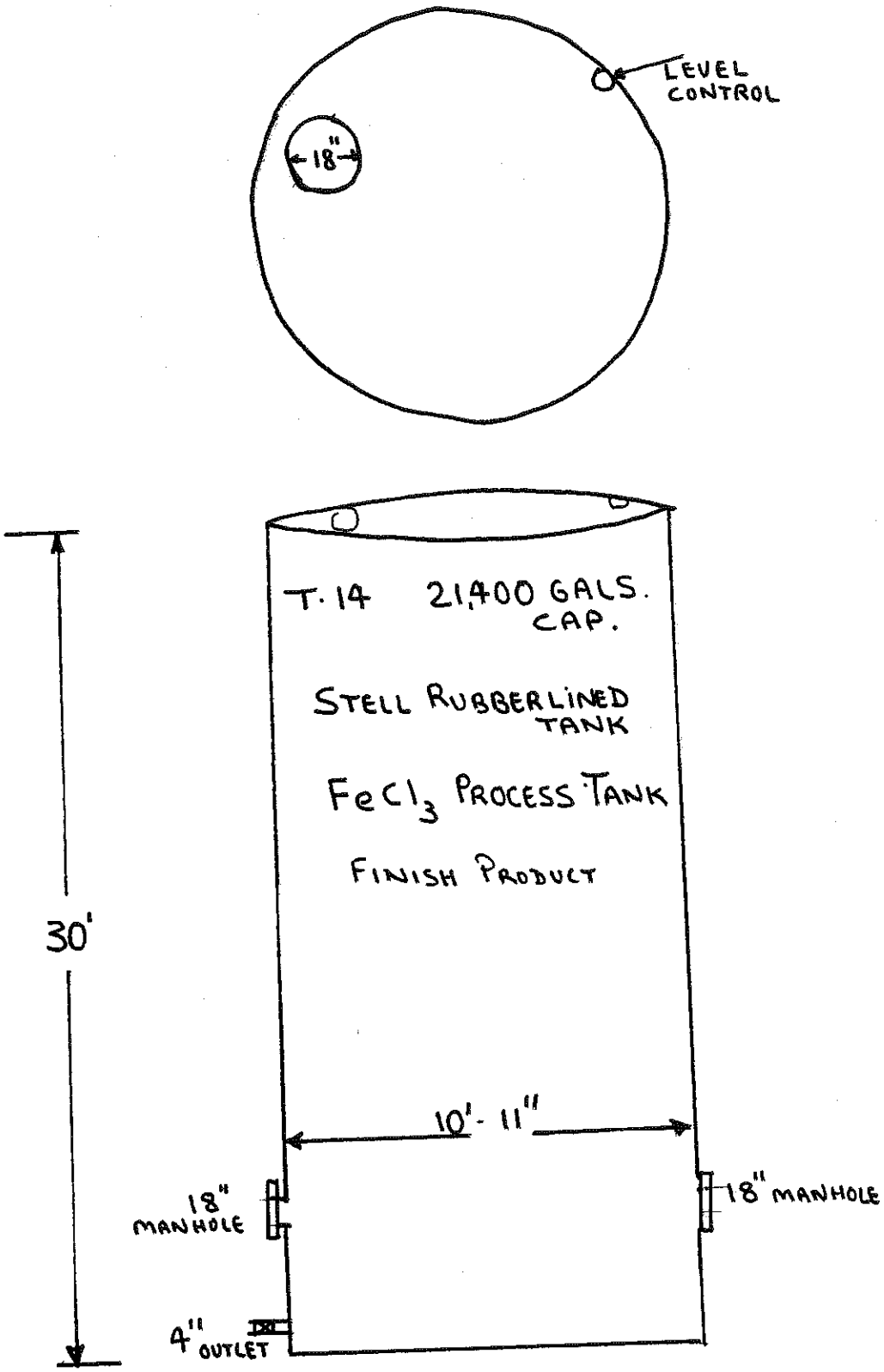

18"


1-A 21,400 GALS CAP.
STEEL RUBBER LINED TANK
$FeCl_3$ PROCESS TANK
FINISH PRODUCT
30'
10' 11"
18" MANHOLE
4" OUTLET

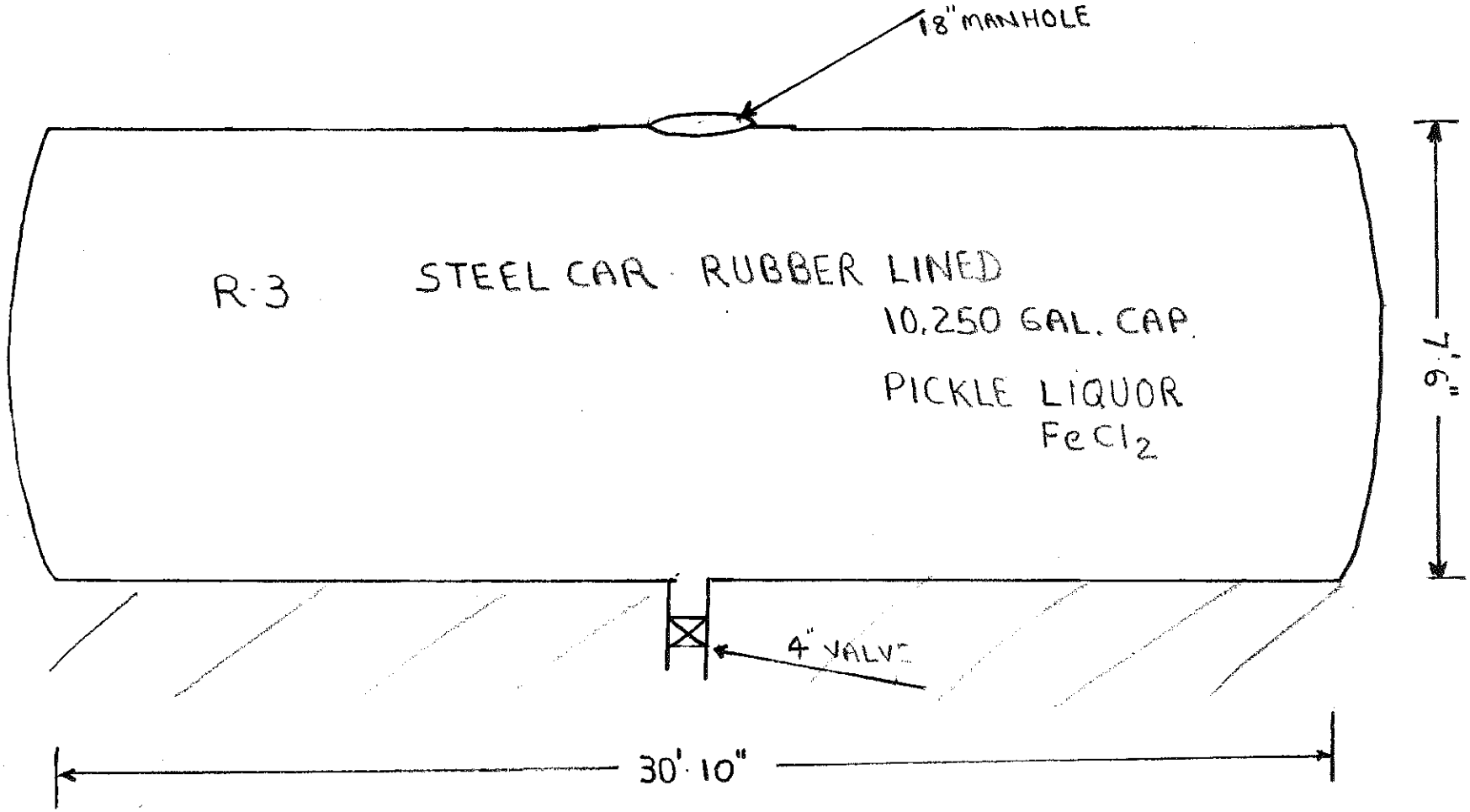
3·A


LEVEL CONTROL
12"
24"
3·A 21,400 GALS. CAP.
STEEL RUBBERLINED TANK
FeCl3 PROCESS TANK
FINISH PRODUCT
30'
18" MANHOLE
10' 11"
4" BLANK FLANGE
4" OUTLET

T·14

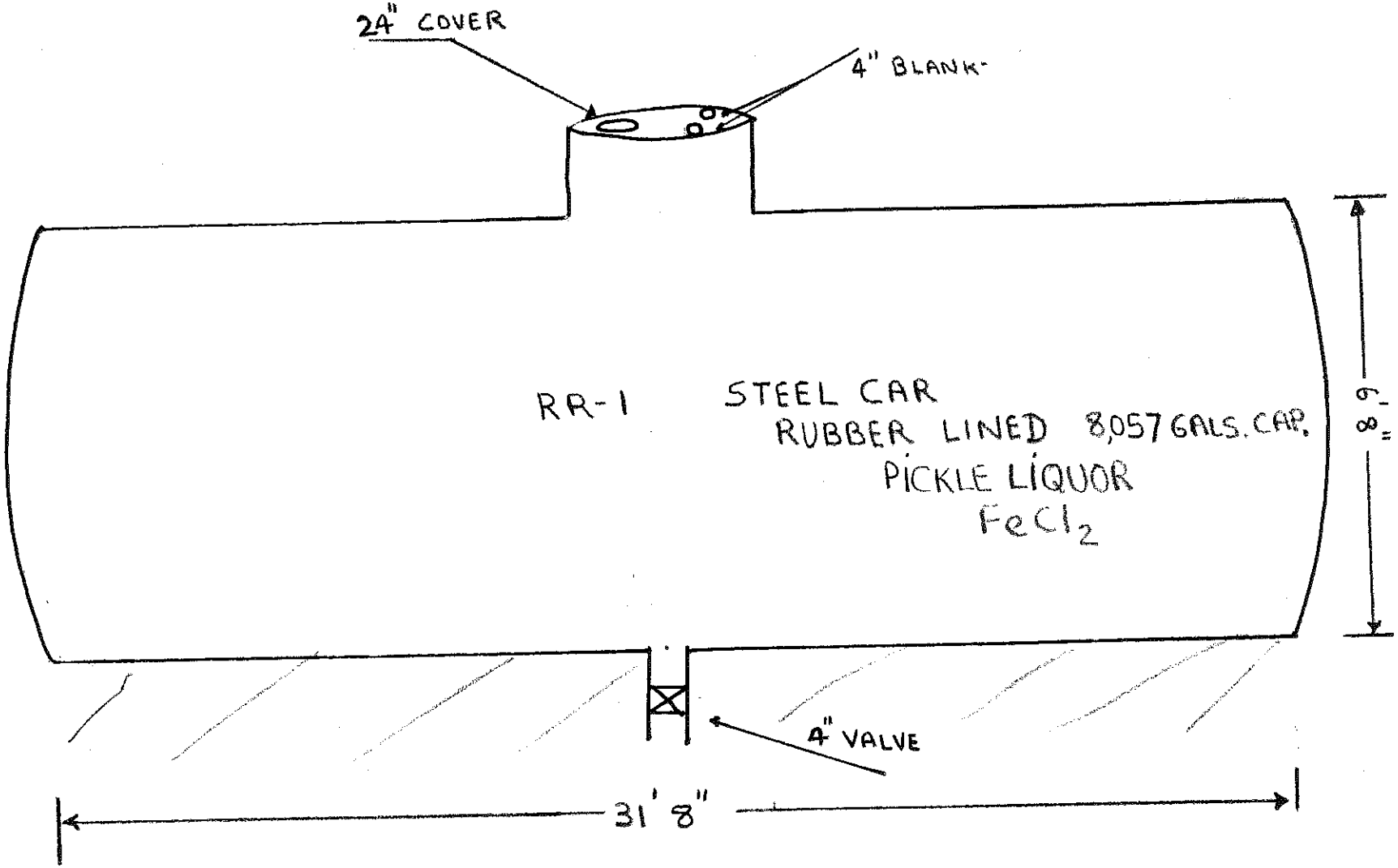

LEVEL CONTROL
18"
T·14 21,400 GALS. CAP.
STELL RUBBERLINED TANK
FeCl3 PROCESS TANK
FINISH PRODUCT
30'
10'-11"
18" MANHOLE
18" MANHOLE
4" OUTLET

# R-3

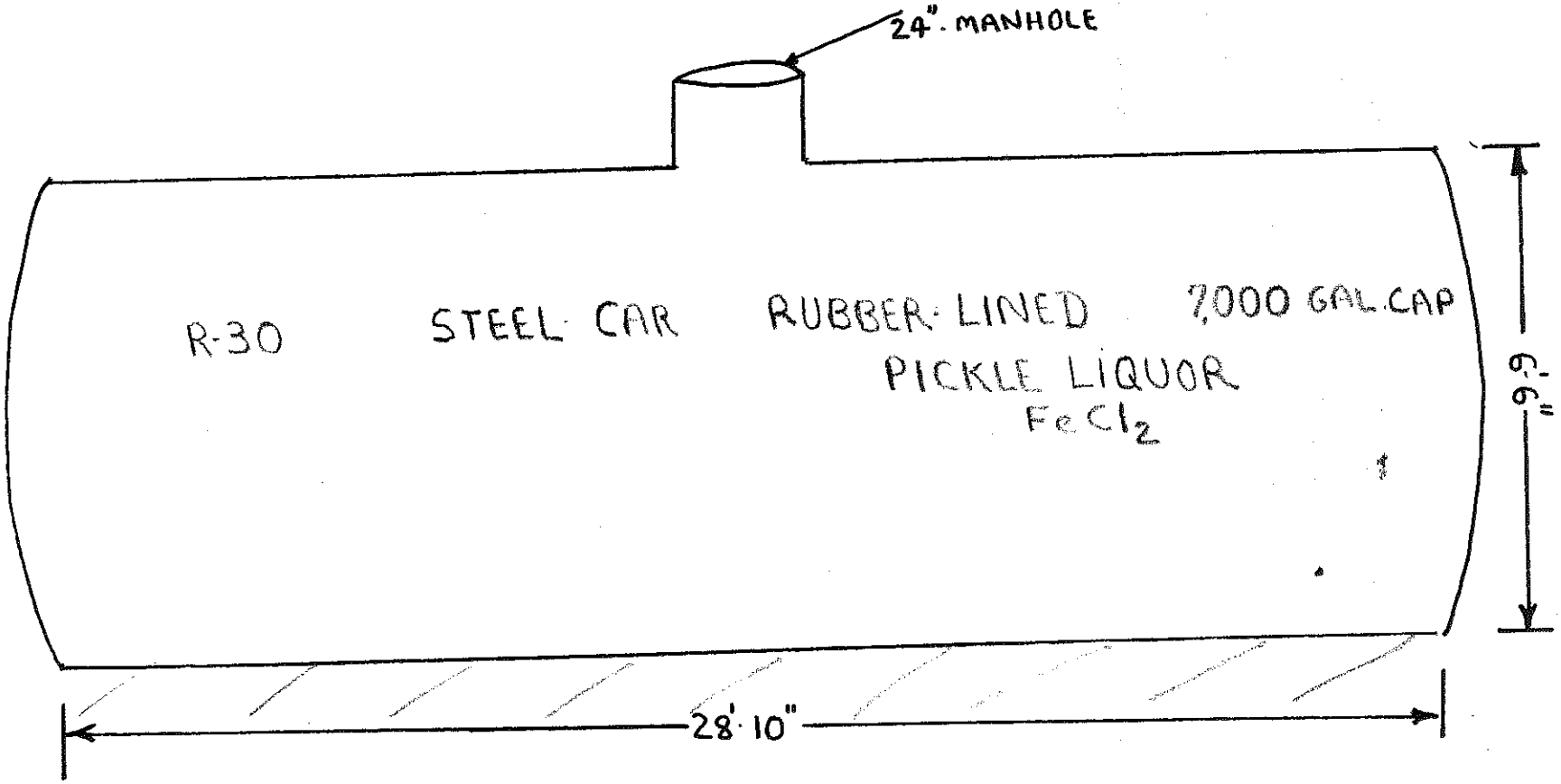

18" MANHOLE
R-3
STEEL CAR · RUBBER LINED
10,250 GAL. CAP.
PICKLE LIQUOR
$FeCl_2$
7'6"
4" VALVE
30'10"

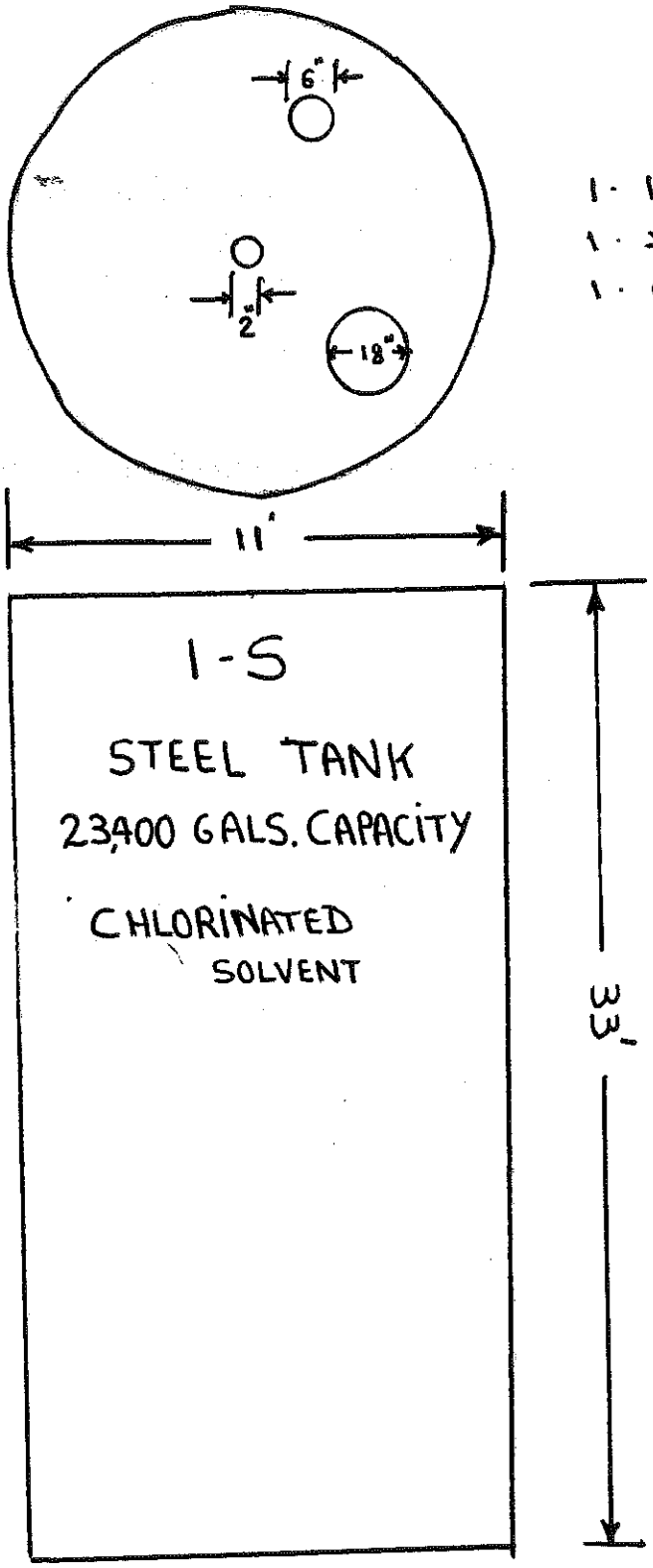
D-34

RR·1


24" COVER
4" BLANK
RR-1
STEEL CAR
RUBBER LINED 8,057 GALS. CAP.
PICKLE LIQUOR
$FeCl_2$
6'-8"
4" VALVE
31' 8"

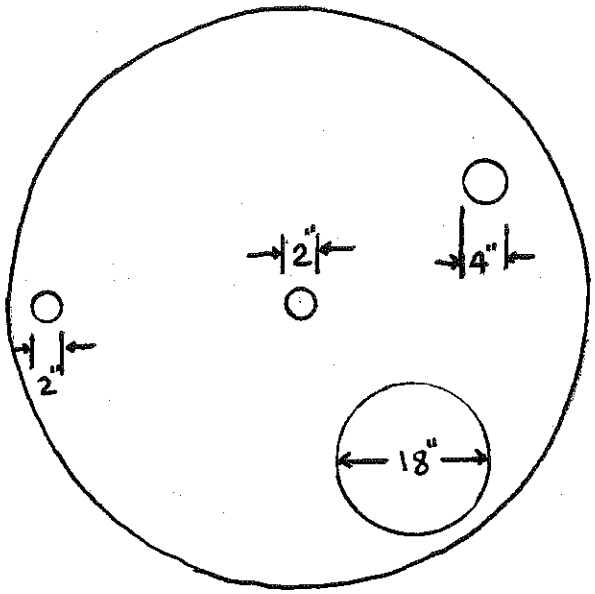
R·30


24". MANHOLE
R-30
STEEL CAR
RUBBER-LINED
7,000 GAL. CAP
PICKLE LIQUOR
$FeCl_2$
6'-6"
28'-10"

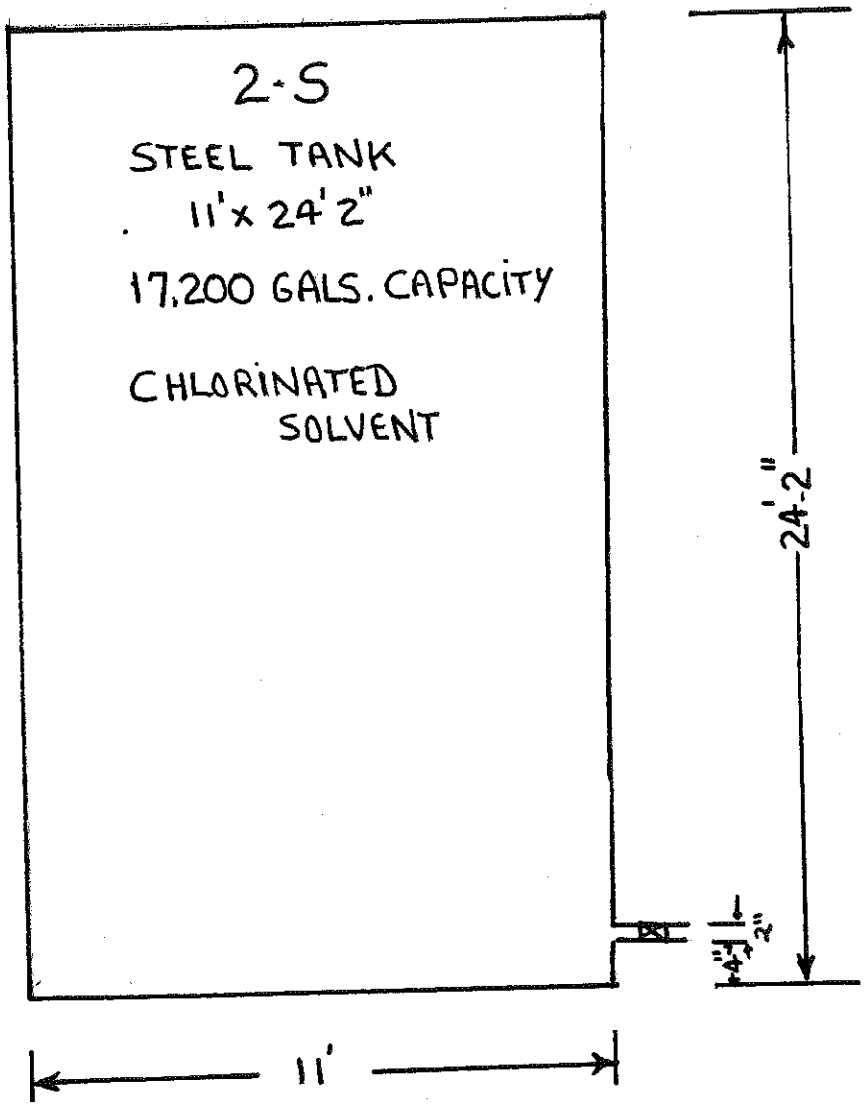



1 · 18" · MANHOLE COVER
1 · 2" AT CENTER
1 · 6" OPENINGS.

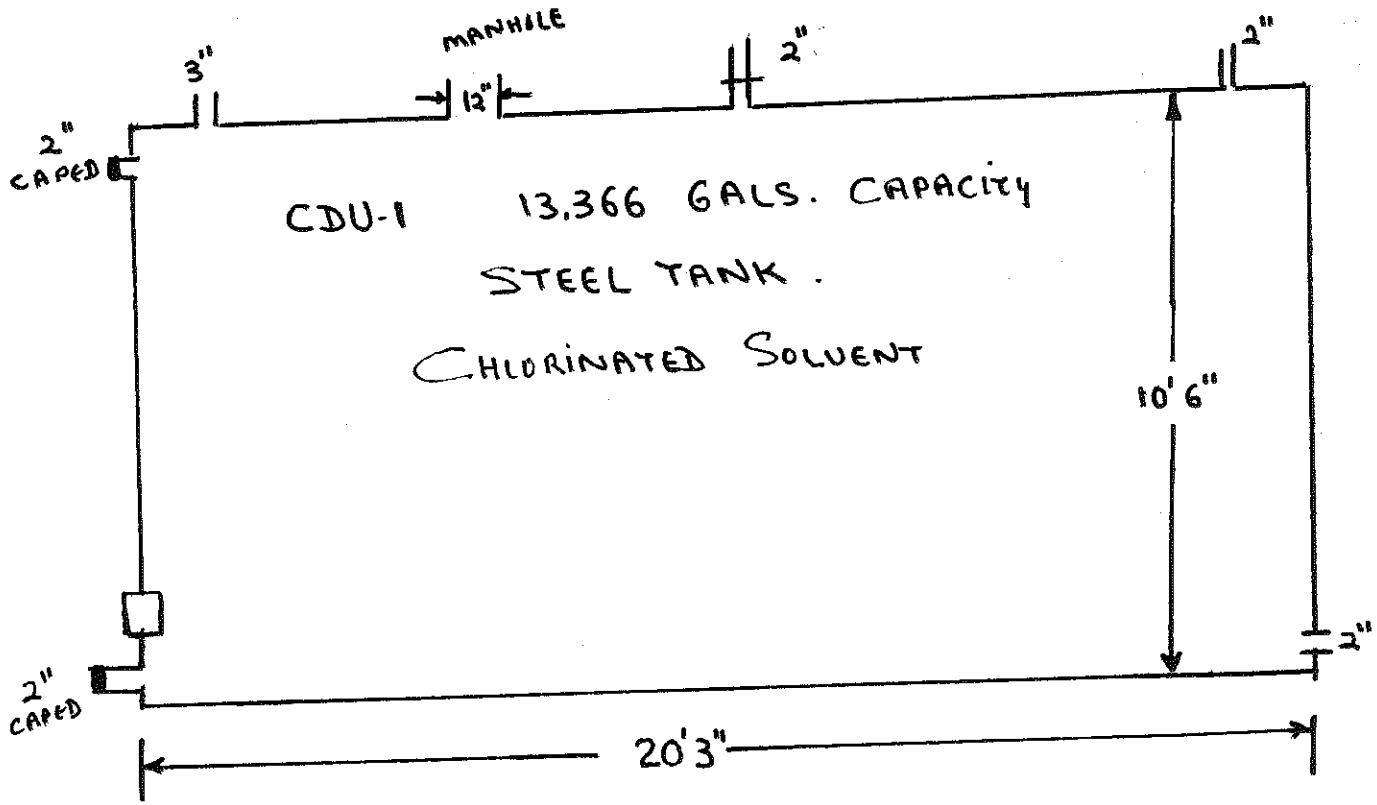
# 2·S



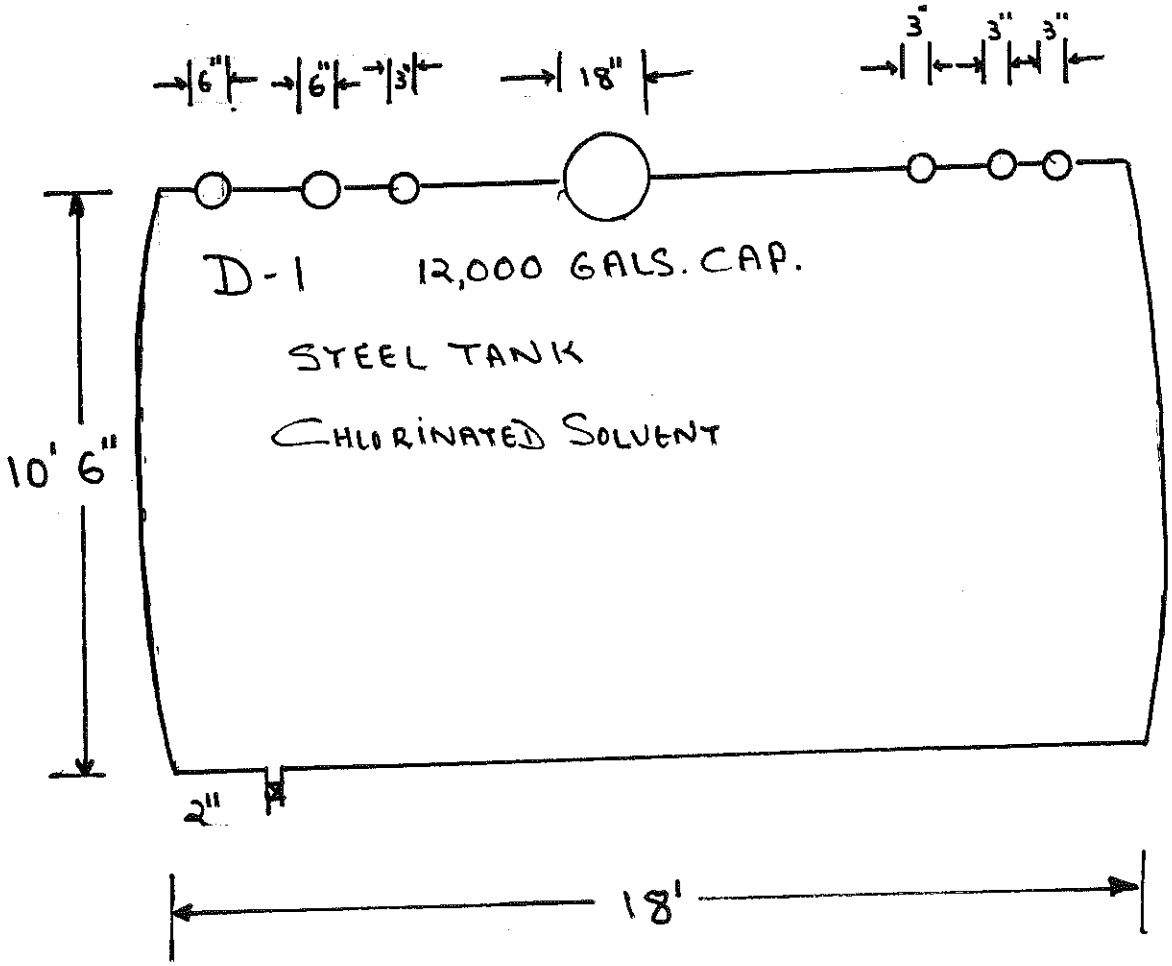

1 - 18" MANHOLE
2 - 2" OPENINGS
1 4" OPENING
1 - 2" VALVE AT BOTTOM AT 4" HEIGHT

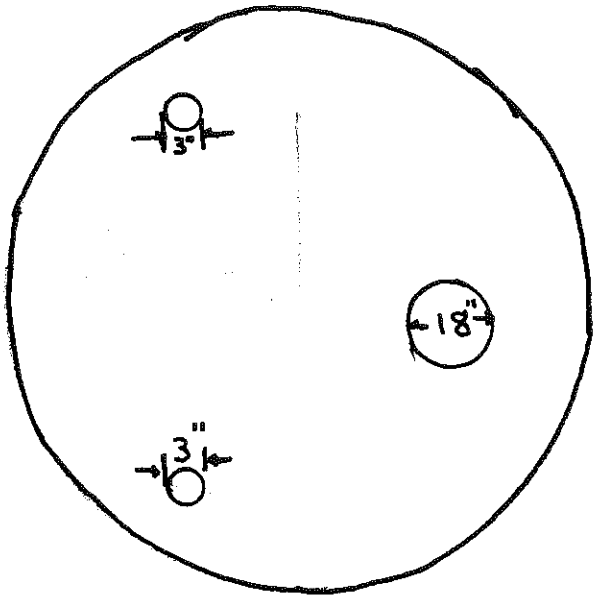


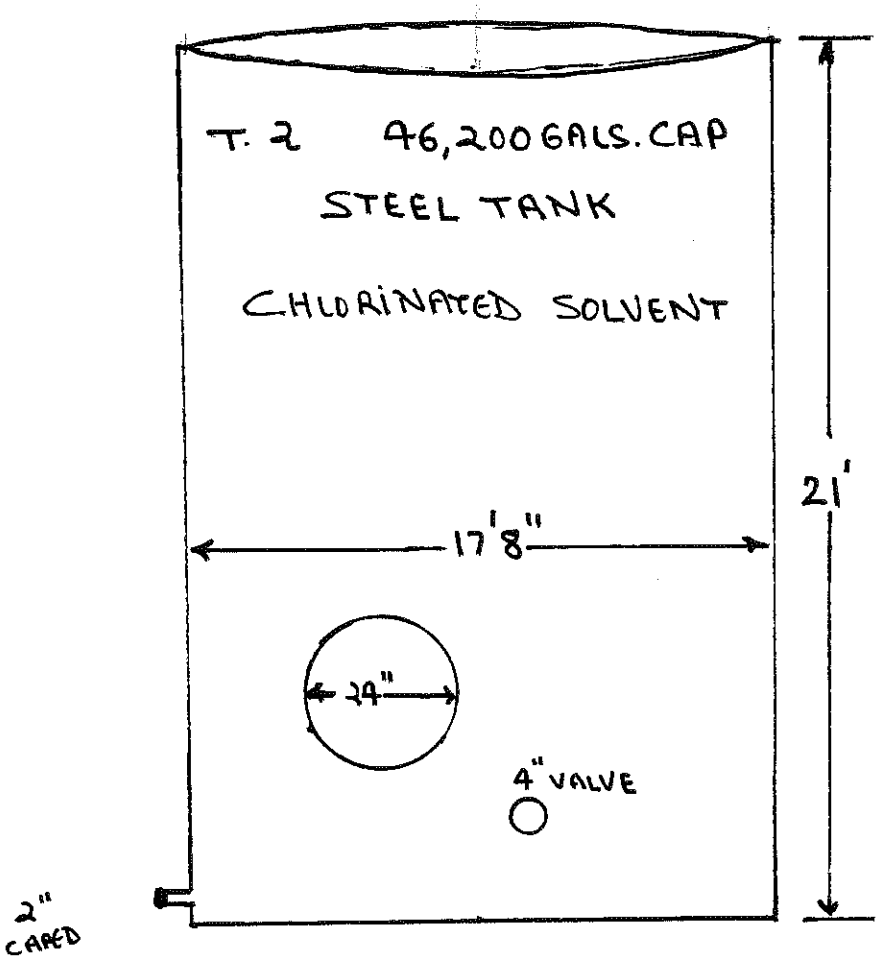
CDU-1


MANHOLE
3"
12"
2"
2"
2" CAPED
CDU-1 13,366 GALS. CAPACITY
STEEL TANK.
CHLORINATED SOLVENT
10' 6"
2"
2" CAPED
20'3"

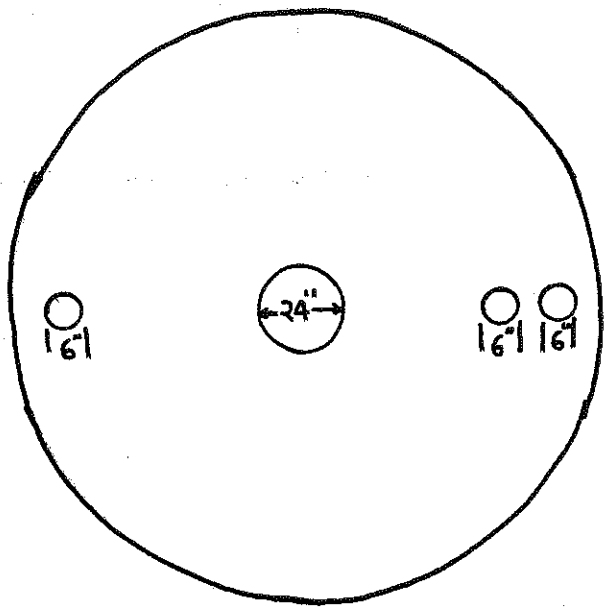
D - 1

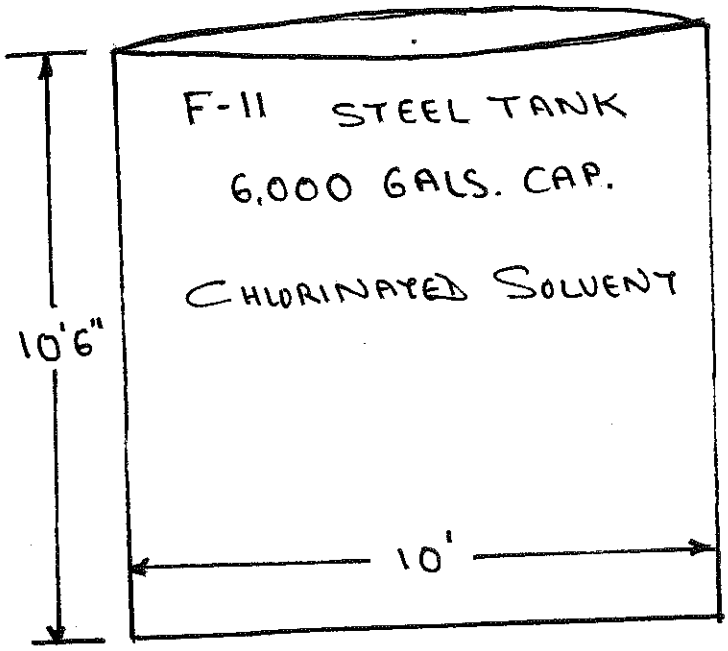

6"
6"
3"
18"
3"
3"
3"
D-1 12,000 GALS. CAP.
STEEL TANK
CHLORINATED SOLVENT
10' 6"
2"
18'

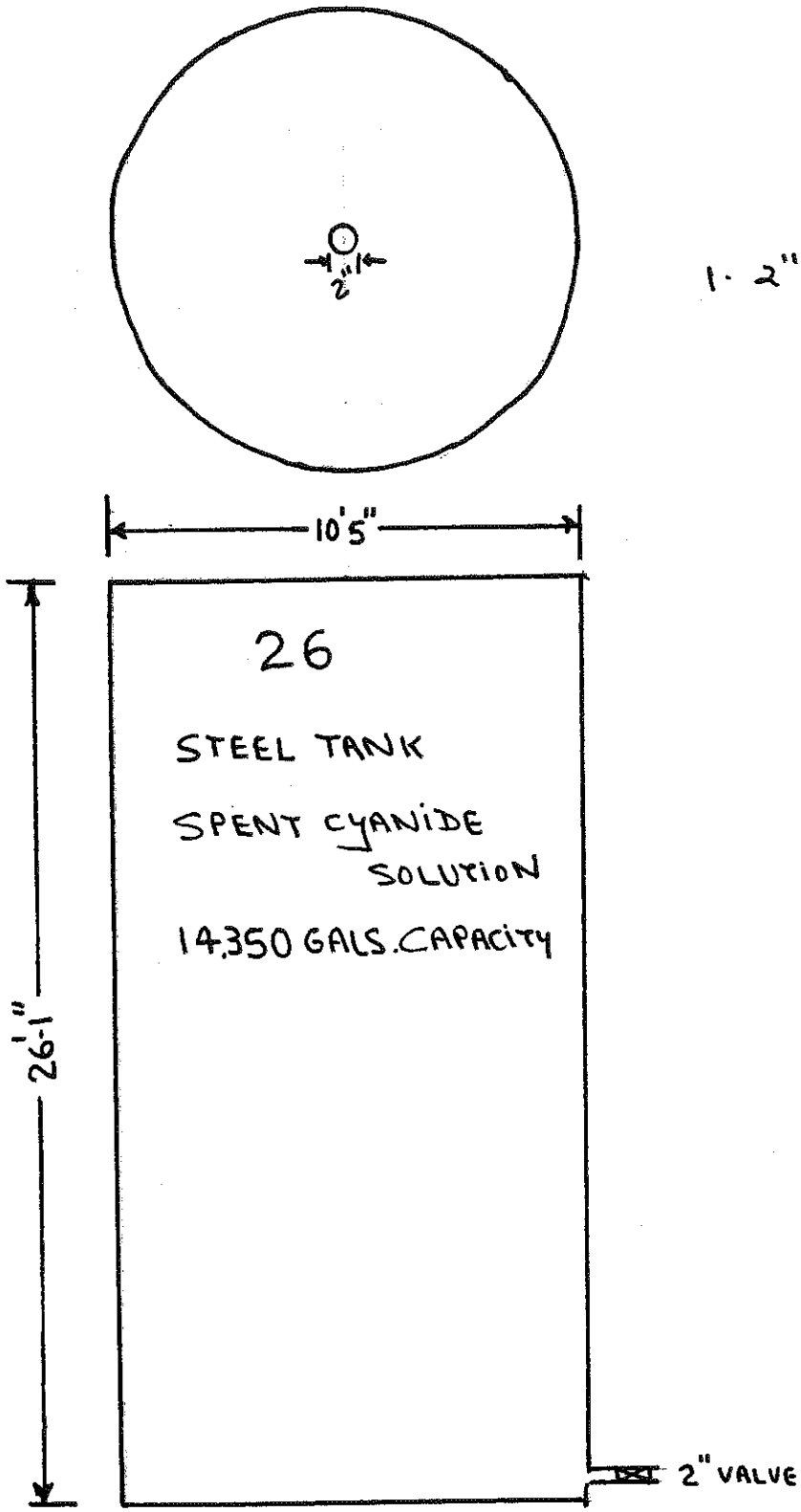

3"
18"
3"


T. 2 46,200 GALS. CAP
STEEL TANK
CHLORINATED SOLVENT
21'
17'8"
24"
4" VALVE
2"
CAPED

F-11


6"
24"
6"
6"


F-11 STEEL TANK
6,000 GALS. CAP.
CHLORINATED SOLVENT
10'6"
10'

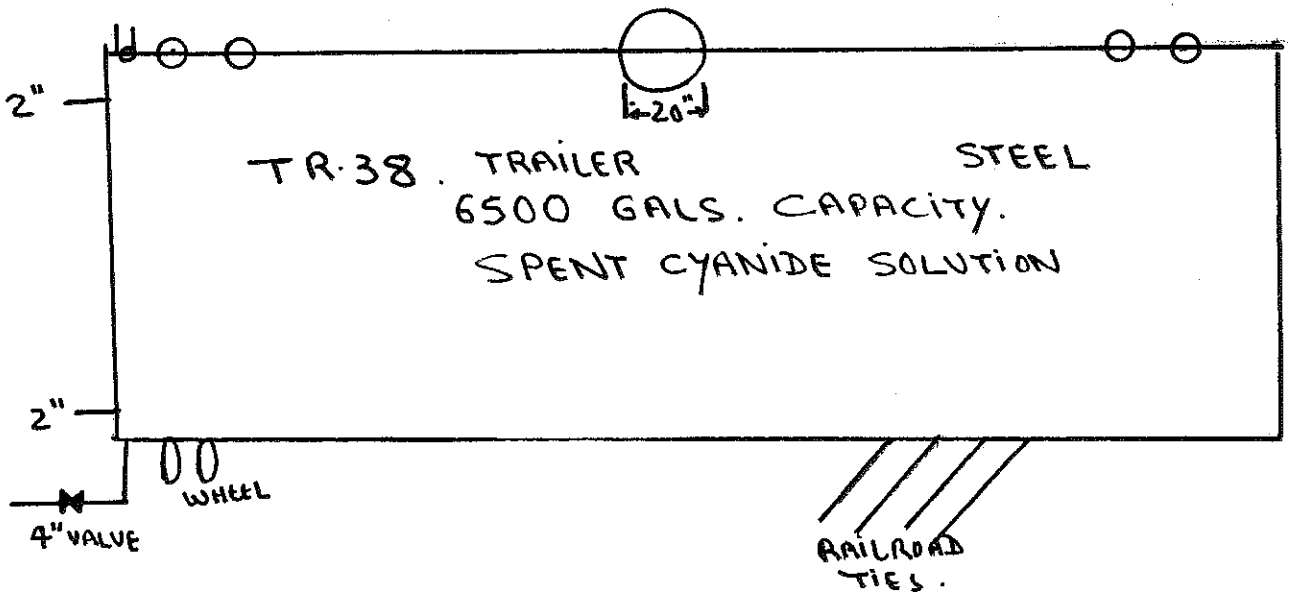



1 - 2" VALVE AT 4" HEIGHT FROM BOTTOM

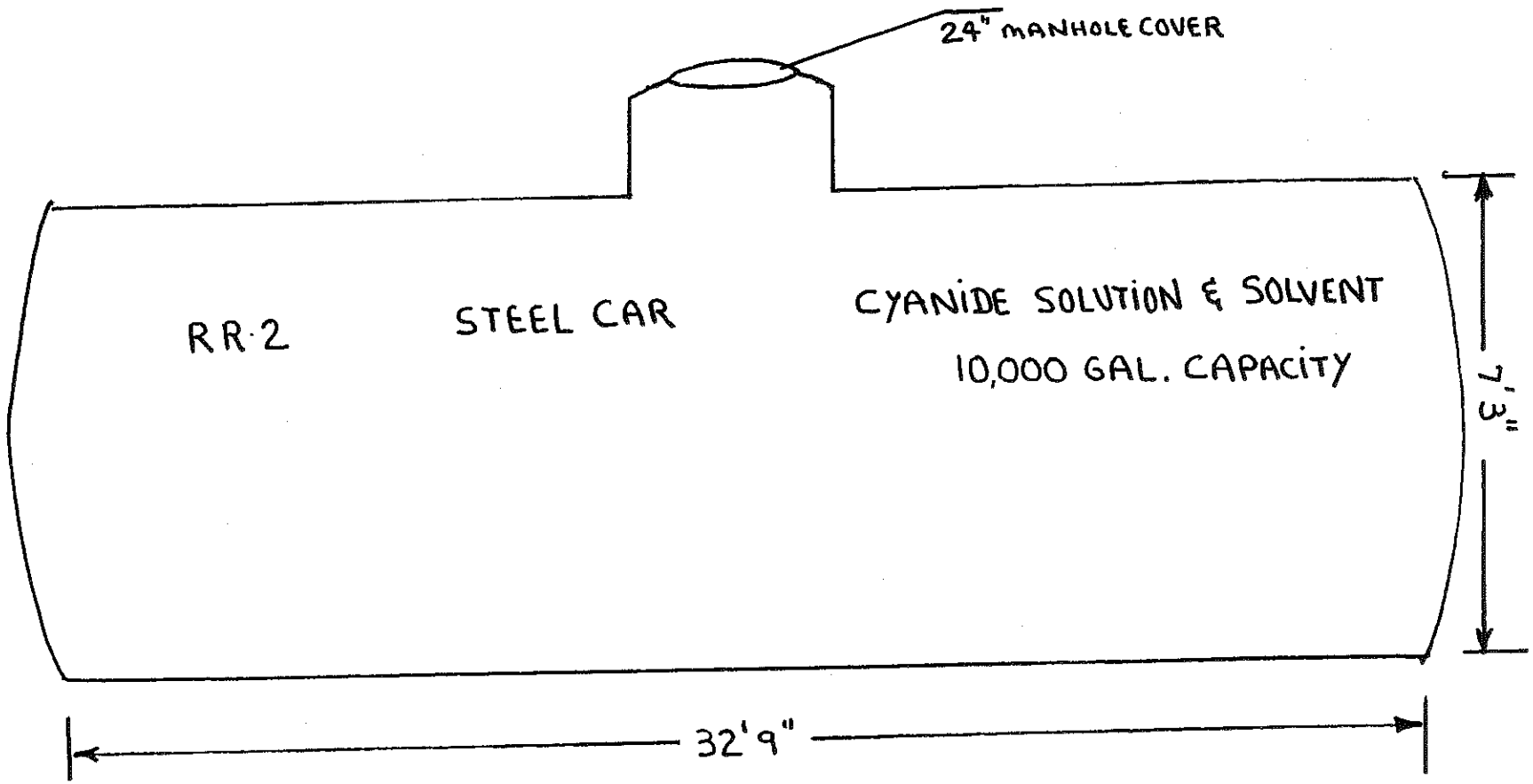
TR 38

D.44

1. 4" VALVE AT BOTTOM
2. 2" OPENINGS. CAPED SID
4. 3" OPENINGS ON TOP BLANKFLANGE
1. 20" MANHOLE
1. 1" OPENINGS.

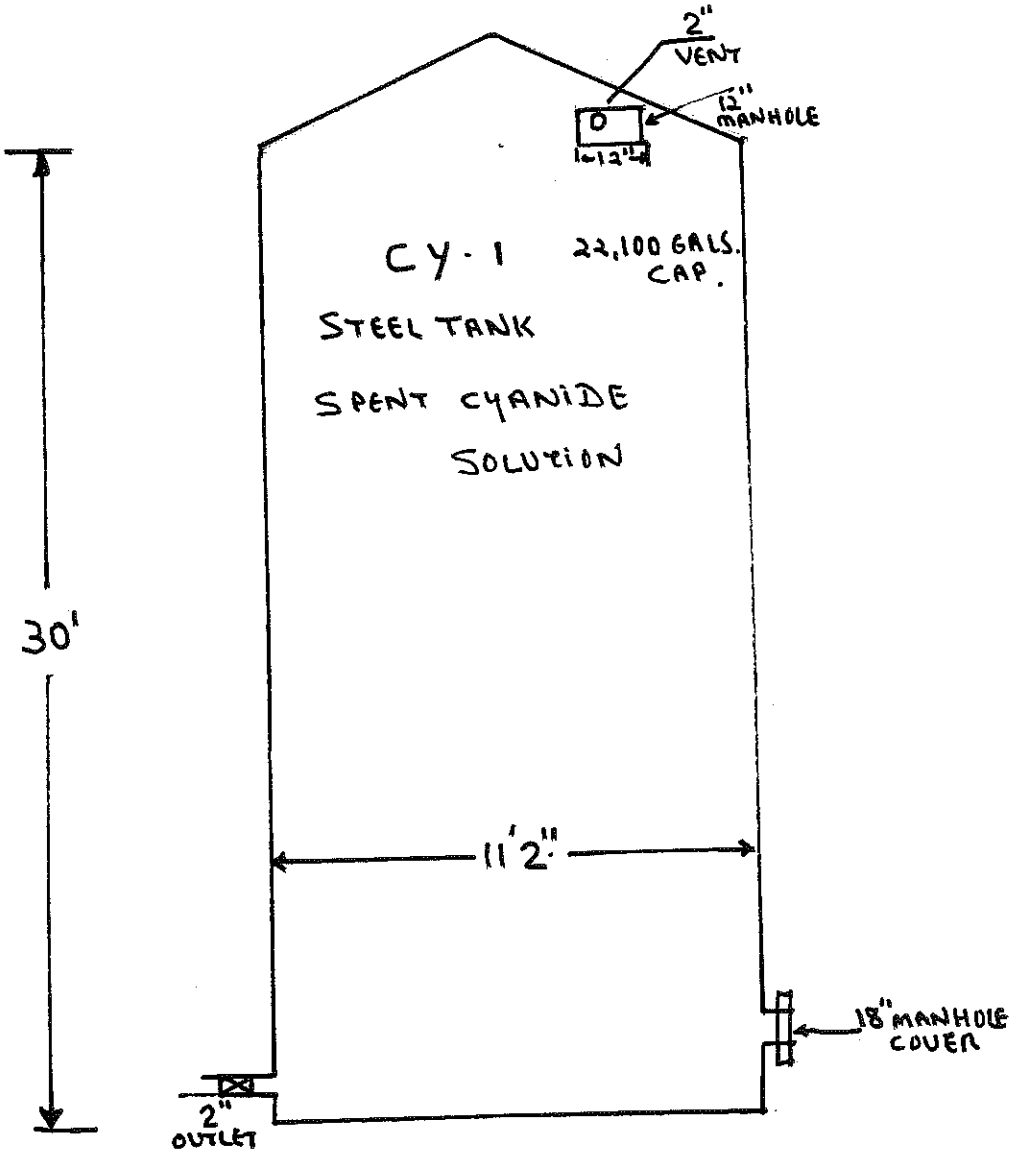


RR·2

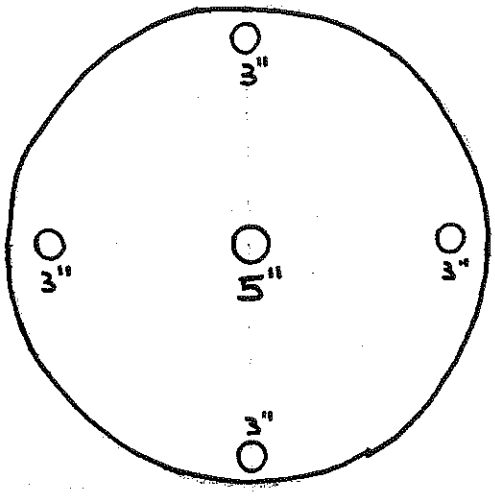

24" MANHOLE COVER
RR·2
STEEL CAR
CYANIDE SOLUTION & SOLVENT
10,000 GAL. CAPACITY
7'3"
32'9"

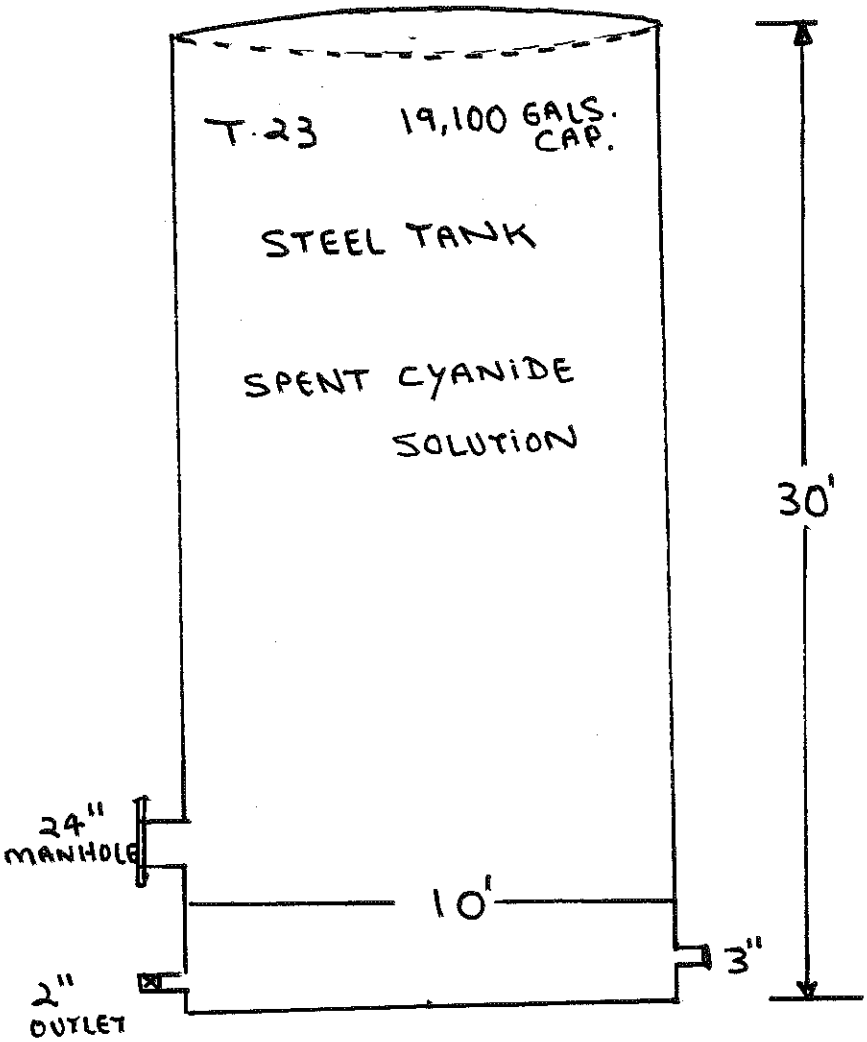
A45

CY·1

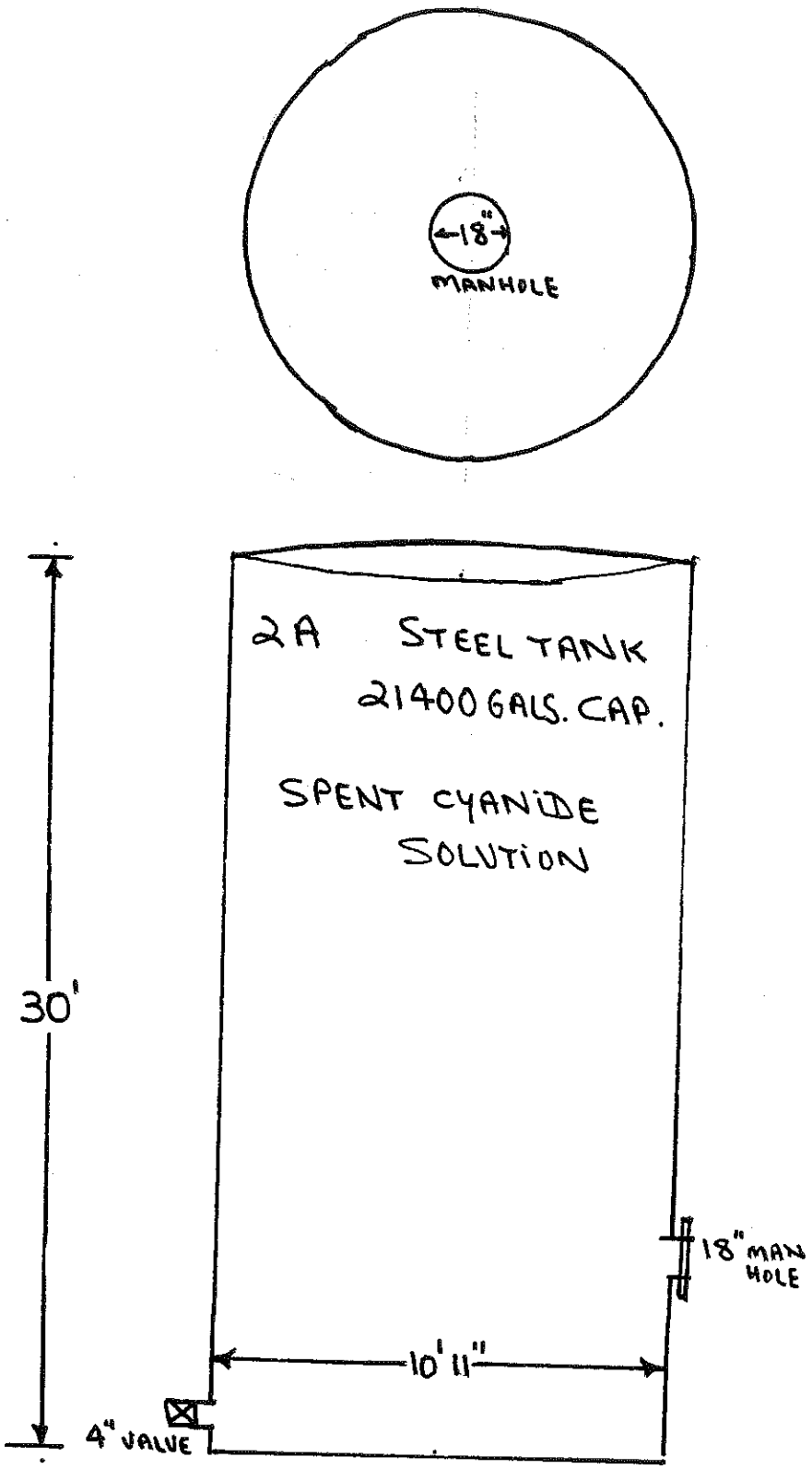

2"
VENT
12"
MANHOLE
12"
CY·1
22,100 GALS.
CAP.
STEEL TANK
SPENT CYANIDE
SOLUTION
30'
11'2"
18" MANHOLE
COVER
2"
OUTLET

T. 23

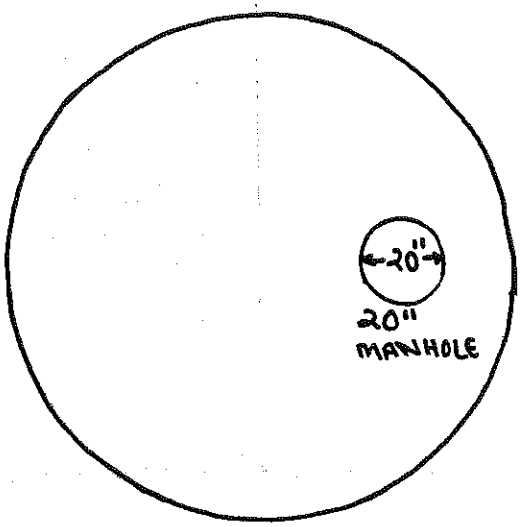

3"
3"
5"
3"
3"

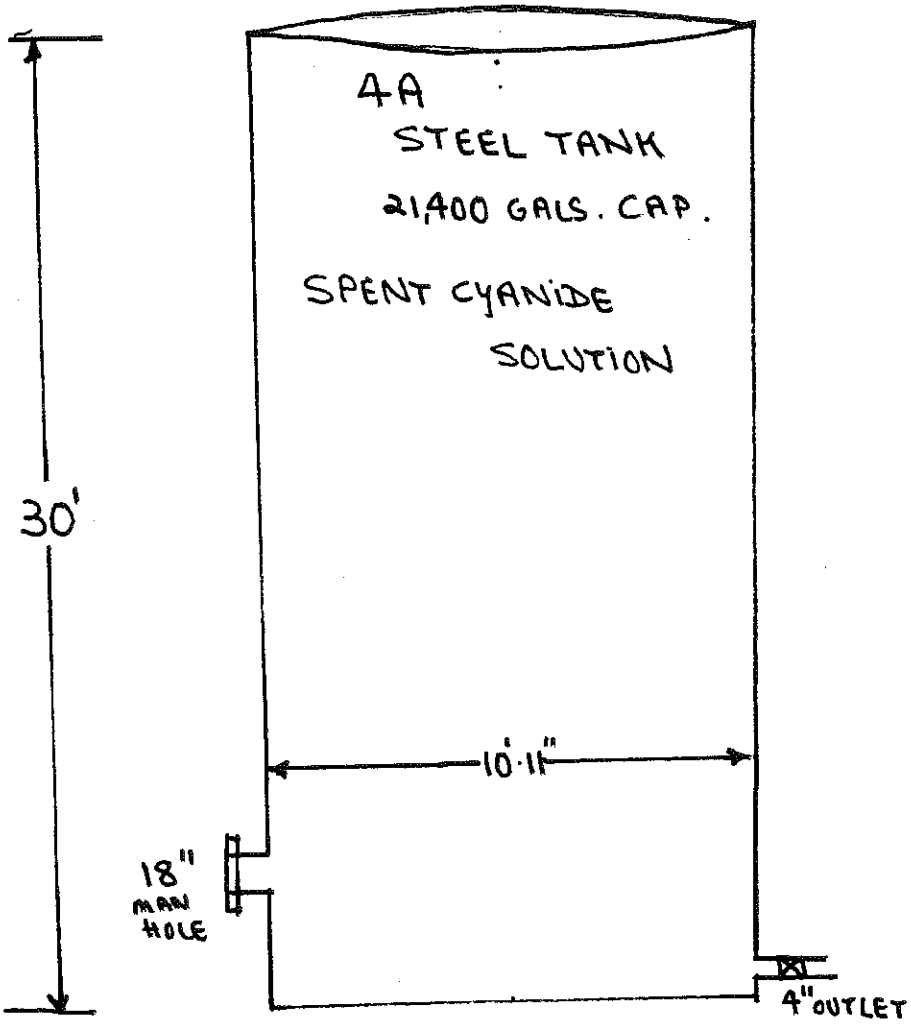

T.23
19,100 GALS. CAP.
STEEL TANK
SPENT CYANIDE SOLUTION
30'
24" MANHOLE
10'
3"
2" OUTLET

2A

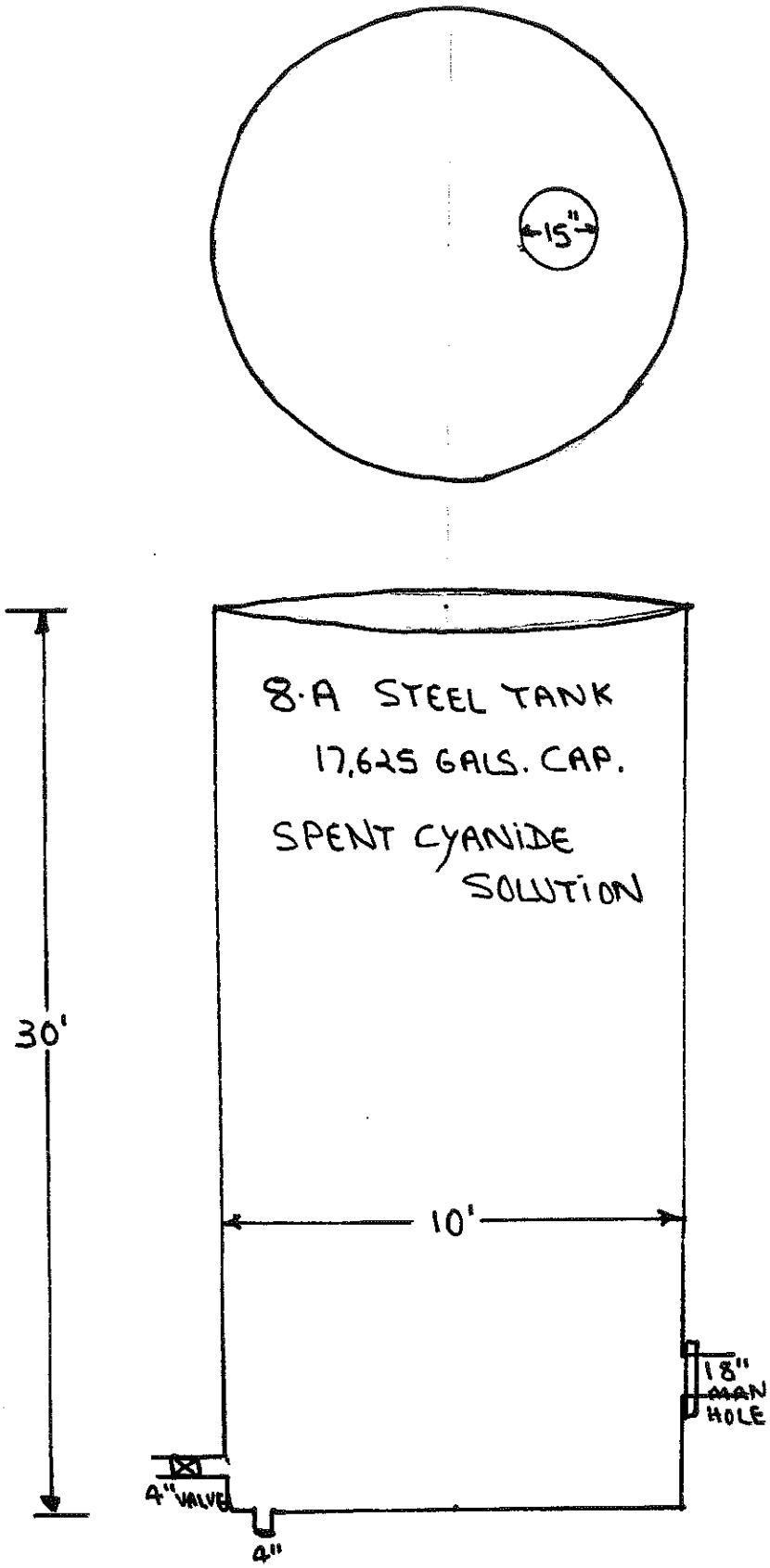

18"
MANHOLE
2A STEEL TANK
21400 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
18" MAN
HOLE
10' 11"
4" VALVE

4A

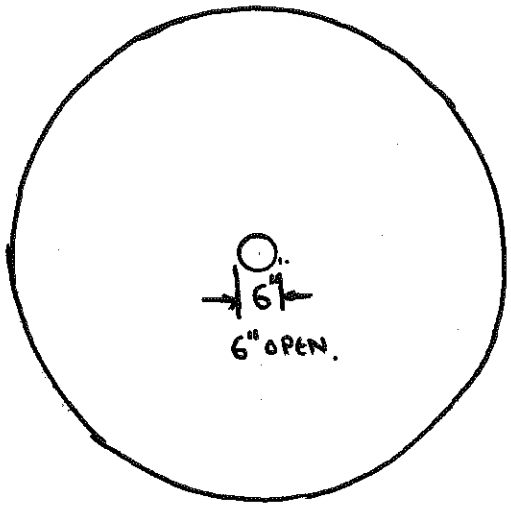

20"
20"
MANHOLE

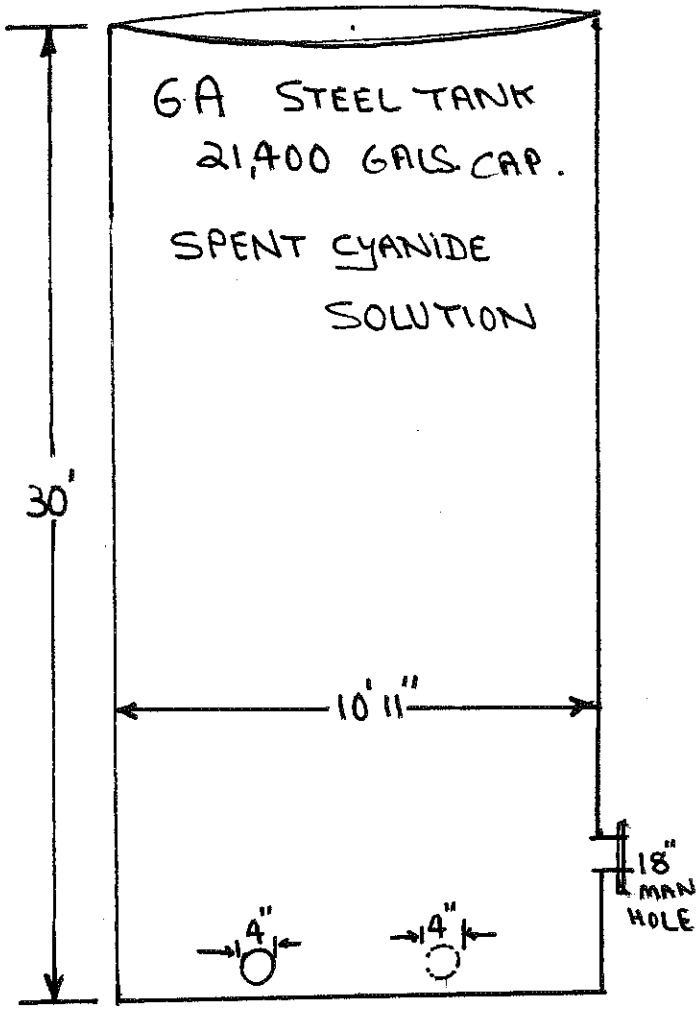

4A
STEEL TANK
21,400 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
10'-11"
18"
MAN
HOLE
4" OUTLET

8-A

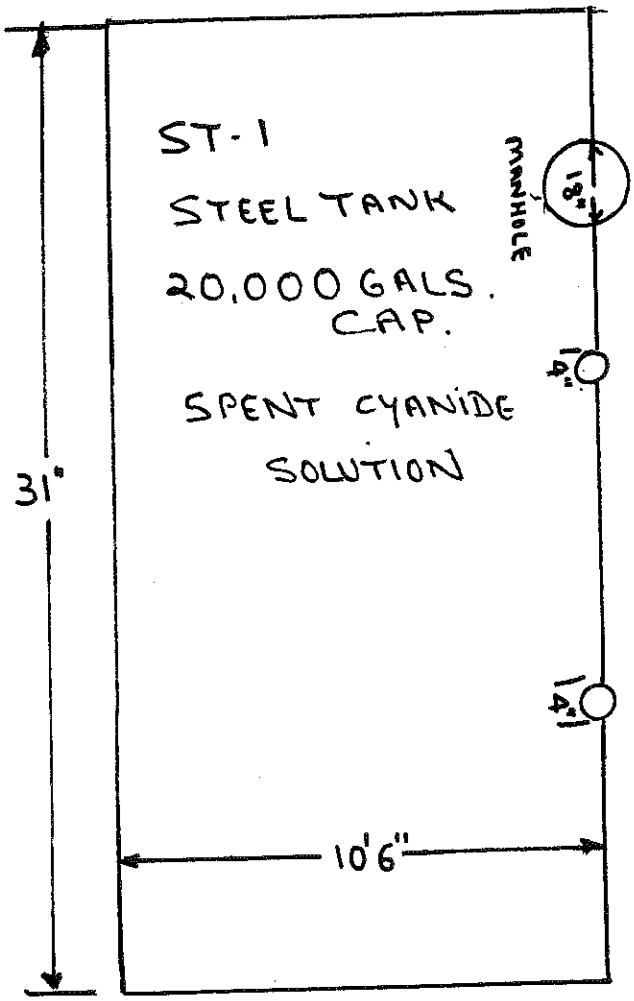

15"
8-A STEEL TANK
17,625 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
10'
18"
MAN
HOLE
4" VALVE
4"

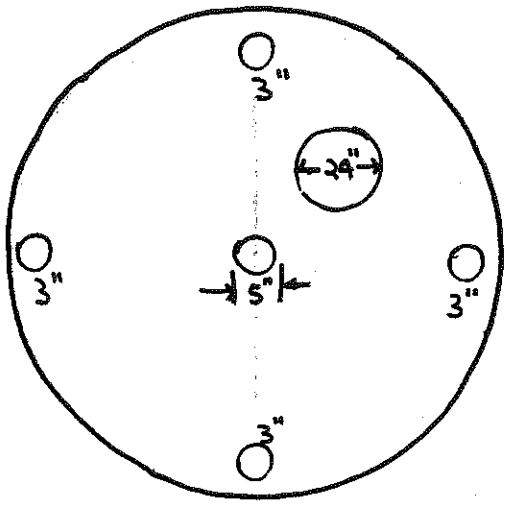
6A

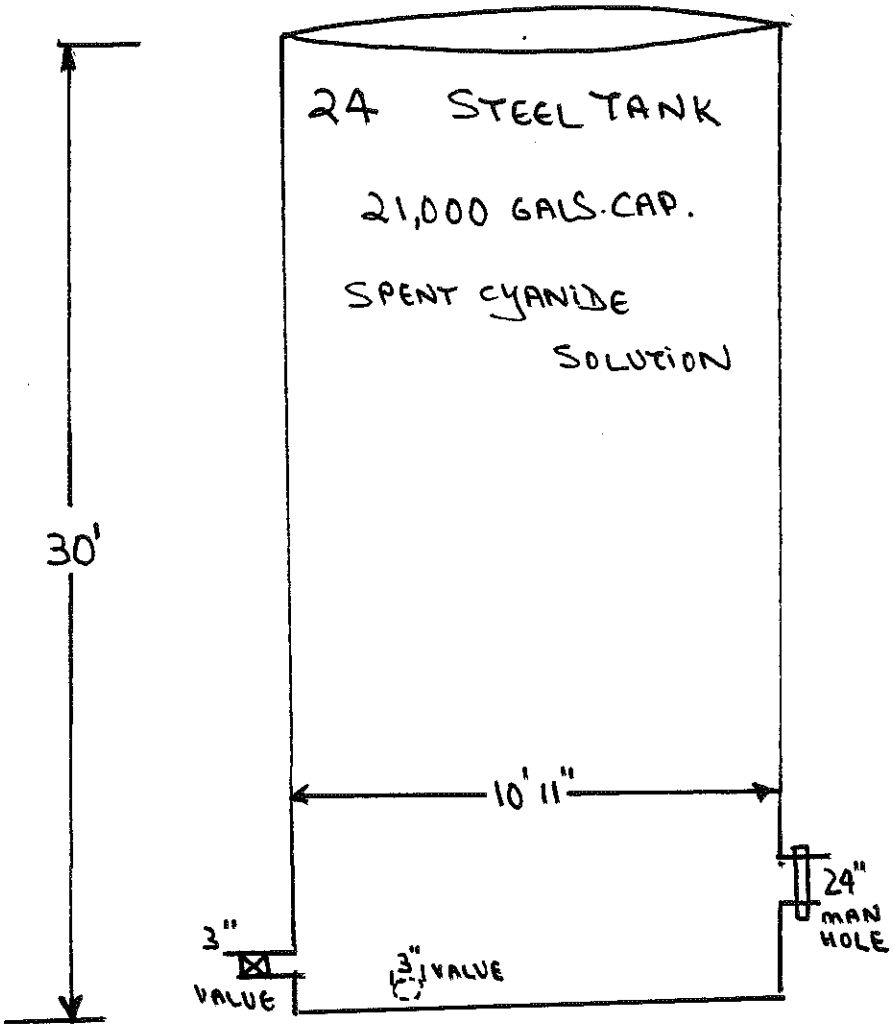

6"
6" OPEN.


6A STEEL TANK
21,400 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
10' 11"
18"
MAN
HOLE
4"
4"

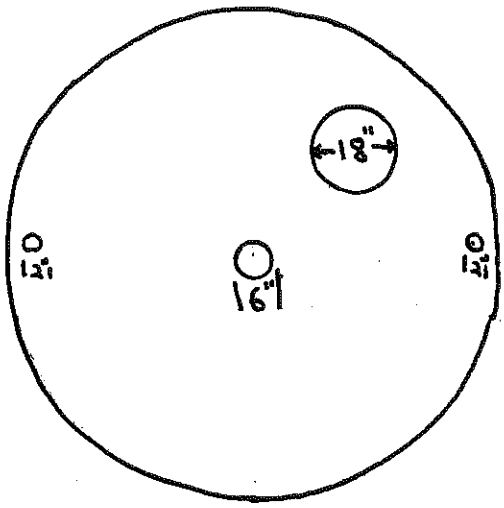
# ST-1

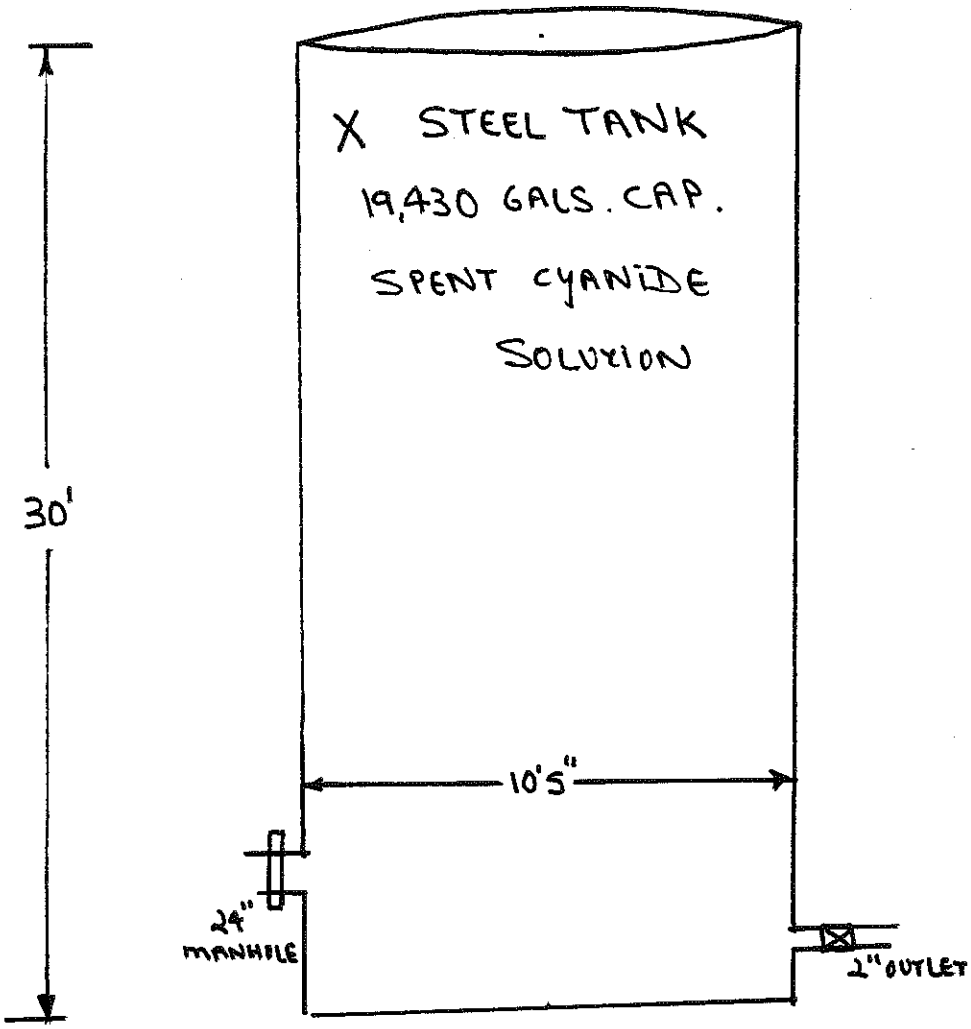

ST-1
STEEL TANK
20,000 GALS.
CAP.
SPENT CYANIDE
SOLUTION
MANHOLE
18"
4"
4"
31"
10'6"

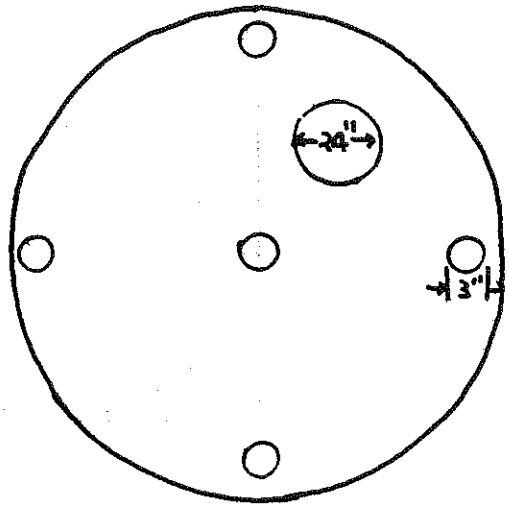

3"
24"
3"
5"
3"
3"


24 STEEL TANK
21,000 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
10' 11"
24"
MAN
HOLE
3"
VALVE
3" VALVE

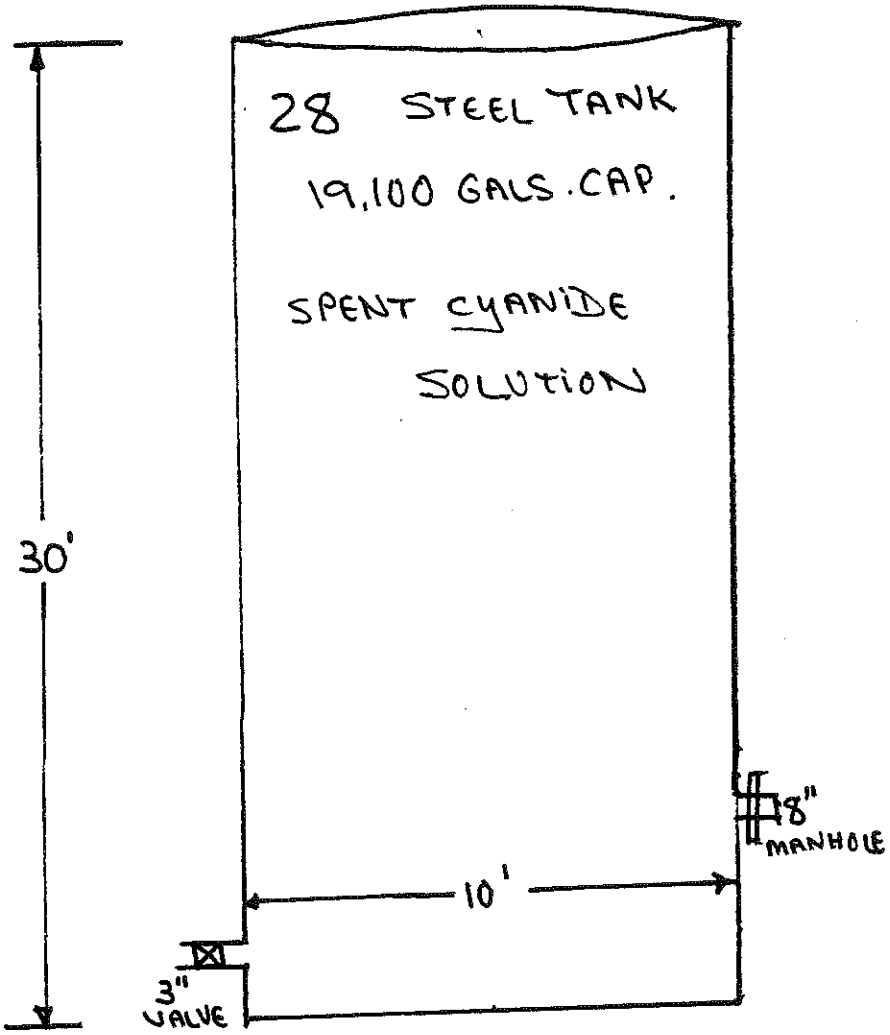
X


18"
12"
16"
12"

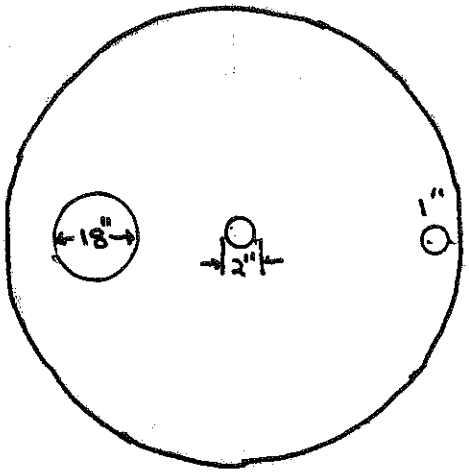

X STEEL TANK
19,430 GALS. CAP.
SPENT CYANIDE
SOLUTION
30'
10'5"
24"
MANHOLE
2" OUTLET

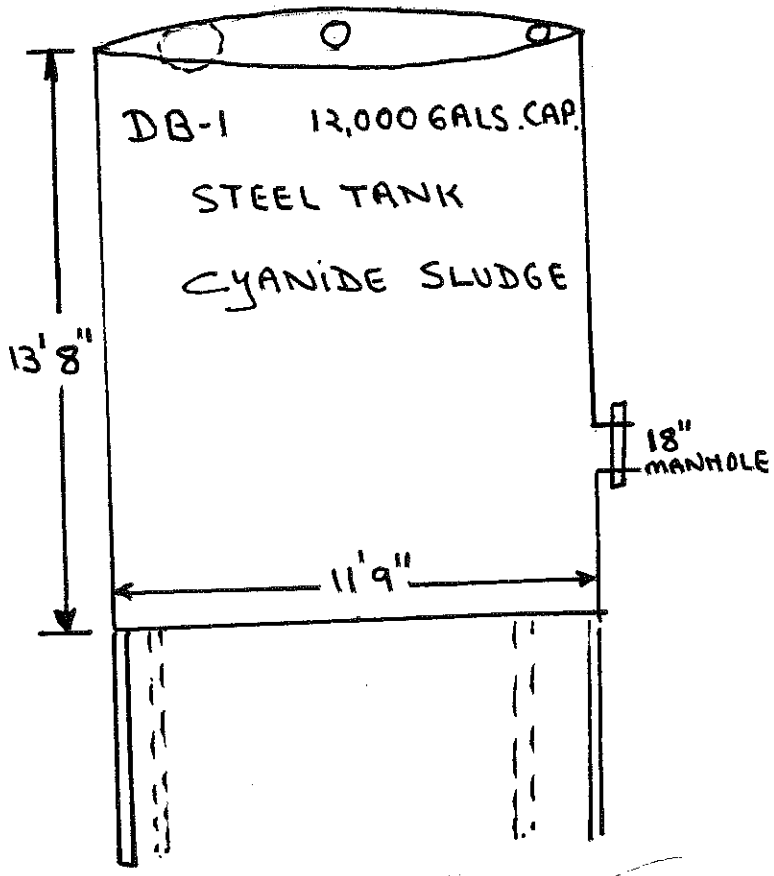



4 · 3" OPENING
1 · 4" OPENING CENER



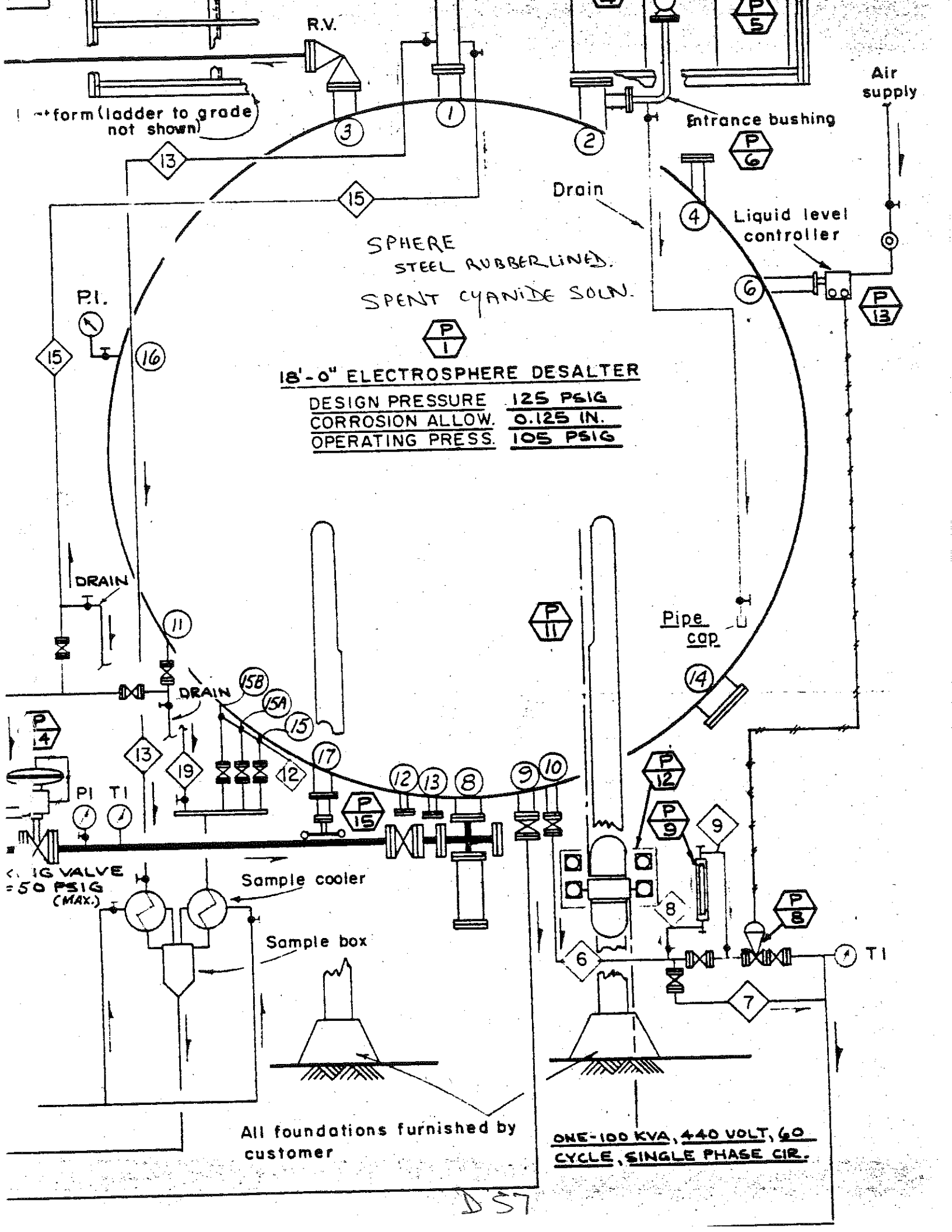
DB-1



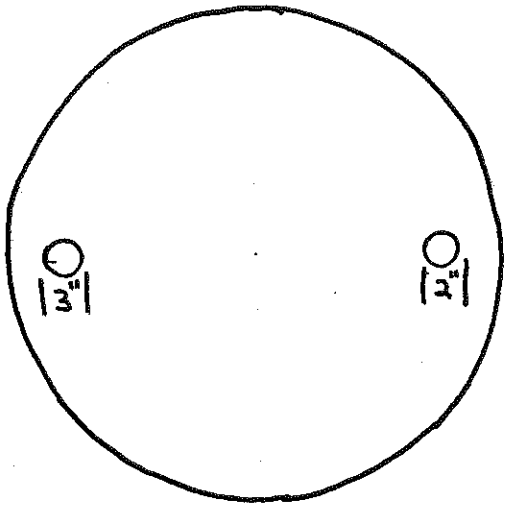

CONCRETE PAD

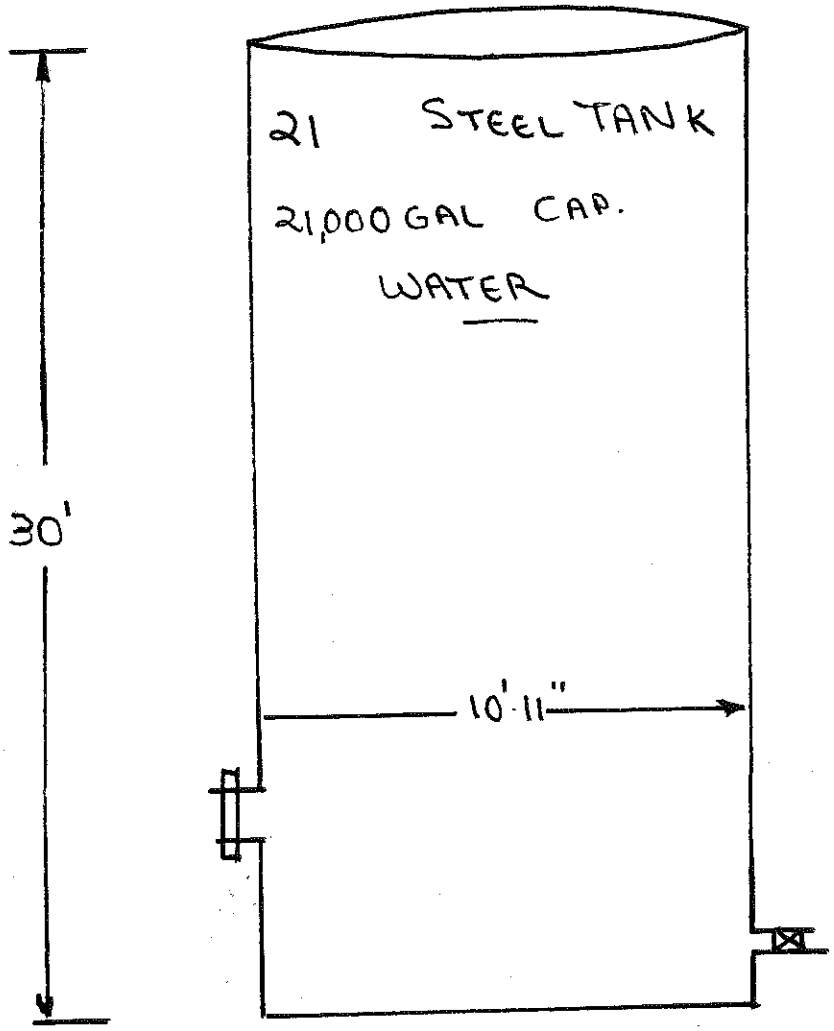
D 56


R.V.
form (ladder to grade not shown)
Air supply
Entrance bushing
Drain
Liquid level controller
SPHERE
STEEL RUBBERLINED.
SPENT CYANIDE SOLN.
P.I.
18'-0" ELECTROSPHERE DESALTER
DESIGN PRESSURE 125 PSIG
CORROSION ALLOW. 0.125 IN.
OPERATING PRESS. 105 PSIG
DRAIN
DRAIN
Pipe cap
PI
TI
Sample cooler
Sample box
TI
All foundations furnished by customer
ONE-100 KVA, 440 VOLT, 60 CYCLE, SINGLE PHASE CIR.

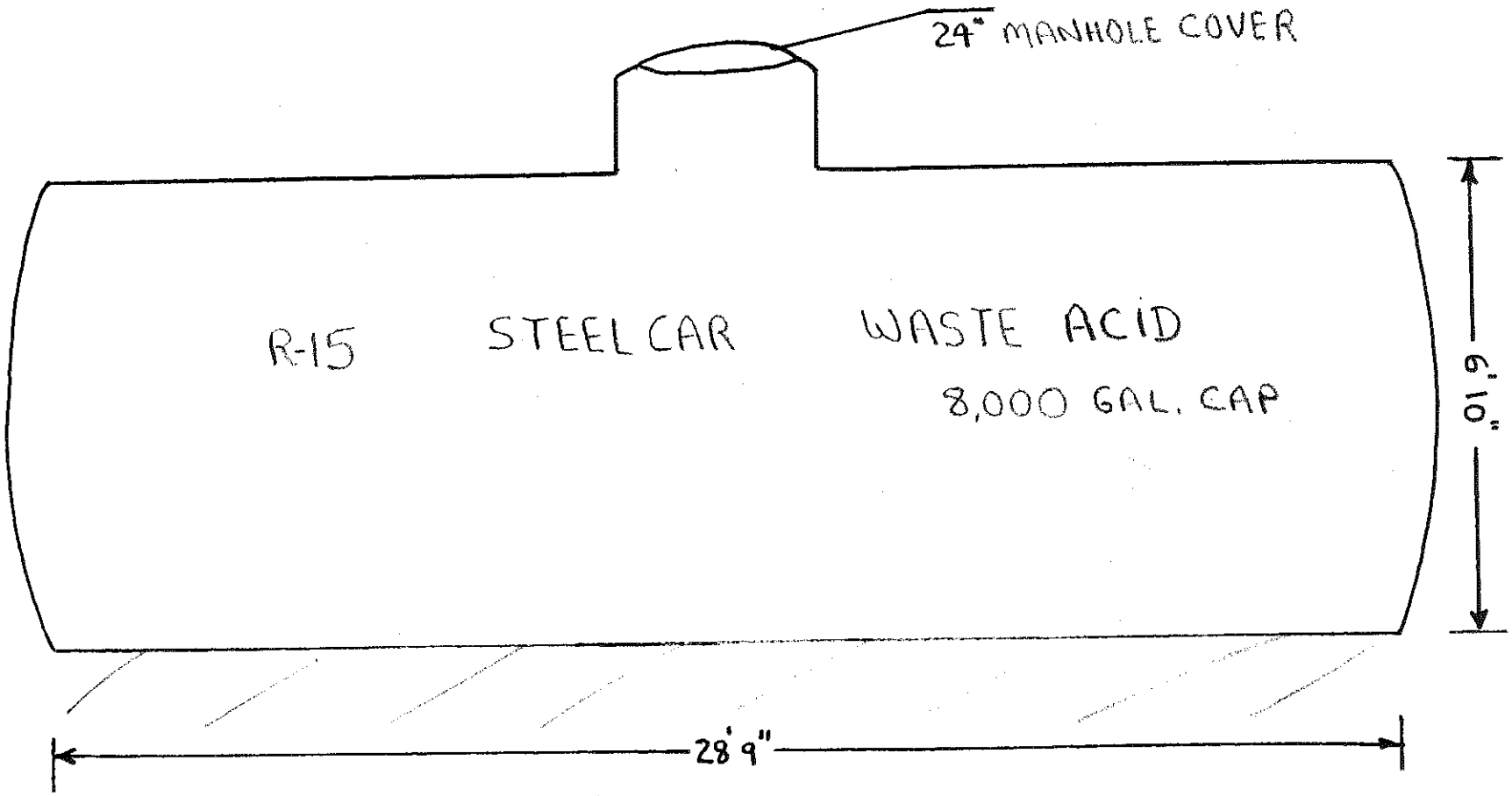
D57

21



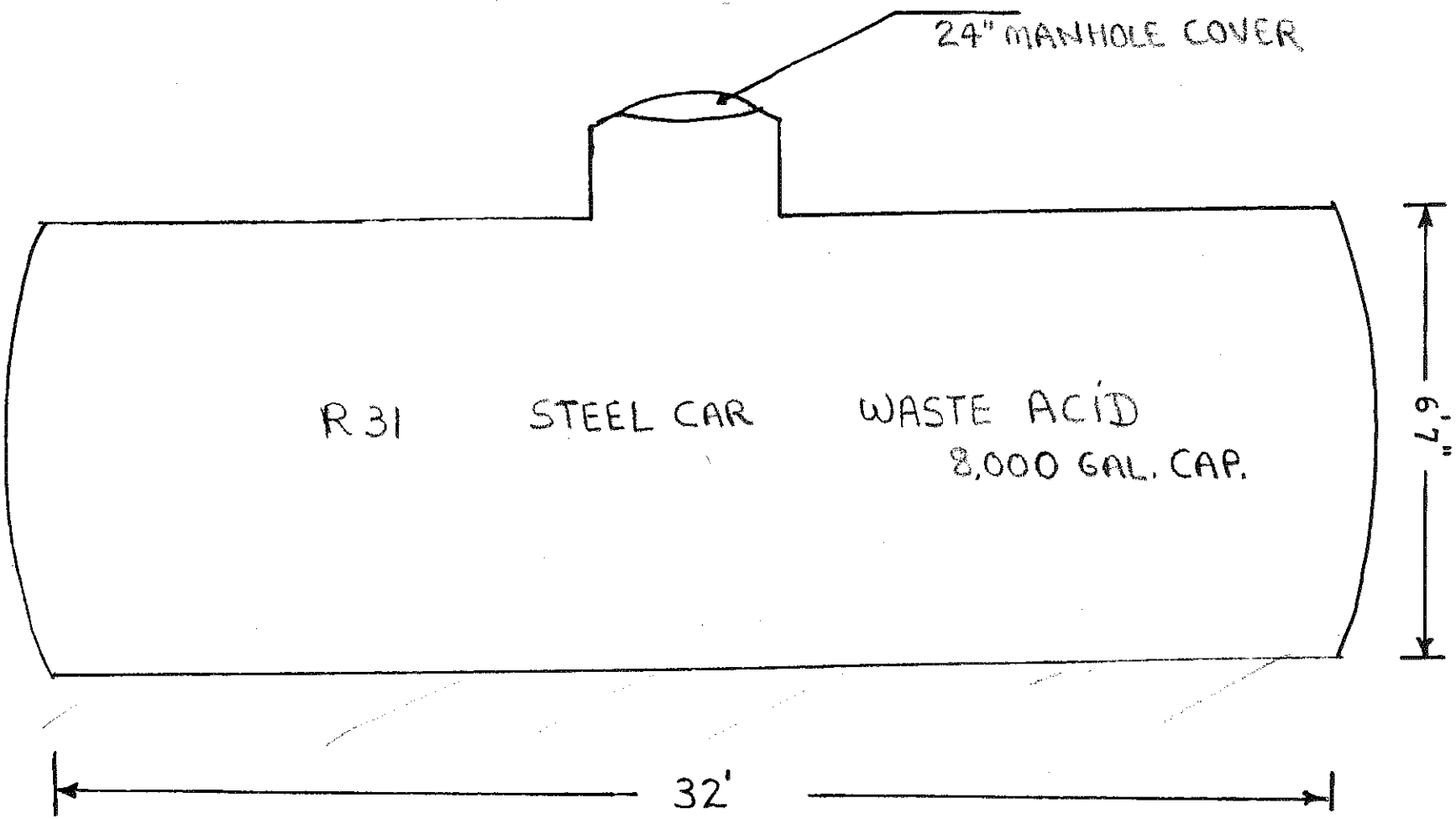



R 15


24" MANHOLE COVER
R-15
STEEL CAR
WASTE ACID
8,000 GAL. CAP
6' 10"
28' 9"

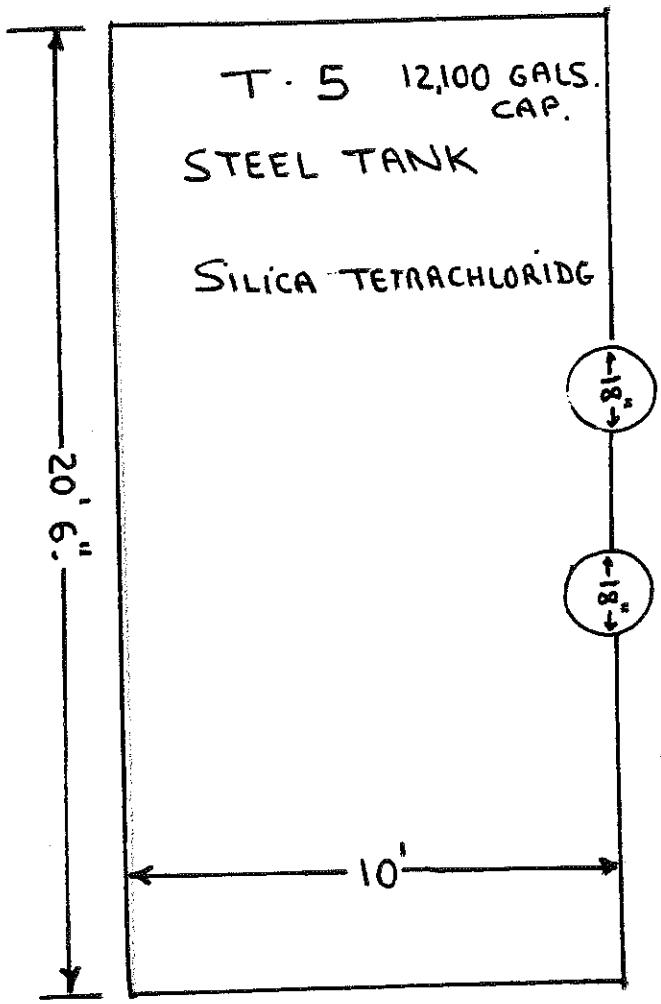
15 A

R·31

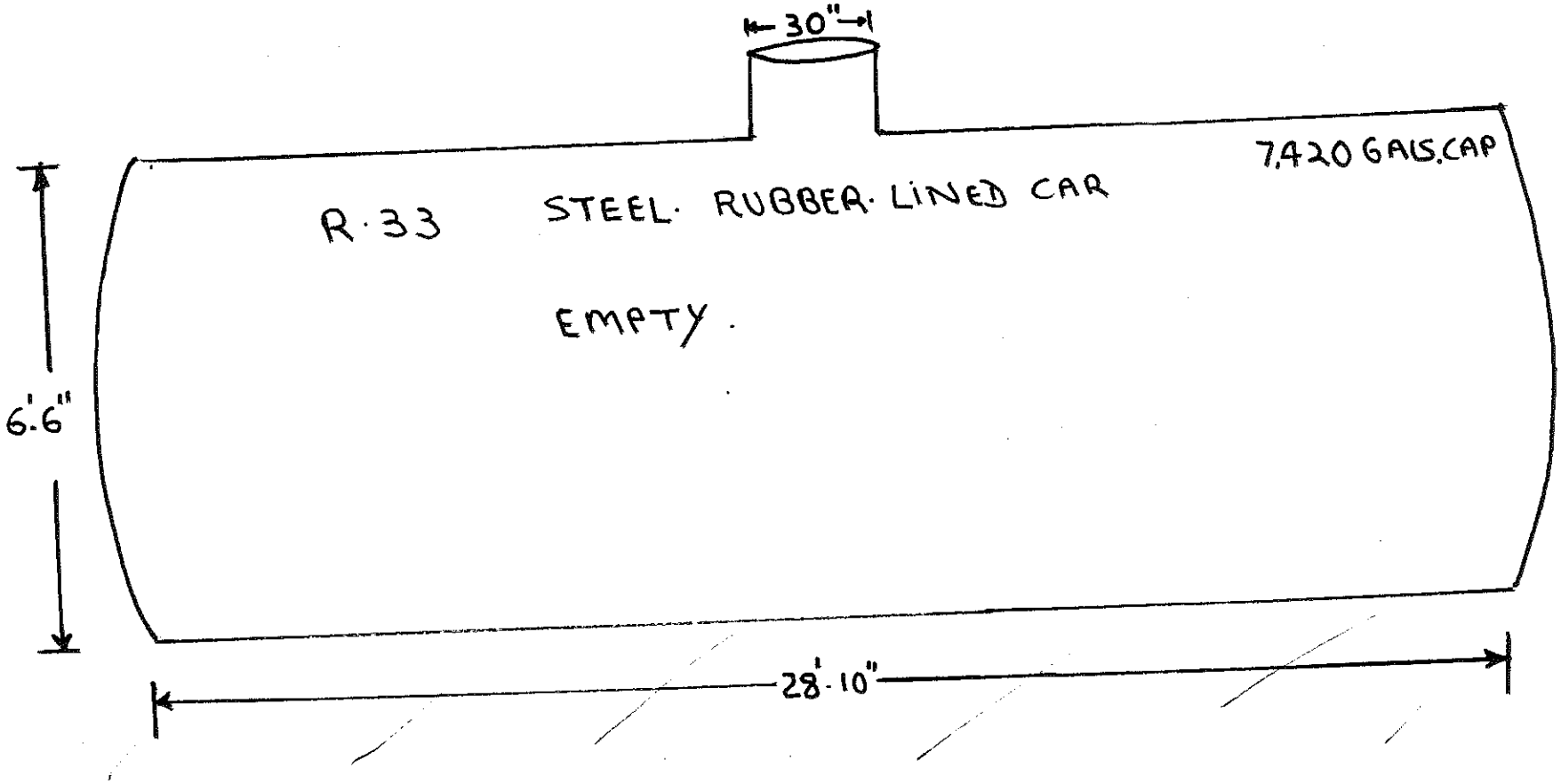



D·66

T · 5


T · 5 12,100 GALS. CAP.
STEEL TANK
SILICA TETRACHLORIDE
18"
18"
20' 6"
10'

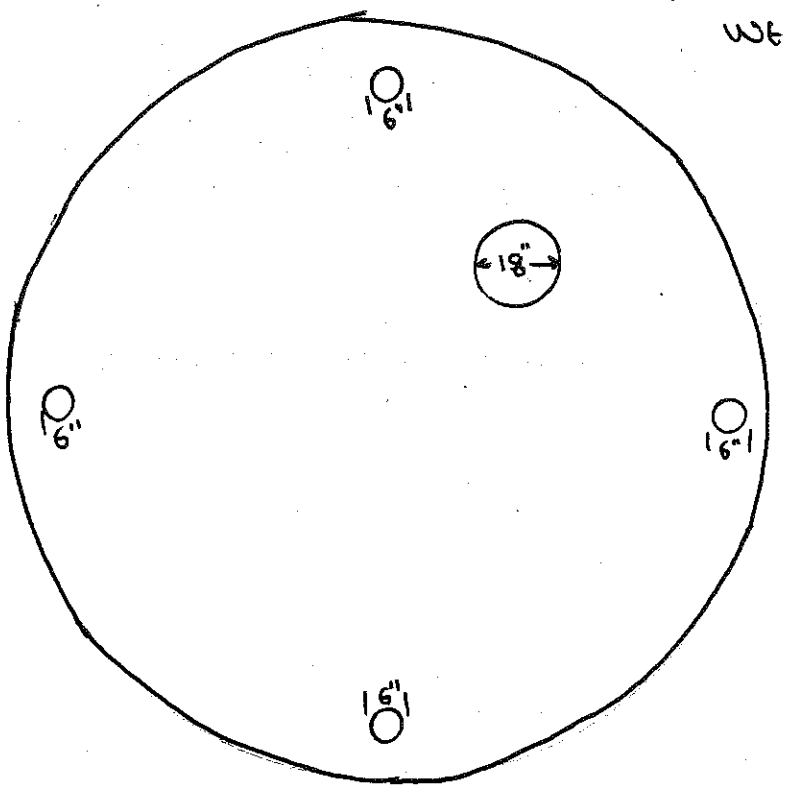
R. 33

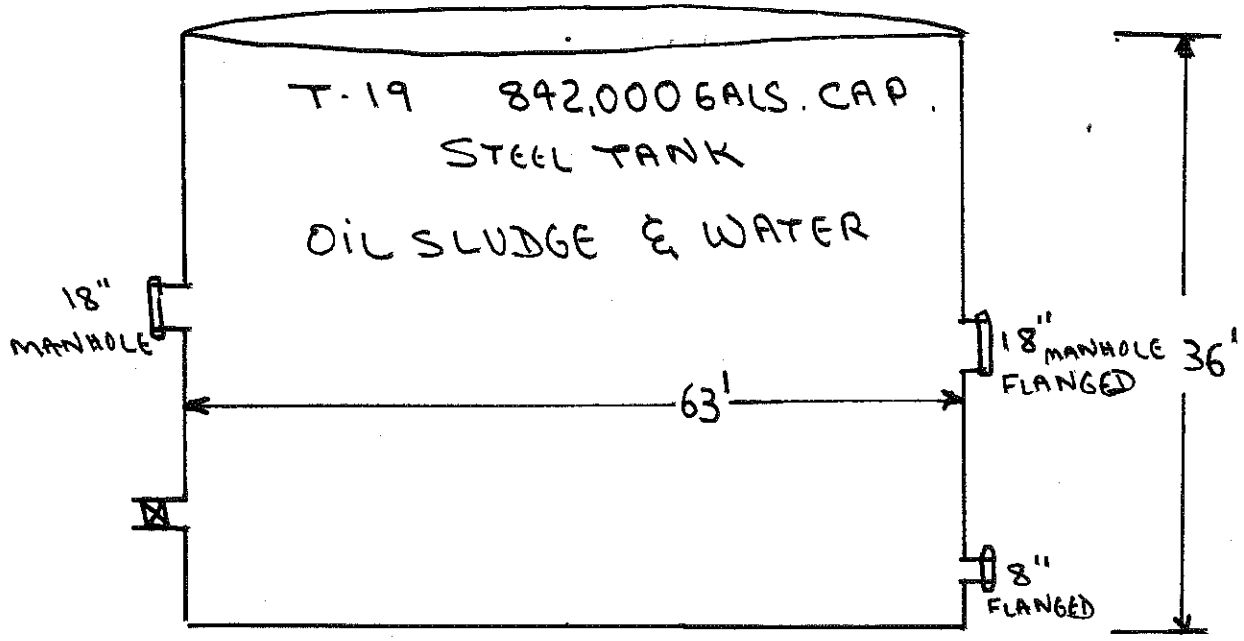



D. 62

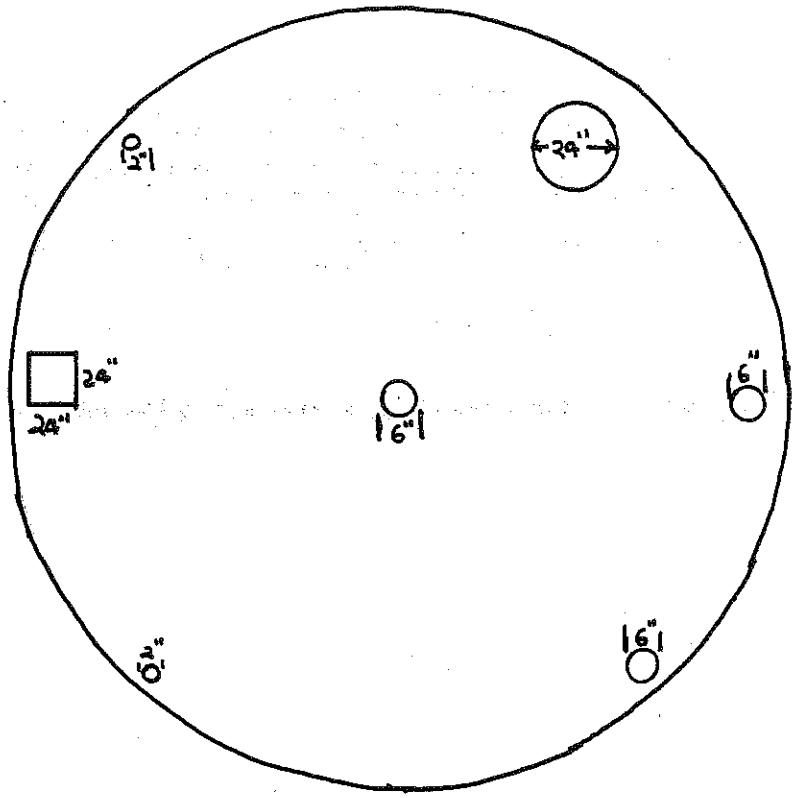
TANK 19

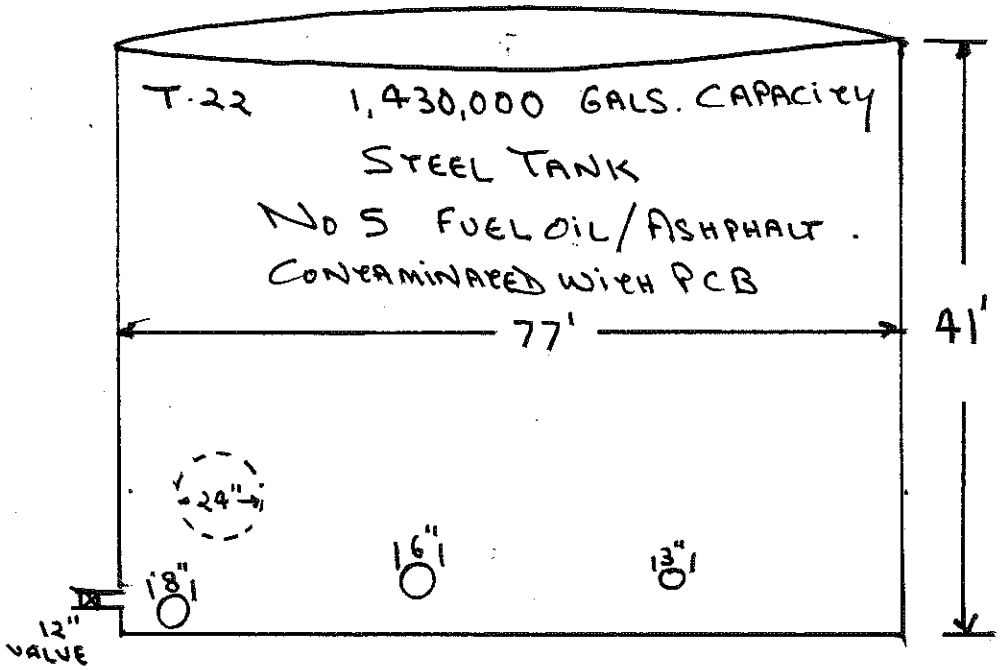
TOP IS DECAYED
WHEN THE TANK IS EMPTY
WE WILL SCRAP IT OR
REPAIR IT



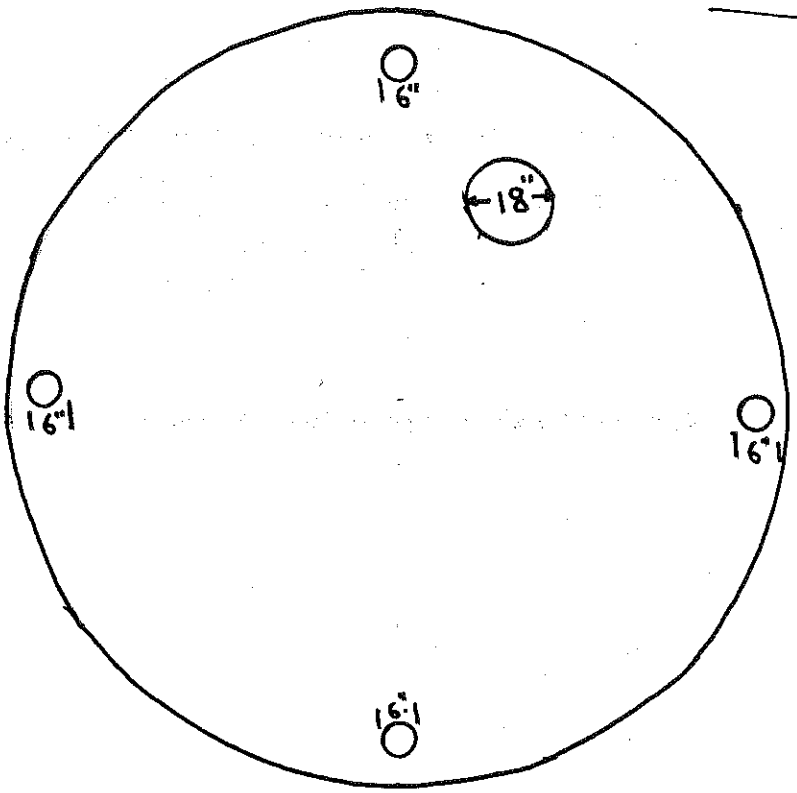
TANK. 22

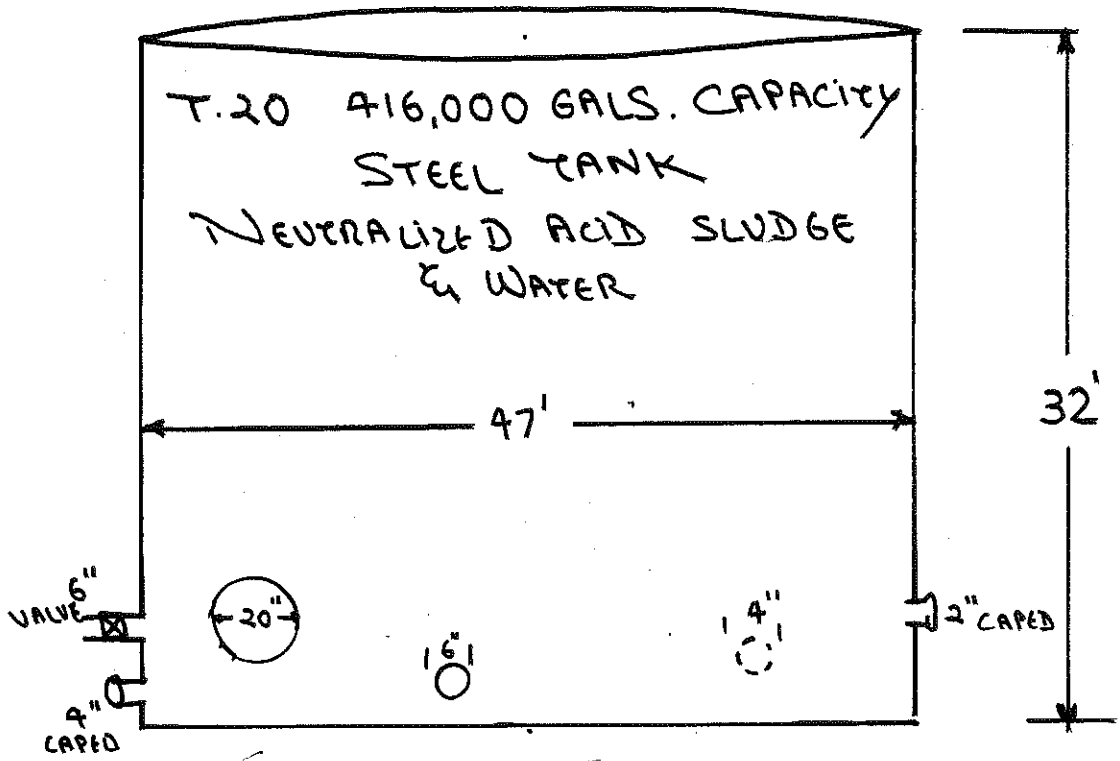

24"
24"
24"
24"
16"
16"
16"
24"


T.22 1,430,000 GALS. CAPACITY
STEEL TANK
NO 5 FUEL OIL/ASHPHALT.
CONTAMINATED WITH PCB
77'
41'
24"
16"
13"
18"
12"
VALVE

T.20

TOP IS DECAYED WHEN THE TANK IS EMPTY WE WILL SCRAP IT OR REPAIR IT.




DIRT

## SECTION D

Facility has waste pile, which is pie-shaped. This waste pile is on the property from company's prior year's activity. As far as we know, we did not put any hazardous waste in this waste pile. This waste pile mainly contains fuel oil. The analysis is in general waste analysis section.

Presently, this waste pile is covered with dirt and sand. Waste pile does not contain any free liquid and is most of the time dry. Physical contact with the material from the waste pile so far did not result in any injury and would be unlikely to result in any injury in the future.

Our plan is to dig out the waste pile about 1½'-2' deep, remove all the dirt, analyze the material; if it's found hazardous, dispose in approved landfill; otherwise, use the dirt back to fill the pile. We will put 6" gravel and fill material on top of it to prevent any material coming out from the top due to weather changes. We will also secure that place with a fence around it.

If it is necessary, we will put a well for ground water sampling. We will inspect the waste pile from the outside to check whether any free liquid is on top. Condition of the fence: sign on the fence every week.

Facility has one surface impoundment which is about 2'x320'x 294'. We have also one oil separator which is about 12'x50'x20'. Oil separator is concrete sump and has fence around it. The analysis of surface impoundment and oil separator are in general waste analysis section. Facility has 2 sumps, one is concrete and the other one is rubber-lined. Rubber-lined sump is to collect the spills and leaks from the processing area and this sump, when it is full, we pump back the material in process tanks. The concrete sump, which is about 6½'x26'x15', which collects the water mainly from the rain and water used on pump seal in processing area. When this sump is full, we neutralize with lime and pump this neutralized water into surface impoundment for the evaporation purpose as facility does not have any sewers.

We do inspect weekly the sump surface impoundments and oil separator.

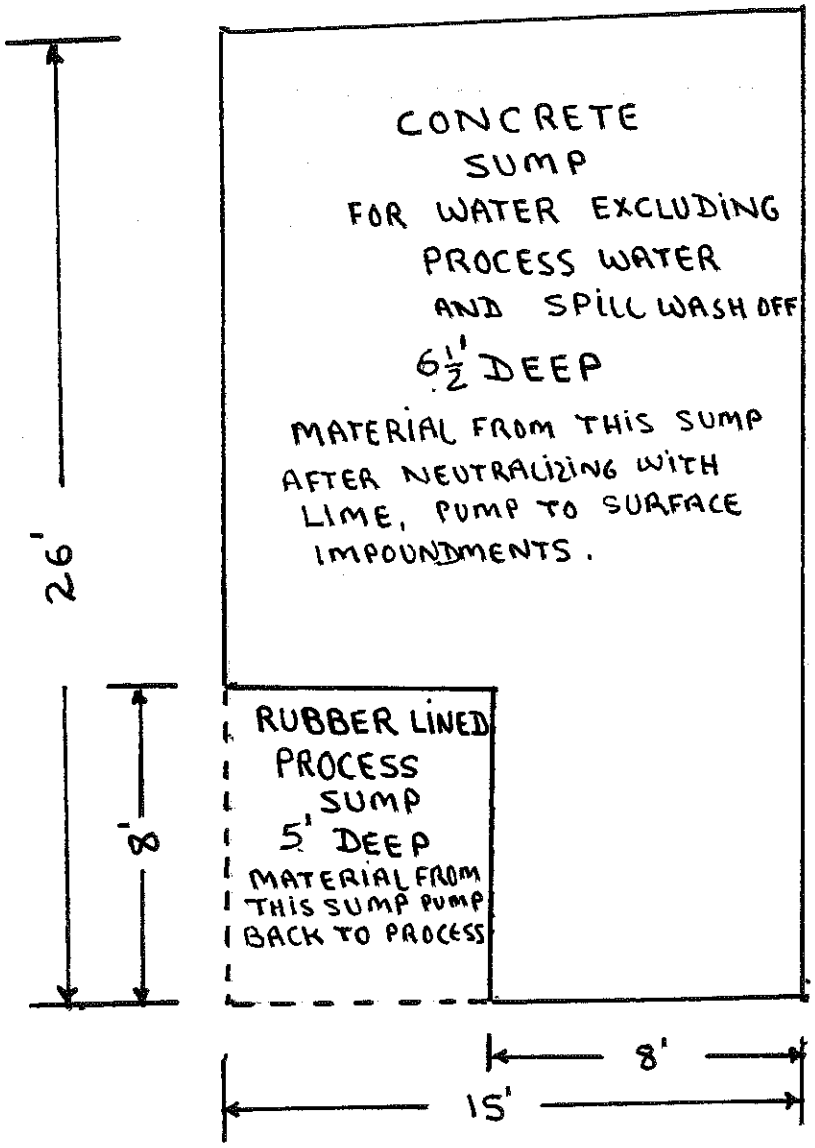
Our plan is to first empty the oil separator which has water and sludge. Sludge, we will dispose it by sending it to the approved landfill. Clean the oil separator. Next, take the sample of the surface impoundment. Pump the clear liquid which will be water, into oil separator by going through the filter. Dry out the surface impoundments solid and send it to the approved landfill site. Then fill this surface impoundment with gravel and sand.

Then 6" of fill pad on top of it and eliminate this surface impoundment.

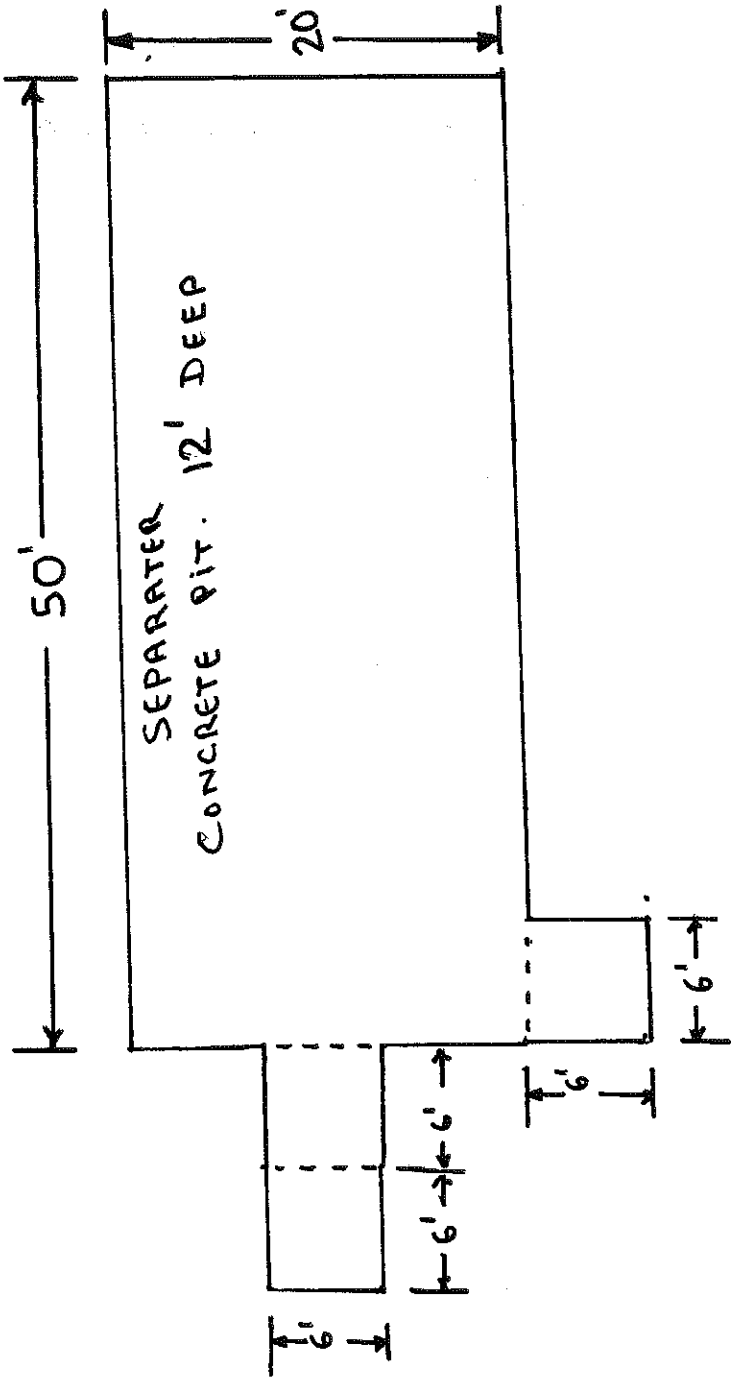
Material from the concrete sump near the processing area after neutralizing, pump into oil separator which will be our new surface impoundment after filtering. This water now in surface impoundment use back into process as water for the seal on pump and maybe in process also.

Everytime when we will pump the water into oil separator from the concrete sump, we will analyze the sample. We will check the pH, specific gravity, color and solids. We will inspect the new oil separator daily. We will have fence around it and we will operate the new surface impoundments in such a way that it will have at least 6" free-board all the time.

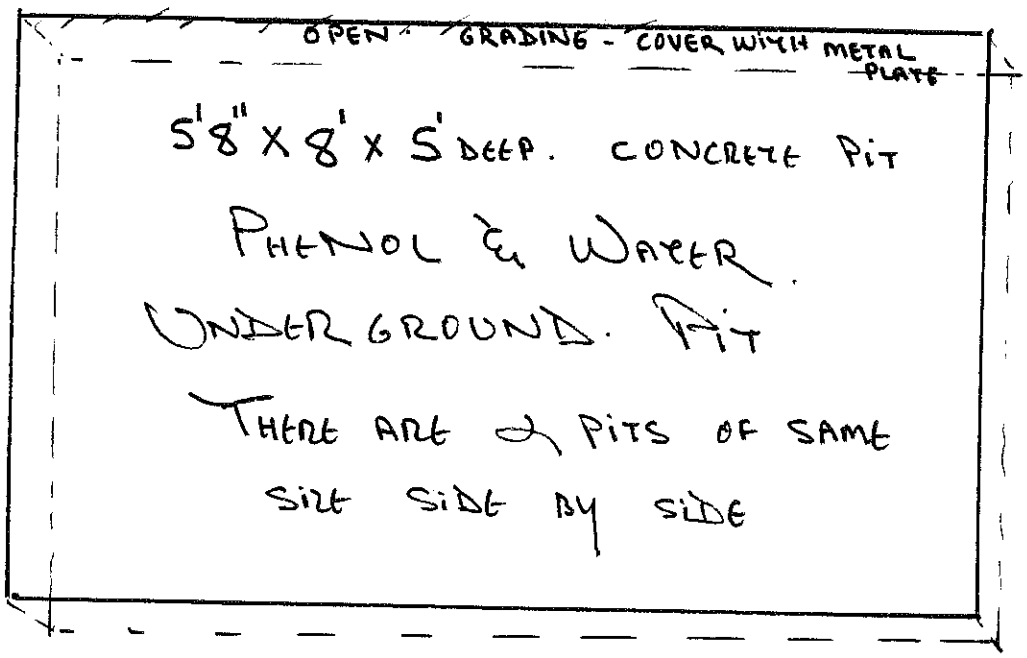
# PROCESS SUMP



OIL SEPRATOR

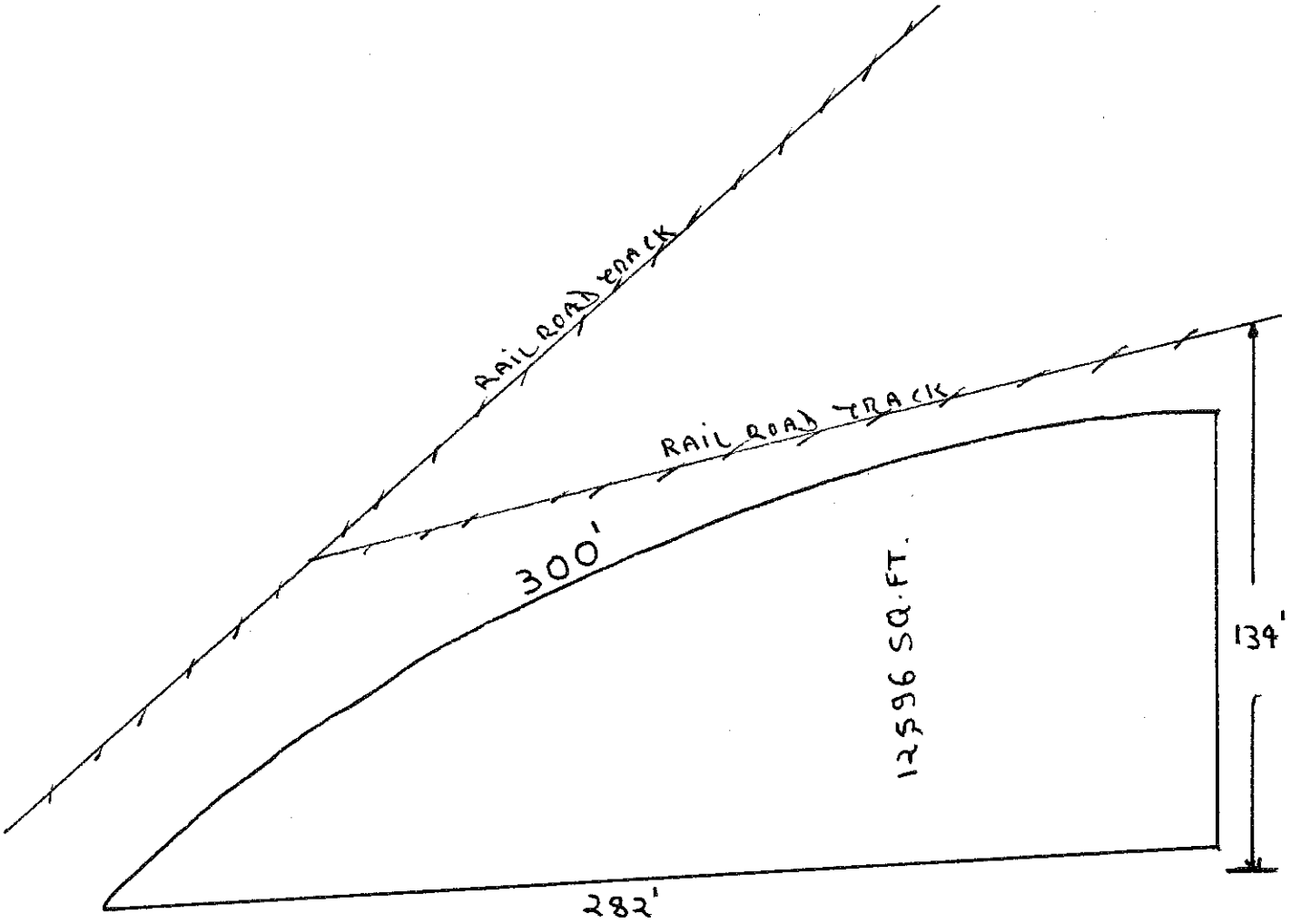


UNDERGROUND PIT

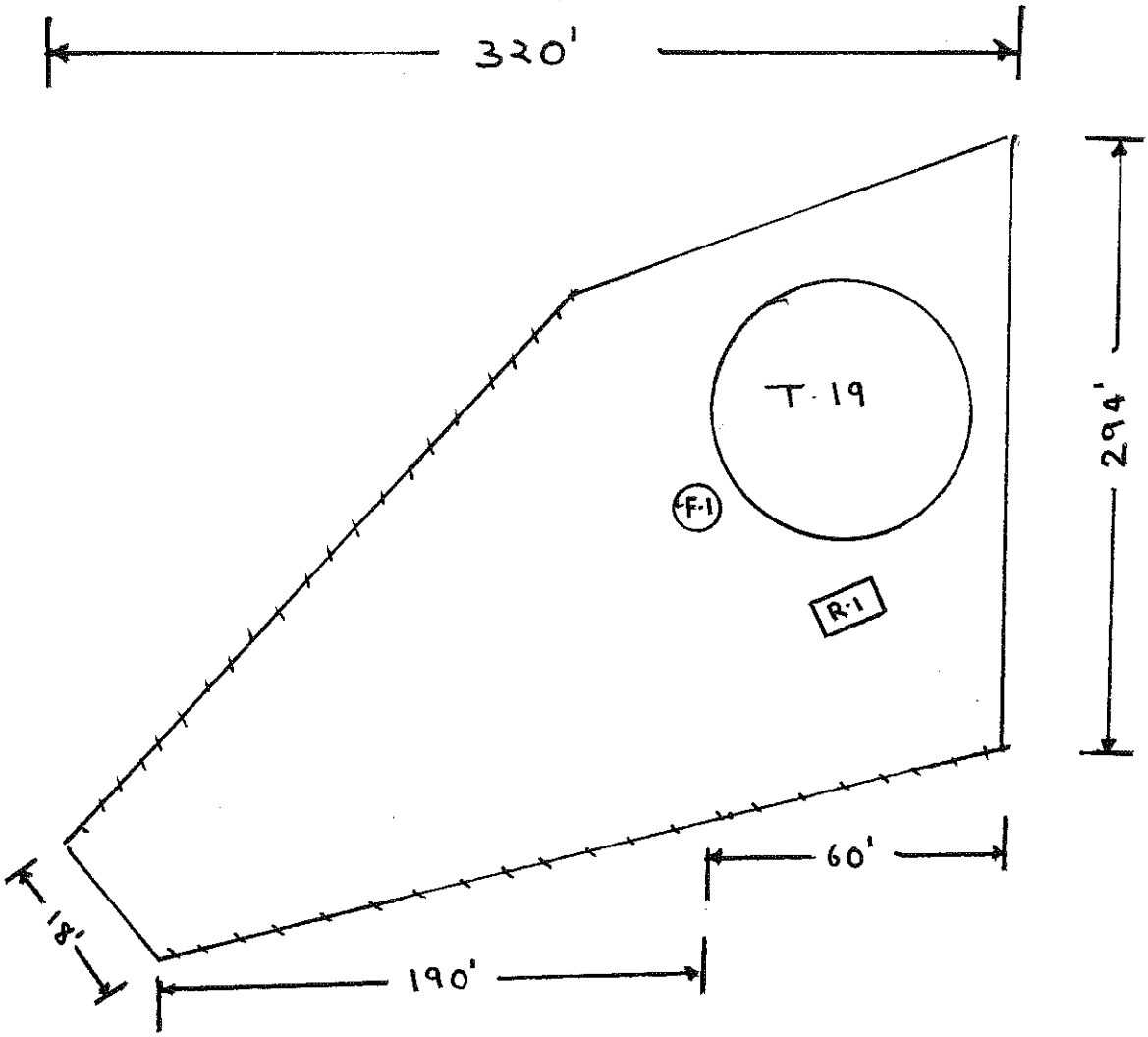


# WASTE PILE

(PIE SHAPED BASIN)



SURFACE IMPOUNDMENT



SECTION E

## SECTION E

GROUND-WATER MONITORING:

40 CFR 265.90

Facility has 6 wells for ground-water monitoring. EPA took the samples from these wells to determine the facility's impact on the quality of ground-water. The analysis of the samples are attached which is done by EPA.

Facility is willing to do all the analyses, recordkeeping and inspections for ground-water monitoring if EPA's required and let us know.

Region V - EPA's has all the analyses of ground-water.

SECTION F

## SECTION F

### SECURITY PROCEDURES F-1

40 CFR 264.14 requires that a facility's security system must prevent the unknowingly entry of people and minimize the potential for the unauthorized entry of people or livestock onto the active portions of the facility.

The final rules contain two conditions for an exemption from this standard:

1. If unauthorized or unknowingly entry will not result in injury to people or livestock who might enter the facility, and
2. If such entry will not result in injury to the environment.

To accomplish this objective, the standard also requires the warning sign written in English and in any other language predominent in the area surrounding the facility and must be legible from a distance of at least 25 feet.

Conservation Chemical Company of Illinois understands and agrees with the EPA, that main purpose of this security standard was to prevent the unknowingly or unauthorized entry of people or livestock onto the active portions of the facility.

Facilities will install four (4) feet high fence around the perimeter of the facility; the fence is just to caution and warn the poeple about hazardous waste management facility existance. There will be two (2) entrance gates. one in front for the employees and vehicles and other in back for rail cars. Both the front gate and rail car entry gate will be kept closed all the time. Front gate will have enough keys. We will give key to each employee, so when they report to work, they can open gate and close it. Rail car gate will be used only to recieve or to ship the material. Extra sets of keys will be kept in Plant Manager's office and every employee will be made aware of this key for the emergency purpose. The location of the gate and fence is shown on the plot plan.

Ample lighting is provided throughout the site. Cordless phone is used to report upset conditions immediately. In addition to the phone, a base station for the public address system is located in the Plant Manager's office. Every employee knows how to use that system. We will have one phone outside near the front gate also.

The sign will be posted and bear the legend, "Danger--Unauthorized Personnel Keep Out". Signs are diamond-shaped and measure 10 inches on each side. The letters will be two inches high and will be red on a reflective white background. The signs will be posted at each gate and attached to the facility perimeter fencing at corner and at 75 feet intervals.

We will have also 4' high fence around the waste pile, surface impoundments and containers storage area. These fences will have also signs posted on it.

Plant personnel will also inspect the condition of the fence and sign on the fence. In our opinion, this security procedure will keep unauthorized peoples' entries restricted.

## SECTION F-2

### GENERAL INSPECTION REQUIREMENTS

40 CFR 265.15 requires:

A. The owner or operator must inspect his facility for malfunctions and deterioration, operator errors and discharges.

B. (1) The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices and operating structural equipment that are important to preventing, detecting or responding to environmental or human health hazards.

(2) He must keep this schedule at the facility.

(3) The schedule must identify the types of problems which are to be looked during inspection.

C. The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals.

D. The record of inspections must be kept in an Inspection Log; this log must be kept at the facility for at least three years.

Facility at present, receives pickle liquor from steel mills. For the facility, it is a raw material. Under the RCRA classification, pickle liquor is a hazardous waste (K062 & K063). Facility in past, received hazardous waste, e.g., (SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATION SPENT STRIPPING AND CLEANNING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS) - F007 & F009, spent halogenated solvents, etc. Facility presently has this material stored in tanks and some in containers.

Presently, technically speaking, facility treats only pickle liquor, and we produce salable products from the hazardous waste. Facility does have records of discharges of pickle liquor. We receive this material mainly by tank-trailer, under manifest. We take the sample of each load, and check the iron content, color, specific gravity and pump into an empty process tank which has capacity more than one trailer load; this eliminates the possibility of over-running the tank. Facility does have records of raw material received and used. We use batch sheet for the usage records. The process to convert ferrous chloride solution to ferric chloride is very simple batch operation. We do not produce any significant amount of solid waste, which is not a hazardous waste and does not produce any wastewater at all.

For the inspections of hazardous waste containers, we have inspection form. We inspect the storage area of HW containers weekly. The form is attached in containers management section. The same way we use form for the inspection of storage tank area. This inspection is also done weekly. Fire extinguishers and other safety equipment is also inspected weekly. At the same time, the storage tank is being inspected.

Inspector is trained in inspecting safety equipment and fire extinguishers. He checks whether safety shower is in proper operating condition by pulling the chain. On eyewash fountain he checks whether it is working properly, whether any rags or dust is inside the basin, etc. He also checks whether fire extinguishers, safety showers or eyewash fountains are not blocked.

The location of fire extinguishers are marked RED so it can be easily located by unfamiliar persons. The same way the location of safety showers and eyewash fountains are also color coded and signs are posted. In inspecting fire extinguishers, the inspector also checks whether it is properly hung. The locking wire is intact and proper label when it is last serviced. We also check the first-aid kit whether adequate supplies is inside the kits are there or not.

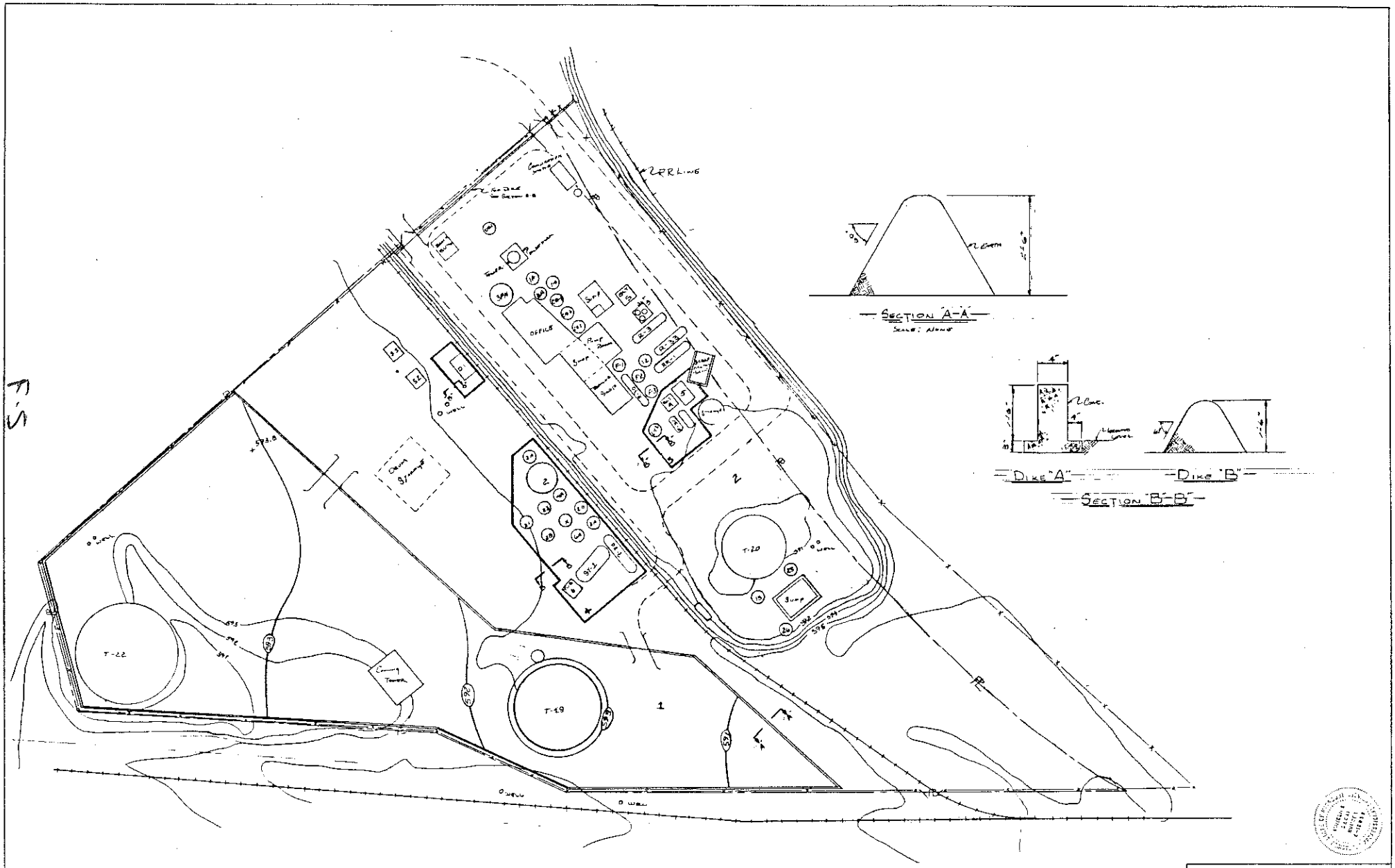
We also check the supply of organic vapor and acid gas canisters, and chlorine gas canisters. Also, we keep adequate supply of rubber gloves and work gloves. hard hats, face shields, rubber boots, and full rain suits.

Everyday, we check the pH of water in sump and try to keep it between 6 to 9 pH. We also check the suspended particles in the sample.

Everyday, plant manager keeps an eye on sanitary dumpster to check whether anybody put any hazardous waste or not. Our plant personnel are quite knowledgable above what to put in sanitary dumpster. We also instructed them that sanitary dumpster should be used only for garbage, rubbish and trash. Sanitary dumpster should not be used for any liquids or solid dry chemicals, floor sweeping of dry chemicals, laboratory chemicals or samples.

We do inspect the condition of fence, hazardous waste labels, HW signs, no smoking signs, danger signs, etc. at all times. Last but not least, the inspector also checks whether the plant personnel observes the company's basic safety rules.

Facility general inspection will be done daily; also we do inspect waste pile and surface impoundments daily.




| | |
|---|---|
| CONSERVATION CHEMICAL CO. OF ILLINOIS | |
| DRAWN BY | |
| LAYOUT BY | SCALE 1" = 20'-0" |
| CHECK BY | DRAWING No. 1 OF 2 |

FACILITY GENERAL INSPECTION

DATE_____ TIME_____ INSPECTED BY_____

| ITEMS | OK | ACTION NEEDED | PLANT MANAGER SHOULD PUT THE COMPLETION DATE ON THE WORK REQUIRED |
|---|---|---|---|
| 1. Danger--Unauthorized Personnel Keep Out Sign | | | |
| 2. Corrosive Material Sign | | | |
| 3. Condition of fence | | | |
| 4. Condition of gates | | | |
| 5. Gates closed, locked | | | |
| 6. CHLORINE RAILCAR: | | | |
| a. Proper placard | | | |
| b. Sign of any leak on ground | | | |
| c. Sign of leaks at valve | | | |
| d. Sign of leaks at fitting | | | |
| Sign (blue) on tracks | | | |
| 7. HW TANK TRAILER: | | | |
| a. Proper placard | | | |
| b. Vehicle registration certificate from state | | | |
| c. Fire extinguishers | | | |
| d. Sign of leaks any place | | | |
| 8. Condition of Sanitary Dumpster | | | |
| 9. SUMP: | | | |
| a. Level of liquids | | | |
| b. pH | | | |
| c. Suspended solids | | | |
| d. Smell | | | |
| 10. GENERAL GROUND AREA: | | | |
| a. Sign of spills | | | |
| b. Debris | | | |
| c. Construction material in middle | | | |
| 11. Container storage area | | | |
| 12. HW tanks area | | | |
| 13. Pie-shape basin | | | |
| 14. Surface impoundment area | | | |
| 15. Eyewash fountains | | | |
| 16. Safety showers | | | |
| 17. Fire Extinguishers | | | |
| 18. Safety or Fire Equipment are clear | | | |

| ITEMS | OK | ACTION NEEDED | PLANT MANAGER SHOULD PUT THE COMPLETION DATE ON THE WORK REQUIRED |
|---|---|---|---|
| 1 . Condition and supply in first aid kit | | | |
| 20. Condition and supply of different canisters | | | |
| 2 . Supply of other safety-related items,e.g.,gloves,boots | | | |
| 2 . Pumps are guarded | | | |
| 2 . Housekeeping | | | |
| 24. Employees attitude towards basic safety | | | |
| 2 . Proper lighting | | | |
| 2 . Condition of restrooms | | | |
| 2 . Wet floor | | | |
| 28. Condition of water fountains | | | |
| 2 . Communication System | | | |
| 30. List of Emergency phone | | | |
| 3 . Gasoline Pump #1 | | | |
| 32. Gasoline Pump #2 | | | |
| 3 . Proper sign on gasoline pump | | | |
| 34. SURFACE IMPOUNDMENTS: | | | |
| a. Level | | | |
| b. pH | | | |
| c. Smell | | | |
| d. Condition of fence and signs | | | |
| e. Any oils | | | |
| f. Debris | | | |
| 3 . WASTE PILE: | | | |
| a. Any liquids | | | |
| b. Smell | | | |
| c. Debris | | | |
| d. Condition of fence and signs | | | |
| 36. OIL SEPARATOR: | | | |
| a. Any oils | | | |
| b. Smell | | | |
| c. Debris | | | |
| d. Condition of fence and signs | | | |

WEEKLY

SAFETY AND FIRE PROTECTION EQUIPMENT INSPECTION

DATE_____ TIME_____ INSPECTED BY_____

| | LOCATION AND EQUIPMENT | OK | ACTION NEEDED | COMPLETION DATE FOR THE WORK REQUIRED |
|---|---|---|---|---|
| . | Southwest Corner of shop<br>Full face Wilson Gas Mask | | | |
| | 5-Organic vapor and acid gas canisters | | | |
| | 2-Chlorine Gas canisters | | | |
| 2. | For Dust & Mist Masks<br>1-Canister for chlorine | | | |
| | 2-Nose and Mouth Masks | | | |
| | 1 Box of dust & mist filters | | | |
| | 3-30 sec. escape cartridges for chlorine | | | |
| 3. | Washroom-Southeast Wall<br>1-Survivair unit w/one tank | | | |
| . | Washroom-North Wall<br>2-Emergency oxygen units | | | |
| | 1-respond first-aid cabinet | | | |
| | 2-bottles of eye and skin neutralizer | | | |
| 5. | Office Hallway-North Wall<br>1-Fire extinguisher | | | |
| | 3-Survivair tanks-1 empty | | | |
| . | Shop-East Wall<br>1-Fire extinguisher | | | |
| 7. | Shop-West Wall<br>1-Fire extinguisher | | | |
| 8. | Shop-Northeast Wall<br>Full shower | | | |
| . | Garage-North Wall<br>1-Fire extinguisher | | | |
| 1 . | Pump Room-North Wall<br>1-Fire extinguisher | | | |
| 11 | Pump Room-West Wall<br>1-Fire extinguisher | | | |

| | LOCATION AND EQUIPMENT | OK | ACTION NEEDED | COMPLETION DATE FOR THE WORK REQUIRED |
|---|---|---|---|---|
| 12 | Pump Room-West Wall<br>1-Eyewash fountain & shower | | | |
| 13. | Other Safety Equipment<br>Full Rain Suits | | | |
| | Rubber gloves and<br>Work gloves | | | |
| | Rubber boots | | | |
| | Hard Hats | | | |
| | Face shields | | | |

# LIST OF MATERIALS IN CONTAINERS

| NO. OF DRUMS | CONTENT | EPA HW NO. | DOT HW NO. | NFPA CODE | SPECIFIC GRAVITY | SOLUBILITY IN WATER | $CN^-$ PPM | pH | |
|---|---|---|---|---|---|---|---|---|---|
| 24 | Chlorinated Solvent | F001 & F002 | NA1993 | | No liquids just dirt soak with solvent. | | | 7.0 | Vapor will cause dizziness or suffocation. Contact will irritate the skin and eyes. Fire may produce irritating or poisonous gases. Will burn. Ignited by heat, sparks and flame. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors, or in sewers. Runoff from fire control or dilution water will cause pollution |
| 14 | Laboratory Chemicals | | | | Just the samples and lab chemicals in it. | | | | |
| 23 | Lapping oil & oil sludges | | | | Solids | Insoluble | | | |
| 15 | Copper salt & copper chloride | | | | Solids | Insoluble | | | |
| 13 | Paint sludges & dyes | | | | Solids | Insoluble | | 5.7 | |
| 4 | Unknown chemicals | | | | | | | | |
| 1 | Iron Salt | | | | Solids | Insoluble | | | |
| 1 | Tar | | | | Solids | Insoluble | | | |
| 9 | Empty drums in water | | | | 1.0 | Soluble | | | |
| 4 | Acid waste | D002 | NA9189 | | 1.025 | Soluble | | 1.5 | |
| 8 | Chrome liquid & sludge | | | | 1.095 | Soluble | | 1.5 | |
| 5 | Miscellaneous | | | | | | | | |
| 9 | Cyanide dirt | | | | | | 65 | | |
| 8 | Tiles | | | | | | | | |

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | | | Chlorinated solvent | F001 & F002 | | 2 1 0 | |
| SPHERE | 22,800 | 18'dia. | Steel, rubber lined | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | Has a hole part way up. |
| TOWER | 30,000 | | Steel | Spent cyanide sol'n & sludge | F007 - F009 | UN1935 | 3 0 0 | |
| RR-2 | 10,000 | 7'3"x32'9" | Steel | Cyanide sol'n and solvent | F007 - F009 | UN1935 | 3 0 0 | |
| TR38 | 6,500 | Trailer | Stainless steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| ST1 | 20,000 | 10'6"x31' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| DB1 | 12,000 | 11'9"x13'8" | Steel | Cyanide Sludge | F007 - F009 | UN1935 | 3 0 0 | |
| 2A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 4A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 6A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | Empty now; could be used for cyanide storage. |
| 8A | 17,625 | 10'x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 26 | 14,350 | 10'5"x26'1" | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 28 | 19,100 | 10'x30' | Steel, rubber lined | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 23 | 19,100 | 10'x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| F11 | | | | | | | | |

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| X | 19,430 | 10'5"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 21 | 21,000 | 10'x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 24 | 21,000 | 10'x30' | Steel | Water | | | 0 0 0 | To be used for cyanide sol'n. |
| CYI | 22,100 | 11'2"x30' | Steel | Spend cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| FG Tank | 7,875 | 10'8"x11'10" | Fiberglass tank | Empty | | | | May be used when scrubber is installed. |
| 11 | 4,300 | 10'x9'6" | Steel | Storage for bags of lime. | | | 0 0 0 0 | Empty now;we are going to scrape the tank |
| 41 | 4,300 | 10x0'6" | Steel | Caustic solution empty | D002 | UN1824 | 3 0 1 | Empty now;we are going to scrape the tank |
| R-17 | 14,488 | 24'8"x10' | | Empty | | | | We are going to scrape the tank |
| 16 | 6,040 | 11'x8'6" | Steel | Neutralized nitric acid plating sol'n | D002 | NA9189 | 2 0 0 | We will use this tank to neutralize acid |
| Al Fuel oil tank | 1,174 | 5'x8' | Aluminum | Fuel oil,very small amount | | | 2 0 0 | No plans to scrape |
| 1 | 20,000 | 10'x32'8" | Steel | Empty | | | | Scrape tank |
| | | | | | | | | |

F12

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | 6'8"x31'8" | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 & | NA1760 | 1 0 1 | |
| R-15 | 8,000 | 6'10"x28'9" | Steel | Waste acid | D002 | NA9189 | 2 0 2 | Scrap tank |
| R-31 | 8,000 | 6'7"x32' | Steel | Waste acid | D002 | NA9189 | 2 0 2 | |
| R-38 | 2,400 | 6'6"x12'5" | Steel, rubber lined | Waste acid (playing sol'n) | D002 | NA9189 | 2 0 2 | |
| 20 | 550,000 | 47'x32' | Steel | Neutralized acid sludge | D002 | NA9189 | 0 0 0 | |
| 5 | 12,100 | 10'x20'6" | Steel | Silica tetra-chloride | D003 | UN1818 Corrosive | 2 1 3 | |
| 2 | 46,200 | 21'x17'8" | Steel | Solvent-chlorinated and oil | F001 & F002 | NA1993 | 2 1 0 | |
| D-1 | 12,000 | 10/6"x18' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 1-S | 23,400 | 11'x33' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 2-S | 17,200 | 11'x24'2" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |
| 19 | 842,000 | 63'x36' | Steel | Oil sludge and water | | NA1993 | 2 1 0 | |
| 22 | 1,855,000 | 77'x41' | Steel | Fuel oil-water contaminated with PCB | D003 | NA1993 | 3 1 0 | |
| CONL | 13,366 | 10'6"x20'3" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 2 1 0 | |

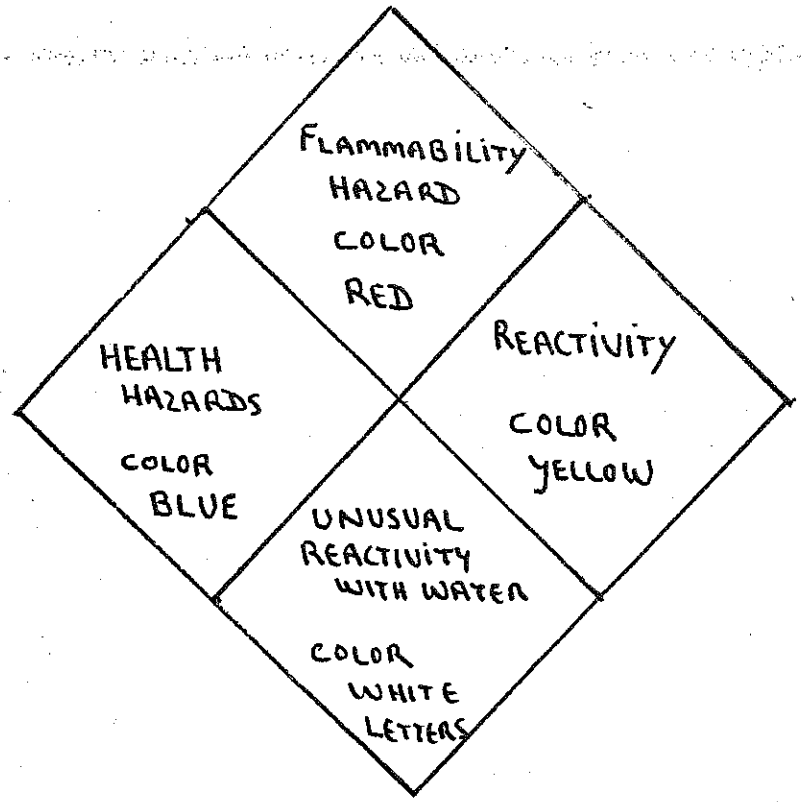
F-13

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| CB-2 | 14,200 | 12'x13' with cone bottom | Steel | Ferrous Chloride In process tank | K062- | NA1760 | | |
| CB-3 | 14,200 | 11'3"x16' with cone bottom | Steel | In process tank | | NA1760/UN2582 | | |
| CB-4 | 14,200 | 11'3"x16' with come bottom | Steel | In process tank | | NA1760 | | |
| 1A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582/NA1760 | | |
| 3A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| 14 | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| R-3 | 10,250 | 7'6"x30'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |
| R-33 | 7,420 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Needs to be repaired. |
| R-30 | 7,000 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |
| 12 | 12,200 | 10'5"x19' | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Being repaired |
| F-1 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-2 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-3 | 16,000 | 12'3"x21'5" | Fiberglass | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |

F14

# NFPA CODES


FLAMMABILITY
HAZARD
COLOR
RED
HEALTH
HAZARDS
COLOR
BLUE
REACTIVITY
COLOR
YELLOW
UNUSUAL
REACTIVITY
WITH WATER
COLOR
WHITE
LETTERS

| Identification of Health Hazards Color Code: BLUE | | Identification of Flammability Color Code: RED | | Identification of Reactivity (Stability) Color Code: YELLOW | |
|---|---|---|---|---|---|
| Signal | Type of Possible Injury | Signal | Susceptibility of Materials to Burning | Signal | Susceptibility to Release of Energy |
| 4 | Materials which on very short exposure could cause death or major residual injury even though prompt medical treatment were given. | 4 | Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temeprature, or which are readily dispersed in air and which will burn readily. | 4 | Materials which in themselves are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures. |
| 3 | Materials which on short exposure could cause serious temporary or residual injury even though prompt medical treatment were given. | 3 | Liquids and solids that can be ignited under almost all ambient temperature conditions. | 3 | Materials which in themselves are capable of detonation or explosive reaction but require a strong initiating source or which must be heated under confinement before initiation or which react explosively with water. |
| 2 | Materials which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given. | 2 | Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. | 2 | Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. Also materials which react violently with water or which may form potentially explosive mixtures with water. |
| 1 | Materials which on exposure would cause irritation but only minor residual injury even if no treatment were given. | 1 | Materials that must be preheated before ignition can occur. | 1 | Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently. |
| 0 | Materials which on exposure under fire conditions would offer no hazard beyond that ordinary combustible material. | 0 | Materials that will not burn. | 0 | Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water. |

The fourth space in the diagram shall be used to indicate unusual reactivity with water. The recommended signal to indicate this unusual reactivity with water and to alert the fire fighting personnel to the possible hazard of using water is the letter W with a line through the center (W).

## SECTION F-3

### PREPAREDNESS AND PREVENTION

Facility will be maintained and operated in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

Due to the small size of the operating area, the initial alarm system is by voice. If required, the plant intercom system will be used to sound an alarm. To use this system, select the local telephone line, Dial 2 and then convey the message into the phone. Facility has two (2) cordless phones which can be used in emergency.

Emergency phone numbers are posted in shop and office for any emergency existing. The emergency coordinator normally will control evaluations, obtaining outside assistance, notifying appropriate officials as necessary.

Again, due to very small size of the facility, facility at present does not have phones in all the areas. Phones are available in shop and office area. Facility has two cordless phones that can be used in an emergency if necessary.

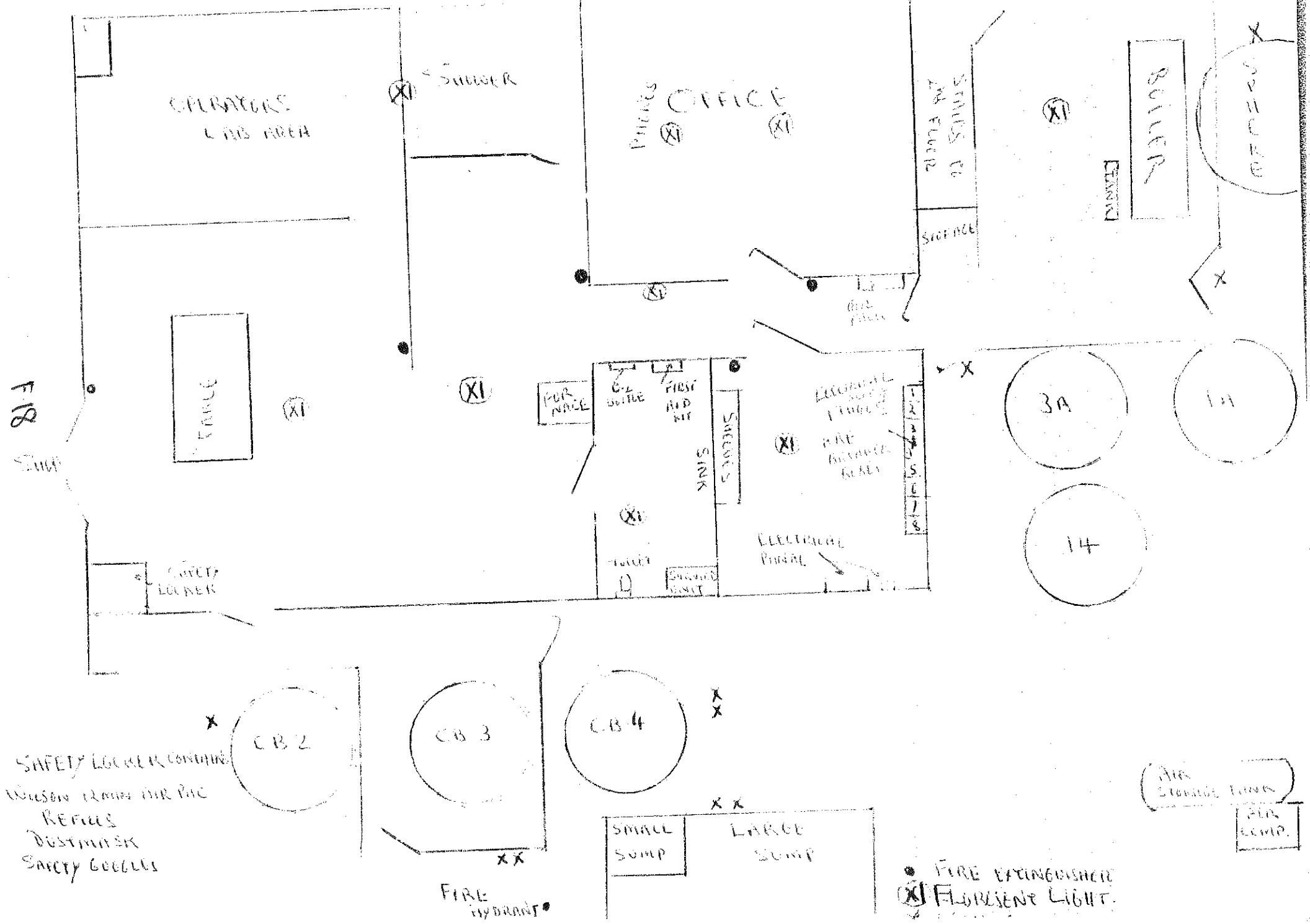
Facility does have all kinds of fire extinguishers to fight the small fires, e.g. foam, dry chemicals, etc.

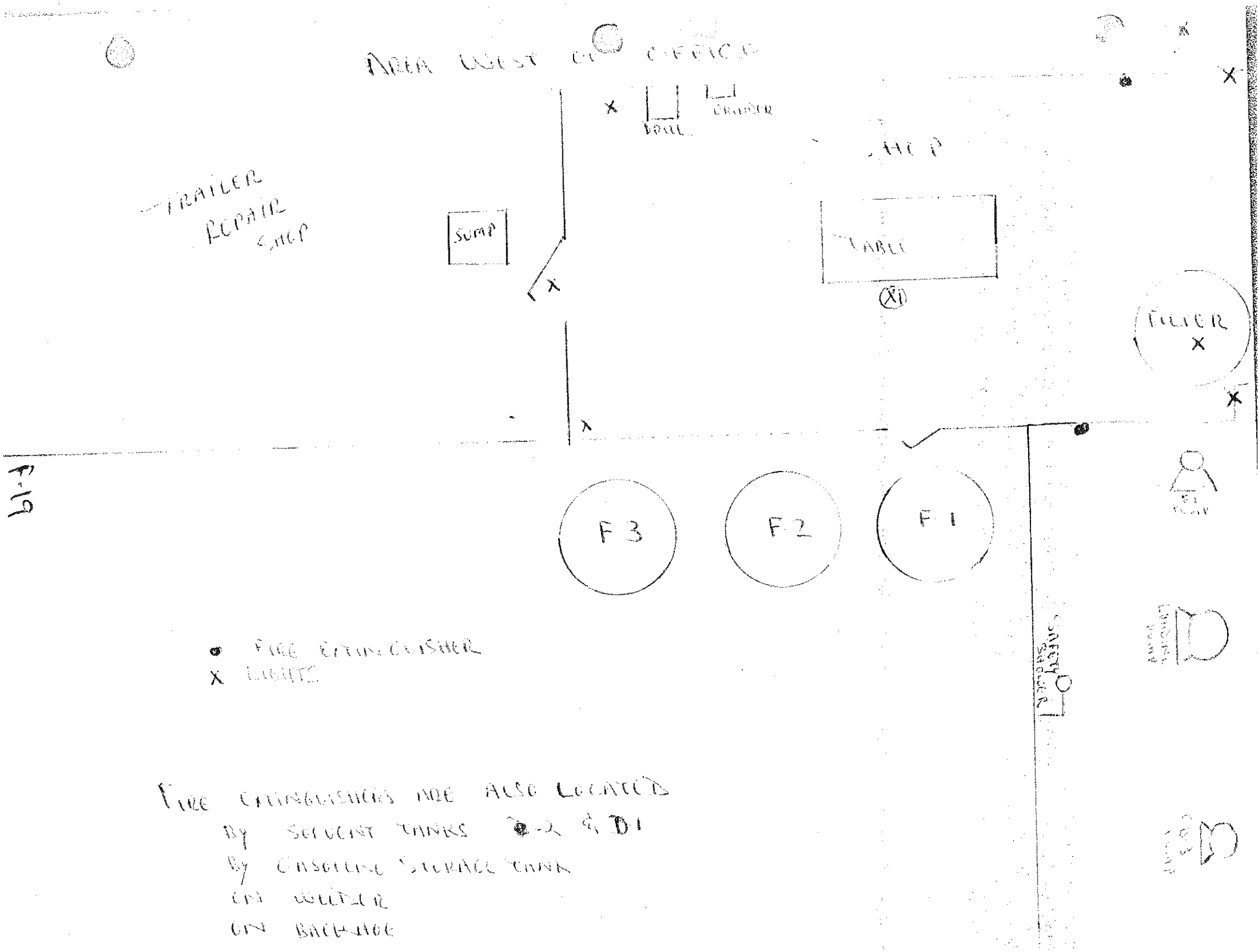
The list of fire extinguishers and other saftey equipment location is attached here. Also the drawings of office-shop-operating area is attached showing the location of fire extinguishers, eyewash fountains, safety showers, first-aid kits.

Facility does carry emergency response guide, safety data sheets on all the chemicals, rubber suits, rubber knee-high safety boots, long sleeve neoprene gloves, chemical safety splash goggles, respirators, self-contained breathing equipment, overpacks, explosion meter and supply of sandbags and absorbent material in case of spill.

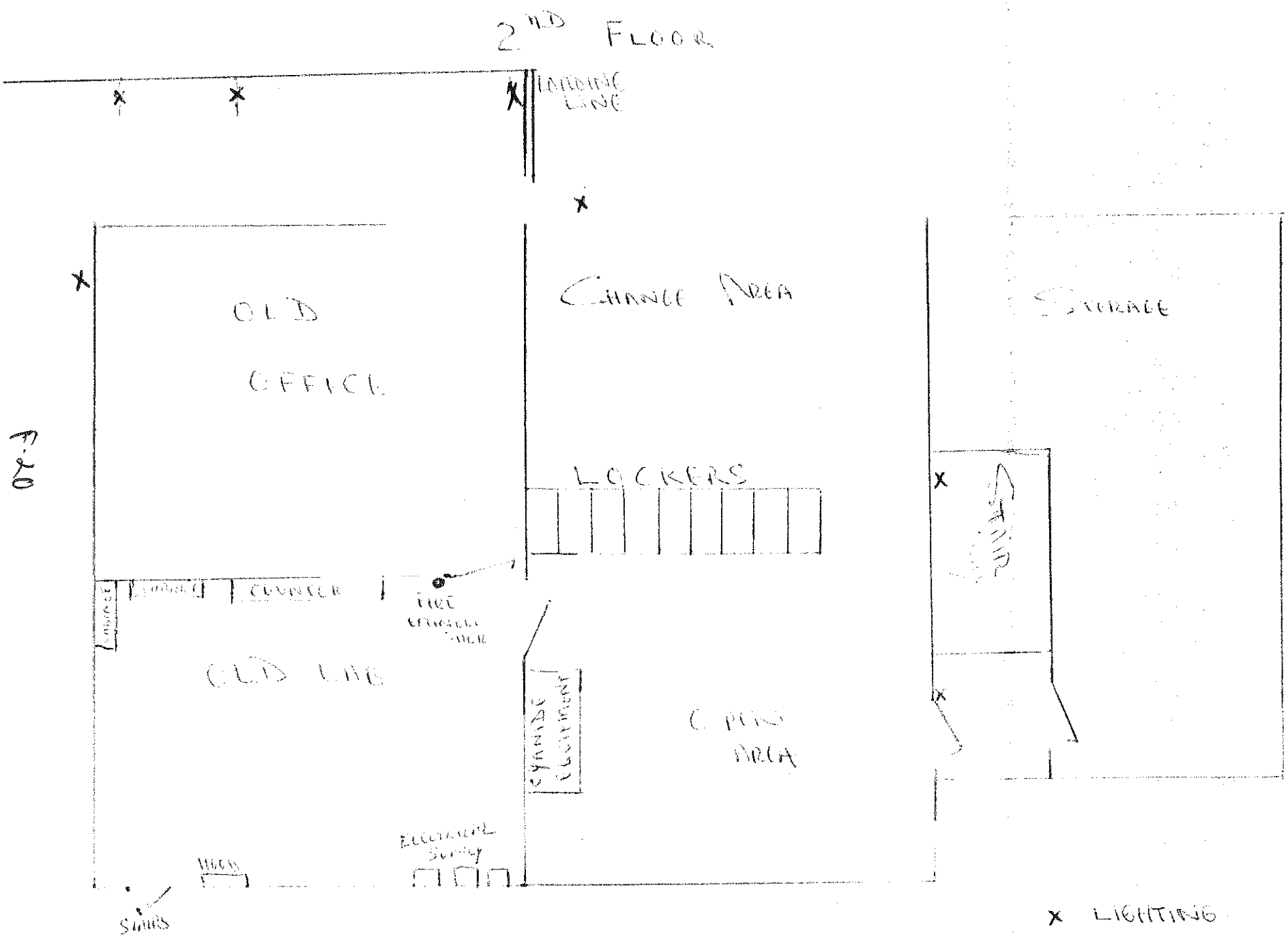
Facility does not carry any volatile solvents so the chances are very rare for the hazardous constituent to escape in air. Facility does not have any sewer; also this will eliminate the possibility of water pollution. Spills from the operating area will run down in sumps. Facility will neutralize the material to make it non-hazardous or will pack it in oversized containers for offsite disposal. Facility will take the sample and analyze it if necessary.

# FIRST FLOOR OFFICE BUILDING




AREA WEST OF OFFICE
DRILL
GRINDER
SHOP
TRAILER REPAIR SHOP
SUMP
TABLE
(X1)
FILTER
F 3
F 2
F 1
SAFETY SHOWER
• FIRE EXTINGUISHER
X LIGHTS
FIRE EXTINGUISHERS ARE ALSO LOCATED
BY SOLVENT TANKS D-2 & D1
BY GASOLINE STORAGE TANK
ON WELDER
ON BACKHOE

F-19


2ND FLOOR
LOADING DOCK
OLD OFFICE
CHANGE AREA
STORAGE
LOCKERS
COUNTER
FIRE EXTINGUISHER
OLD LAB
CYANIDE EQUIPMENT
OPEN AREA
ELECTRICAL SUPPLY
SINKS
LIGHTING

As per 40 CFR 265.37, facility had already made arrangements with police, fire department and hospitals. Police and fire departments have facility drawings, showing the containers storage area and tank farms. Police and fire departments are also made aware of contents in storage tanks and containers. Facility submitted a list of tanks similar to one attached here to the police and fire departments.

Facility has stock of overpacks to handle emergency spills. We have extra pumps to transfer the material from leaky or damaged containers or tanks to another tank or tank trailer. Facility has 3-4 empty tanks cleaned and washed for emergency. We also made arrangements with transport companies to get 5-6 empty tank trailers if needed within very short times.

Transport Company: Contact Name: Al Hahm or Dan Deuekis
Company Name and Address: Willett
3333 Sheffield Avenue
Hammond, IN 46320

We have also made arrangements to haul-dispose and store hazardous waste for us in emergency with:

Contact Name: Tom Grad
Company Name and Address: Mr. Frank
201 W. 155th Street
South Holland, IL 60473

Arrangements have been made with local hospitals. They know the potential hazards of the chemicals facility carries, and they are aware of types of injuries or illnesses which could result from fires, explosions or releases at the facility.

Plant always operates with at least a 1-man crew. During loading or unloading operation, there is always 2 men present. At present, facility receives only pickle liquor which is hazardous waste. Facility receives this material by tank trucks. Facility has several above-ground tanks to receive this material. Before unloading, operator takes the level in tanks and records it in operating log. He starts unloading only if the tanks take entire load. After unloading, he unrolls the hose, empty into bucket and uses into the next batch.

A public water supply serves as the primary source of emergency water. The system has rated delivery capacity of 500 GPM at 85psig.

Facility does not carry large quantity of ignitable chemicals. Our raw materials or finished products do not have any lower or upper explosive limits. Waste we stored in storage

tanks also has very high explosive limits and flashpoint, so the maximum water requirements under worst case conditions is sufficiently supplied by public water system.

Aisles within the operations area provide access to storage areas and each process operation. The aisles' width is maintained at 36 inches. Workmen are instructed to keep aisles clear of obstructions at all times.

LIST AND LOCATION OF SAFETY EQUIPMENT AT GARY PLANT

LOCATION: EMERGENCY LOCKER SOUTHWEST CORNER OF SHOP-FOR WILLSON GAS MASK
5 Organic Vapor & Acid Gas canisters
2 Chlorine Gas canisters
1 Willson Full Face gas mask

FOR DUST & MIST MASKS
1 canister for Chlorine
2 Nose and Mouth masks
1 Box of Dust & Mist filters
3 30-second Escape Cartridges - for Chlorine

WASHROOM - NORTH WALL
2 Emergency Oxygen units
1 Respond first aid cabinet
2 bottles of eye & skin neutralizer

WASHROOM - SOUTHEAST WALL
1 Survivair unit w/one tank

OFFICE HALLWAY - NORTH WALL
1 Fire Extinguisher/Kidde model 20TAS-6, 20 pound dry chemical, for type A,B, or C fires
3 Survivair Tanks - one empty

ELECTRIC SUPPLY ROOM
1 Fire Extinguisher/Kidde model 10TAP, 10 pound dry chemical for type A,B, or C fires

SHOP - EAST WALL
1 Fire Extinguisher/Kidde model 20TAS-6, 20 pound dry chemical for type A,B, or C fires

SHOP - WEST WALL
1 Fire Extinguisher/Pem All model PA100ABC, 10 pound dry chemical, for type A,B, or C. fires

SHOP - NORTHEAST WALL
Full shower

GARAGE - NORTH WALL
1 Fire Extinguisher/Kidde model 1SKS-3, 15 pound carbon dioxide

PUMP ROOM - NORTH WALL
1 Fire Extinguisher/Purple K model KCP-2½ dry chemical for type A,B, or C fires

2ND FLOOR
1 Fire Extinguisher/Kidde model 10TAP, dry chemical for type A,B, or C fires

PUMP ROOM - WEST WALL
1 Eyewash Fountain & Shower

OTHER SAFETY EQUIPMENT
Full Rain suits
Rubber gloves and work gloves
Rubber boots
Hard hats - face shields

PILOT PLANT BY GASOLINE TANK
1 Fire Extinguisher/Kidde model 20TAS-6, 20 pound dry chemical for type A,B, or C fires

BY SOLVENT TANK 2 & D-1
1 Fire Extinguisher/Badger model 30, 30 pound dry chemical for type A,B, or C fires

COMMUNICATION SYSTEM IN PLANT MANAGER'S OFFICE

Intercom system
Cordless phone
Near the gate - coin operated phone

DECONTAMINATION EQUIPMENT

Empty tanks - fiberglass tank, T-41, T-17, R-38
Sand/absorbent material
Pump - portable gasoline power pump with a rated capacity of 100 GPM 2x2
Overpacks
Lime in T-11 for neutralizing purposes
Hot patch - maintenance shop
Arrangements have been made with Willett Company 3333 Sheffield Avenue, Hammond, IN 46320 to get additional tank trailer for emergency purposes.

# EMERGENCY PHONE NUMBERS

| | | |
|---|---|---|
| 1. | Conservation Chemical Co. of Illinois<br>6500 Industrial Highway<br>Gary, IN 46406 | 219-949-8229<br>219-949-8230 |
| 2. | Mr. Jim Poisel (Emergency Coordinator)<br>5038 W. 87th Place<br>Crown Point, IN 46307 | 219-738-1832 |
| 3. | Mr. Don Grimmett (Acting Emergency Coordinator)<br>11106 W. 144th Street<br>Cedar Lake, IN 46303 | 219-937-9563 |
| 4. | Mr. Terry Autry (Acting Emergency Coordinator)<br>2938 Brown Street<br>Portage, IN 46368 | 219-763-1082 |
| 5. | Police Department | 911 or 883-4141 |
| 6. | Police-Mr. Bobby Joiner | 219-886-1313 |
| 7. | State Police | 911 or 769-8459 |
| 8. | Fire Department | 911 or 886-1313 |
| 9. | Fire Department-Mr. Frederick Kowsky | 886-1313 |
| 10. | St. Catherine Hospital, Emergency Room<br>Rosemary Moore<br>Johnny Roscoe | 219-392-7203 |
| 11. | NIPSCO | 219-886-5500 |
| 12. | National Response Center | 1-800-424-8802 |
| 13. | CHEMTREC | 1-800-424-9300 |
| 14. | Indiana Spill Response-Mr. Skip Powers | 317-633-0683 |
| 15. | Federal EPA Region (V) | 312-886-6148 |
| 16. | OSHA's Office | 1-800-621-0523 |
| 17. | 24-hour emergency number | 317-633-0144 |
| 18. | Wats line | 124-1035 |

## SECTION F-4

### PREVENTIVE PROCEDURES, STRUCTURES AND EQUIPMENT

Facility receives waste by tank trucks. At present, we do not receive any waste in containers. Our drivers are familiar and trained in loading and unloading procedures.

### UNLOADING PROCEDURE FOR TANK TRUCKS:

* Engine should be stopped. The only possible exception is if the engine is used to operate a pump used in the unloading process. Keep fires away. When unloading through a non-vapor tight connection into a stationary tank, no bonding or grounding is required if the metallic filling connection is in contact with the filling hole at all times. Otherwise, ground the cargo tank.
* Cargo tank must be attended by a qualified person at all time-while it is being unloaded.
* Smoking within - 25 feet of a cargo is forbidden during unloading process.
* Spot the cargo tank at unloading spot. Chock wheels. Put th-sign "Tank is connected" 10 feet of cargo in both the directions.
* Take manifest in the plant manager's office for verification.
* Wear protective equipment, e.g. goggles, protective rubber suits, gloves and face shield.
* Check condition of truck at the valves and outlets before opening dome.
* Open dome; Note: Face shields, protective suits and gloves must be worn at this stage. Additional safety equipment(Respirator) may be required at the direction of the supervisor.
* Note liquid level by targets in compartment.
* Draw sample; apply label. Note in your report and deliver to lab for:
    Certification
    Approval to discharge
    Storage tank #
* Confirm sufficient outage in storage tank to receive material
* Check valves, hoses and gaskets.
* Connect hoses; put the bucket underneath the valves both at the cargo and at the tank loading line.
* Set valve for unloading; Note: If air is used for unloading, open regulated air supply valve and product discharge valves. Air pressure used for unloading not to exceed 30psi.
* Check to determine product is going to proper tank.
* Periodically check the unloading operation for:
    Product to proper tank
    Leaks at truck or tank
    Loss of air pressure
    Leaks at any connections

* After unloading is completed:
    Close all valves:
    Truck
    Tank;
    Bleed off regulated air pressure if air is used.
* Disconnect all the hoses and drain off in bucket and identify clearly.
* Check visually to determine truck is empty.
* Notify the supervisor of any difficulties or malfunctions of equipment in the unloading operation.
* In the event of a spill or leak, suspend unloading operations. Notify supervisors for instructions on cleaning and flushing the area.

Facility receives only one waste by tank trucks. During unloading and loading operations, operators are instructed to use 5 gal. plastic bucket underneath the valves to collect spills. We have ample supply of sands and absorbents to soak the leaks in emergencies.

Facility does not have any sewer system and that's why chances are rare for contamination of water supplies. From operating area the leaks of material will run down to plastic-lined sumps and material from the sump, facility uses back into the process.

Our operation is not critical that power failure will cause any serious damages to the human health or environment. Facility does have emergency power lighting in case of power failure.

Facility does have rubber suits, masks, air packs, goggles, face-shields, gloves and rubber shoes. Operator is instructed and it is our basic policy that employees should wear them during handling of chemicals.

Spills and leaks from the container storage area will be collected in sump. Sample will be taken and recontainerized from the sump material. We are going to install dikes around T-19 & 22; tanks 21,24,8A,6A,X,28,4a,11,2,41 and 2A; T-20,1-S,2-S; tanks R-31,Cy-1, Con-1, R-15, 4,12, and 5; and around tank D-1.

We are going to install fence around surface impoundments, waste pile(pie-shaped basin), oil separator and sump area.

## SECTION F-5

### PREVENTION OF IGNITION/REACTION WASTES

40 CFR 265.17, General Requirements for ignitable, reactive or incompatible wastes:

A. Facility must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

Facility does not have substantial amounts of ignitable, reactive or incompatible wastes. Facility trained the operating personnel and has rules and regulations for handling ignitable, reactive or incompatible wastes.

Many hazardous wastes, when mixed with other waste or materials at hazardous waste facility, can produce effects which are harmful to human health and the environment, such as:

1. Heat or pressure, 2. Fire or explosion, 3. Violent reaction, 4. Toxic dusts, mists, fumes or gases, 5. Flammable fumes or gases.

Personnel are trained and facility's procedures are:

1. Do not add acid to water rather than water to acid.
2. Do not mix strong acid waste with a strong basic waste.
3. Heat generation and violent reaction will take place if Group 1-A is mixed with 1-B:

| GROUP 1-A | GROUP 1-B |
|---|---|
| Alkaline Caustic Liquids | Acid Sludge-acid and water |
| Alkaline cleaner | Electrolyte acid |
| Alkaline corrosive liquids | Etching acid liquid or solvent |
| Caustic wastewater | Pickling liquor and other |
| Lime sludge | corrosive acids |
| Lime wastewater | Spent acid |
| Spent caustic | Spent mixed acid |
| | Spent sulfuric acid |

4. Fire or explosion, generation of flammable gas may occur if Group A and Group B are mixed:

This list from 3 to 8 does not contain all the materials, but it is based only on the materials which facility carries presently.

Facility does not have, truly speaking, according to the definition, any ignitable material. Facility does have chlorinated solvents; it has some low-boiling solvents. We store this material in containers and in storage tanks. Our containers storage area is 50 feet away from the property line. We have posted "No Smoking" signs; the same way our storage tanks area is also 50 feet away from the property line and "No Smoking" signs are posted also near the area. Our containers and tank areas are away from the sewer. We do not have any sewers on the property, so there is no chance for running ignitable material in the sewers which may cause an explosion. We have dikes around the containers storage area. We do not fill our tanks or containers full to the top; we always leave 2-4" free space in containers and 2' in the tanks for expansion. Our plant personnel have been trained to open any containers or storage tank slowly to relieve any pressure. We are going to put NFPA codes on the storage tanks also.

As explained in our containers management section, we do not store any hazardous waste in an unwashed container. We store waste in containers or in tanks after the containers/ tanks are tripply rinsed.

In storage tanks, we have cyanide waste; those tanks are far apart from the other waste tanks, e.g., pickle liquor, spent acids, etching acid, liquid or solvent.

We do not open filled containers for the prevention of spills. Also, the only time we open tanks is when we have to take level measurements. Operating personnel are trained in taking samples from containers and tanks. They do wear protective clothing and necessary safety equipment.

Facility uses only a container made of or lined with materials which will not react with and are otherwise compatible with, the hazardous waste to be stored. We have lined tanks for acids or acidic waste. Facility uses 17E or 17H drums with butyl rubber lining.

Facility has waste stored in drums and in tanks which does not possess ignitability characteristics listed in 261.21(a). Flashpoint of wastes are listed in Section D.

Facility does not have any oxidizer, (waste) as defined in 49CFR 173.151.

It is our normal procedure, regardless if we are or not carrying an ignitable waste is:

* No smoking in plant operating and waste storage area.
* No welding or cutting near the hazardous waste storage area. If it is absolutely necessary, keep at least 50' of distance; we will keep water supply and fire extinguishers at the site.
* Keep material away from hot surfaces.
* Keep material away from radiant heat.
* Do not open flames in plant.
* We keep sufficient distance between containers' rows to eliminate frictional heat.

Facility understands that the primary cause of combining incompatible wastes is insufficient or inaccurate information about a waste or wastes. A second cause of accidents is the indiscriminate handling of waste. To avoid this, facility does not use empty containers or tanks to fill the waste unless it is tripply rinsed. We do not top-off any containers. Unless it is absolutely necessary, we do not move the containers from one place to another. Facility personnel is trained in handling containers in a safe way so it does not rupture.

No smoking sign is placed conspicuously in areas where hazards exist from smoking or open flames. Tools used in handling ignitable or reactive wastes are constructed or nonsparking materials. It is our common practice to ground the containers and tanks before loading or unloading material in it.

SECTION G

## SECTION G

## CONTINGENCY PLAN

This is the Contingency Plan for Conservation Chemical Company of Illinois. The facility is located at 6500 Industrial Highway, Gary, Indiana, 46406. Facility Federal EPA Identification Number is IND040888992, and facility state Identification Number is IN4514-0080-11.

Facility treats, stores and disposes the hazardous waste. Facility also transports the hazardous waste. Facility is operated by:

Mr. James C. Poisel
5038 W. 87th Place
Crown Point, IN 46307
(219) 738-1832

Purpose: The main purpose of this plan is to minimize hazards to human health and or the environment from fires, explosions or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

Description: Conservation Chemical Company of Illinois manufactures iron salt which are used as coagulant aids in the treatment of both potable and waste waters. Some of the raw materials used to produce our finished products are hazardous wastes, pickle liquor from the steel industries.

In some instances, we are paid to remove pickle liquor and other hazardous wastes from the generator's facility. As a consequence, we are also a service facility providing an outlet for specific types of hazardous wastes that can be recycled.

Facility's primary business activity prior to 1980 was the storage, treatment and transportation of chemical hazardous waste. The only hazardous waste currently brought into the facility is a waste pickle liquor (K062 & K063).

Plant produces iron salt from the pickle liquor and in this process, facility does not produce any hazardous waste. However, from prior years' activity, we do have other hazardous waste at the facility which is stored in containers and tanks. These wastes are:

| | | |
|---|---|---|
| 1. | F007 - F009 | Cyanide waste |
| 2. | F001 & F002 | Spent halogenated solvents |
| 3. | D003 | Silica tetrachloride |
| 4. | D003 | Sodium nitrate |

The other waste material facility has is:

1. Tar residues, paint sludges, soil clean up residues, and miscellaneous chemicals stored in containers.

2. Contaminated No. 5 fuel oil with PCB and asphalt.
3. Neutralized acid and acid sludges.
4. Phenol and water.

Facility also has surface impoundments which are used mainly for evaporation purposes. The location and sizes are shown in the facility diagram. Facility does not have sewer system.

Facility has 2 sumps. One is big, which is about 6½'x26'x 15' and is used to collect rain water and pump seal water. This sump is time to time, after neutralizing, pumped into surface impoundments. Small pump, which is about 5'x8'x7' is used to collect spill clean up and leakage from processing area. Material from this sump is pumped back into process.

Facility has oil separator which is marked as pit in the diagram, which is 12'x50'x20'. We never used this pit for any purpose. Material in it is mainly from the rainfall and from the company's prior years' acitivity.

We also have two small underground pits which are about 5'x8'x5'8", which contain water and phenol from our prior years' activity.

Facility has pie-shaped basin which we are going to call a "Waste Pile". The location and size is shown in the diagram. Presently it is covered with sands and gravels and is dry. It may contain fuel oil underneath it.

Facility carries other chemicals besides the above mentioned and are:

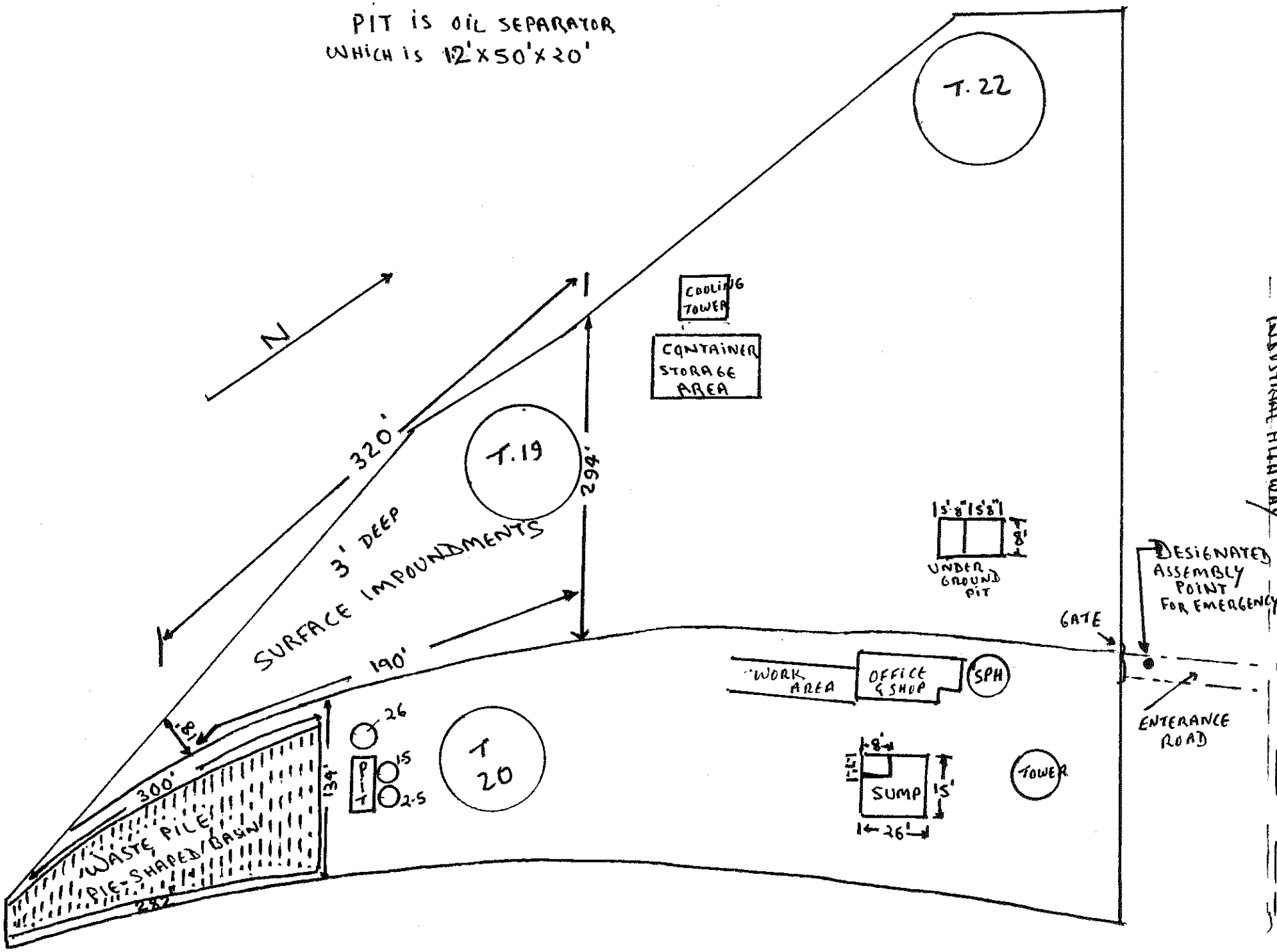
1. Ferri-Chlor
2. Ferrous Sulfate
3. Ferrous Chloride
4. Scrap iron
5. Caustic soda
6. Liquid chlorine in rail car
7. Copper oxide
8. Nitric acid
9. Hydrochloric acid
10. Fuel oil
11. Asphalt
12. Filter aid
13. Oxygen and acetylene cylinder for welding
14. Lab chemicals and reagents.

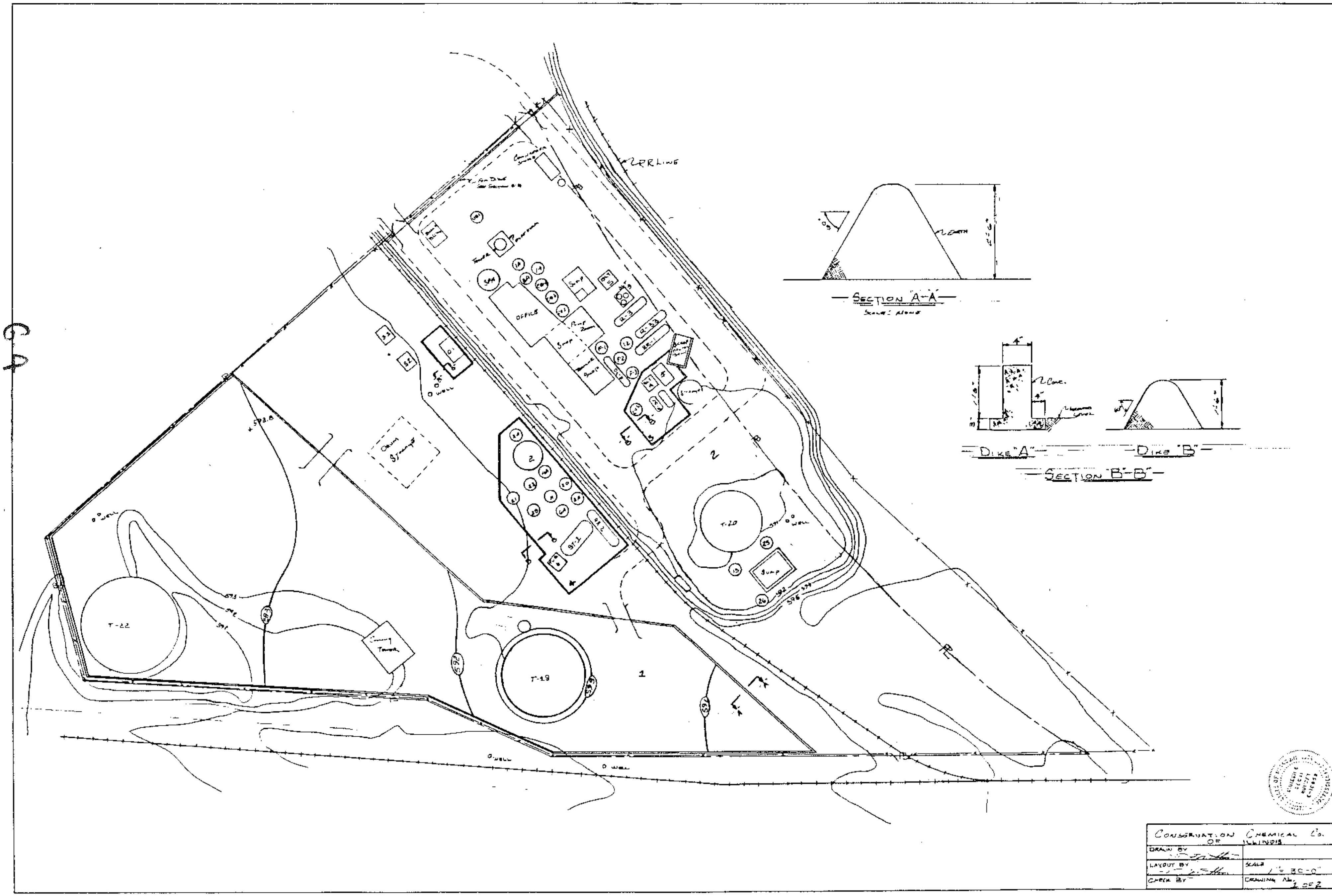
<u>EMERGENCY COORDINATOR</u> (264.52(d); 264.55)

The emergency coordinator of the facility is:

Mr. James C. Poisel
5038 W. 87th Place
Crown Point, Indiana 46307
Phone No. Office (219) 949-8229
Home (219) 738-1832

PIT IS OIL SEPARATOR
WHICH IS 12'X50'X20'





RR LINE
OFFICE
SUMP
T-22
T-19
T-20
1
2
DRUM STORAGE
COOLING TOWER
O WELL
SECTION "A-A"
SCALE: NONE
EARTH
CONC.
DIKE "A"
DIKE "B"
SECTION "B"-"B"
CONSERVATION CHEMICAL CO. OF ILLINOIS
DRAWN BY
LAYOUT BY
CHECK BY
SCALE 1" = 30'-0"
DRAWING NO. 1 OF 2


G-4

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

June 15, 1984

Regional Administrator
of Region V
U.S. Environmental Protection Agency
Off ice of the Director
Waste Management Branch
Waste Management Division
Federal Building
230 South Dearborn Street
Chicago, IL 60604

Dear Sir:

Please be advised that Mr. Jim Poisel, plant manager, is authorized to serve as the Emergency Coordinator of the contingency plan for Conservation Chemical Company of Illinois' hazardous waste treatment and storage facility located at 6500 Industrial Highway, Gary, Indiana. Mr. Poisel has the necessary authority to commit resources to implement the contingency plan.

Mr. Poisel is the emergency coordinator and is thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout.

Very truly yours,

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

Norman B. Hjersted
President

NBH/dr

Mr. James C. Poisel has been selected as primary emergency coordinator for our facility. He has been employed at this facility for 3 years. He is presently serving as a Plant Manager at the facility. During his employ, he has participated in the planning and operation of all facility activities. He is well-suited for this position because he assisted in the preparation and review of the Contingency Plan and he is thoroughly familiar with the facility operations and activities and location of records. As Plant Manager, Mr. Poisel has the necessary authority to commit resources to implement the Contingency Plan. He has at least 10 years of outside experience in the same field.

Acting emergency coordinator in the absence of primary emergency coordinator for the facility are:

Mr. Terry Autry
2938 Brown Street
Portage, Indiana 46368
Phone No. Office (219) 949-8229
Home (219) 763-1082

and

Mr. Don Grimmett
11106 W. 144th Street
Cedar Lake, Indiana 46303
Phone No. Office (219) 949-8229
Home (219) 937-9563

The name of the emergency coordinator is contained in all copies of the Contingency Plan. In addition, it is posted in maintenance shop along with other emergency phone numbers, in office on second floor. The operator in the area where an emergency occurs is responsible for notifying the emergency coordinator. Maintenance man, drivers also report the emergency if operator is not at the site. During the facility business hours, most of the time emergency coordinator is at the plant site. Acting emergency coordinator, out of two, one will be at the site during facility operating hours.

Emergency coordinator has the authority to commit company resources in an emergency situation. The emergency coordinator is responsible for implementing the evaluation procedure. He will assess the conditions and order an evaluation or other action required. He will control evacuations, obtain outside assistance, notify appropriate officials and any contact with the news media. The acting emergency coordinator may control evacuations and obtain outside assistance. In the absence of primary emergency coordinator, the acting emergency coordinator will take charge of all the duties of primary emergency coordinator and upon arrival of the primary emergency coordinator, he will transfer all the duties back to primary emergency coordinator.

Response to Fire: Plant intercom system will be used to sound an alarm. All the personnel will immediately leave the plant and report to the designated assembly point for a headcount at the entrance road and Industrial Highway and for subsequent duty assignments.

Emergency Coordinator will notify the fire and police department first. Emergency Coordinator will assign one person outside the facility to guide the firemen and police to the scene.

If the fire is small, plant personnel authorized and trained will try to keep the fire under control. Plant emergency coordinator will advise the firechief about the content and the potential hazards in the area. Fire department has our plant's tank chart, which is updated, so they have general idea of the chemicals and potential hazards involved in fighting the fire at the facility.

Emergency Coordinator will notify in writing to the Indiana State and Federal EPA about the fire. Emergency Coordinator will investigate thoroughly the cause of the fire, and submit his explanation to the local authorities. He will also explain what kind of action he will institute so that re-occurrence will not happen.

All the waste produced by the fire we will put in a container and dispose it at a later date if it is hazardous waste. Debris, concrete material, woods, etc., we'll keep at one place and dispose it at a later date.

Response to Explosions: Plant intercom system will be used to sound an alarm. All the plant personnel will immediately leave the plant and report to the designated assembly point for a headcount and for subsequent duty assignments.

It is our common practice that when the alarm starts ringing, we will stop all the processes at once. Operator and maintenance personnel will shut the pump's agitators steam valves if they can without any damages to their health.

Plant Emergency Coordinator will obtain outside help if it's required by calling fire and police departments. He will assign the right person to check the area after he is fully equipped with protective clothing, self-contained air mask. We will try to stop the explosion re-occurrence by keeping solvents like chemicals away from the explosion site.

We will make sure that there is no open flames or smoking in the area going on at that time. Emergency Coordinator will ensure that in the affected area:

a. there is no waste that may be incompatible with the released material;

b. all the equipment used is cleaned and fit for its intended use before operations resume;
c. released material is treated, stored or disposed of.

Plant Emergency Coordinator will make sure that incident is noted in the operating record with time, date and details. Within 15 days after the incident, he will submit a written report on the incident to the Regional Administrator.

Response to Spill: Facility does not have too many different kinds of materials. Due to small size of the plant, all our employees are aware of hazards of all the chemicals plant has. Our employees are trained to do different kinds of jobs, e.g., electrician or maintenance person, if the operator is absent, take the charge of operation. In case of spill, the employee will follow the outlined procedure:

1. He will call Emergency Coordinator.
2. He will wear his protective safety equipment.
3. He will try to get the help of other co-workers.
4. If the spill is small, he will try to take the spill up with sand or inert absorbent material. If the spill is of a solid, he will try to put in a clean washed container.
5. Spill they collected in a container they will label appropriately. If the spill cannot be reworked, we'll store the material in a container for off-site disposal.
6. If the spill is large and needs evacuation, plant intercom system will be used to sound an alarm. All personnel will immediately leave the plant in a safe and appropriate manner. Headcount will be taken. Emergency Coordinator will call local authority. If the spill is of flammable material, he will also call the fire department. Authorized plant personnel will try to build a dike far ahead of spill for later disposal.

Specific Chemical Spills:

A. CHLORINE RELEASE:

1. The operator or employee detecting the leak or gas will advise other personnel of the dangerous situation.

2. All personnel not involved in containing or repairing leak will immediately evacuate the plant area moving against the wind.

3. Trained operators will turn chlorine off at nearest available valve and immediately turn chlorine off at the Rail Car.

4. If the severity warrants, call the Fire Department and Chemtrec, 1-800-424-9300. All personnel at this time will evacuate the area going against the wind. The Emergency Coordinator will notify neighboring companies.

When Calling Fire Department and Chemtrec:

| | |
|---|---|
| Company Name: | Conservation Chemical Company (Phone:949-8229) |
| Emergency: | Chlorine Escape |
| Cause: | (i.e. Rail Car exploded)<br>(i.e. Pressure Valve erupted) |
| Address: | 6500 Industrial Highway West road - North of EJ&E Overpass |

If Emergency Coordinator (Plant Manager) is not in plant, notify him or Acting Emergency Coordinator: Don Grimmett - 219-937-9563.

B. RELEASE OF STORED FLAMMABLE MATERIAL (NO FIRE):

1. Notify other personnel about the situation.

2. Remove sources of ignition. In other words, no cigarettes, no flames, turn off any electric motors or other spark generators in the area, no engines operating in the area (automobile, gasoline powered pumps, front end loaders, etc.) and so on.

3. Stop the release, if possible, to do so in a safe manner.

4. Transfer the leaking container contents to another container if this can be done by gravity or by pumping from a remote location (see #2 above).

5. Flush the area with water or use dirt or sand to reduce the fire hazards.

6. Call the Fire Department if necessary.
   EMERGENCY NUMBER 911
   (see procedure on fire and explosion for information to be supplied_

7. If the plant manager is not at the plant, notify him as soon as possible.

C. RELEASE OF CORROSIVE MATERIAL:

1. Advise other personnel about the situation.

2. Stop the release of material if it is possible to do so in a safe manner.

3. Use protective equipment as required.

4. Transfer the contents of the leaking container to another appropriate container if possible.

5. Flush the contaminated area and equipment with water.

6. If the plant manager is not at the plant, notify him as soon as possible.

7. Neutralize the spilled material as required.

D. RELEASE OF CYANIDE MATERIAL:

1. Advise other personnel about the situation.

2. Insure that no acids will contact the cyanide material.

3. Use protective equipment as required.

4. Stop the release of material if it is possible to do so in a safe manner.

5. Transfer the contents of the leaking container to another appropriate container if possible.

6. Obtain outside assistance if necessary:

| | |
|---|---|
| EMERGENCY NUMBER | 911 |
| CHEMTREC | 1-800-424-9300 |

7. If the plant manager is not at the plant, notify him as soon as possible.

8. The plant manager will notify the proper officials concerning the incident.

9. Decontamination will be directed by the plant manager.

The facility is equipped with an intercom system to provide internal emergency communications. Any emergency will be brought to the attention of the Plant Manager stationed at the office. He will quickly evaluate the situation and place any necessary calls to police department, fire department and/or emergency response teams from one of the outside phones located in the office. If the office is affected by the emergency situation, a telephone at the entrance gate will be used to summon assistance.

To use the plant intercom system, select the local telephone line, dial 2 and then convey the message into the phone. The locations of all the phones are shown on the emergency equipment location plan which follows page in the Contingency Plan.

The only one treatment process is carried out at the facility, outside the maintenance shop in the manufacturing area. To provide rapid response to fires, wall-mounted, hand-held fire extinguishers are located in the shop and manufacturing areas. These extinguishers are of dry chemicals; one carbon dioxide-filled fire extinguisher is provided by solvent tank 2 or D-1.

For any scheduled absence from the plant, the Emergency Coordinator will designate the Acting Emergency Coordinator and post a notice to that effect.

Due to small size of the plant and only few employees, the initial alarm system is by voice. If required, the plant intercom system will be used to sound an alarm. To use this system, select the local telephone line, dial 2 and then convey the message into the phone.

The Emergency Coordinator normally will control evacuations, obtaining outside assistance, notifying appropriate officials and any contact with the news media.

The Acting Emergency Coordinator may control evacuations and obtain outside assistance. For simplicity, the list of emergency phone numbers is posted in the office, maintenance area and second floor.

The primary purpose of all emergency procedures is protection of all personnel. Protection of equipment and facilities is secondary concern of the facility management.

Outside assistance will be obtained by dialing 911. Letters have been sent to:

| | |
|---|---|
| Police Department: | Bobby Joiner 886-1313 |
| Fire Department: | Frederick Kowsky |
| Hospital: | St. Catherine Hospital |
| | Rosemary Moore 392-7203 |
| | Johnnie Roscoe |

Other phone numbers:

| | |
|---|---|
| State Police | 769-8459 |
| NIPSCO | 886-5500 |

| | |
|---|---|
| National Response Center | 1-800-424-8802 |
| Chemtrec | 1-800-424-9300 |

| | |
|---|---|
| Indiana Spill Response<br>Mr. Skip Powers | 317-633-0683 |

| | |
|---|---|
| Federal EPA Region V | 312-886-6148 |
| OSHA's Office | 1-800-621-0523 |

As explained in Contingency Plan earlier, facility stores hazardous waste in tanks and in containers. The list of tanks and materials in it is attached. The plot plan of our containers storage area and storage tank areas is also attached, which includes the location of the waste pile and surface impoundments.

Facility has about 143 drums which have hazardous waste and is stored at the assigned container storage area near cooling tower as shown in the plot plan.

LIST OF MATERIALS IN CONTAINERS

| NO. OF DRUMS | CONTENT | EPA HW NO. | DOT HW NO. | NFPA CODE | SPECIFIC GRAVITY | SOLUBILITY IN WATER | $CN^-$ PPM | pH | |
|---|---|---|---|---|---|---|---|---|---|
| 24 | Chlorinated Solvent | F001 & F002 | NA1993 | | No liquids just dirt soak with solvent. | | | 7.0 | Vapor will cause dizzines or suffocation Contact will irritate the skin and eyes. Fire may produce irritatin or poisonous gases. Will burn. Ignited by heat, spark and flame. Container may explode in hea or fire. Vapo explosion hazard indoors, outdoors, or in sewers. Runoff from fi control or dil tion water wil cause pollutio |
| 14 | Laboratory Chemicals | | | | Just the samples and lab chemicals in it. | | | | |
| 23 | Lapping oil & oil sludges | | | | Solids | Insoluble | | | |
| 15 | Copper salt & copper chloride | | | | Solids | Insoluble | | | |
| 13 | Paint sludges & dyes | | | | Solids | Insoluble | | 5.7 | |
| 4 | Unknown chemicals | | | | | | | | |
| 1 | Iron Salt | | | | Solids | Insoluble | | | |
| 1 | Tar | | | | Solids | Insoluble | | | |
| 9 | Empty drums in water | | | | 1.0 | Soluble | | | |
| 4 | Acid waste | D002 | NA9189 | | 1.025 | Soluble | | 1.5 | |
| 8 | Chrome liquid & sludge | | | | 1.095 | Soluble | | 1.5 | |
| 5 | Miscellaneous | | | | | | | | |
| 9 | Cyanide dirt | | | | | | 65 | | |
| 8 | Tiles | | | | | | | | |

G13

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | Chlorinated Solvents 5000 gallons | F001 & F002 | NA1993 | 1.0 | 6.8 | | In-soluble | 7.0 | Vapors will cause dizzines or suffocatio Contact will irritate the skin and eyes. Fire may produce irritati or poisonous gases. Runof from fire control or dilution water ma cause pollut Will burn. I nited by heat sparks and flames. Container may explode in heat or fire. Vap explosion haz ard indoors, outdoors or i sewers. |
| | | Chlorinated Solvents 41,100 gallons | F001 & F002 | NA1993 | 0.92 | 8.3 | | In-soluble | 7.2 | |
| | | Chlorinated Solvents 9300 gallons | F001 & F002 | NA1993 | 1.238 | 6.4 | | In-soluble | 5.2 | |
| | | Chlorinated Solvents 18,200 gallons | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.3 | |
| 2-S | 17,200 | Chlorinated Solvents 15,100 gallons | F001 & F002 | NA1993 | 0.956 | 6.7 | | Missible | 8.2 | |
| CONL | 13,366 | Chlorinated Solvents | F001 & F002 | NA1993 | 1.0 | 7.2 | | Missible | 5.6 | |
| Containers Raw | | Chlorinated Solvents | F001 & F002 | NA1993 | | | | | | |
| Sump-2 | | Solvents/Water | | NA1993 | 1.075 | 6.1 | | Insoluble | 3.5 | |
| R-15 | 8,000 | Waste Acid-Empty | D002 | | | | | | | May ignite combustibles. May cause reaction with water. Explo sive concentr tions of gas may accumulat in tanks. Ru off to sewer will cause water pollution. Contac |
| R-31 | 8,000 | Waste Acid-4000 | D002 | | | .6 | | | <1 | |
| R-38 | 2,400 | Waste Acid-Empty | D002 | | | | | | | |
| 20 | 550,000 | Neutralized Acid Sludge, 8'2" outage 305,000 gallons | D002 | | | bo uch lids | 12.5 | | 6.7 | |
| 16 | 6,040 | Neutralized Acid Sludge, 4000 | D002 | | | .9 | | | 2.3 | |
| Containers Raw | | | | | | | | | | |

will cause burns to skin and eyes. Fire produces irritating and/or poisonous gases.

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| Sphere | 22,800 | Spent Cyanide Soln. 11'3" outage | F007 - F009 | UN1935 | 1.095 | 6.7 | 12400 | Soluble | 13.5 | Material is considered as poison. If inhaled, may be fatal. May be fatal also if swallowed or absorbed throug skin. Contact may cause burns to the skin and eyes. Runoff from fire control or dilution water will cause water pollution. It may burn but does not ignite readily. |
| Tower | 30,000 | Spent Cyanide Soln. | F007 - F009 | UN1935 | 1.1 | --- | 1438 | Soluble | 11.4 | |
| RR-2 | 10,000 | Spent Cyanide Soln. 3790 gallons | F007 - F009 | UN1935 | 1.125 | 6.5 | 12650 | Soluble | 12.1 | |
| TR-38 | 6,500 | Spent Cyanide Soln. 1300 gallons | F007 - F009 | UN1935 | 1.09 | 6.6 | 17062 | Soluble | 13.1 | |
| ST-1 | 20,000 | Spent Cyanide Soln. 19,500 gallons | F007 - F009 | UN1935 | Has oil 0.88 | 7.3 | 62 | In-soluble | 7.6 | |
| DB-1 | 12,000 | Spent Cyanide Soln. 1500 gallons | F007 - F009 | UN1935 | NO SAMPLE | | | | | |
| 2A | 21,400 | Spent Cyanide Soln. 12,400 gallons | F007 - F009 | UN1935 | 1.14 | 6.5 | 3112 | Soluble | 13.6 | |
| 4A | 21,400 | Spent Cyanide Soln. 19,925 gallons | F007 - F009 | UN1935 | 1.005 | 6.5 | 975 | Soluble | 12.8 | |
| 6A | 21,400 | Spent Cyanide Soln. 500 gallons | F007 - F009 | UN1935 | NO SAMPLE | EMPTY | | | | |
| 8A | 17,625 | Spent Cyanide Soln. 14,100 gallons | F007 - F009 | UN1935 | 1.03 | 6.8 | 5150 | Soluble | 12.9 | |
| 26 | 14,350 | Spent Cyanide Soln. 11,050 gallons | F007 - F009 | UN1935 | 1.025 | 6.9 | 5838 | Soluble | 12.9 | |
| 28 | 19,100 | Spent Cyanide Soln. 16,800 gallons | F007 - F009 | UN1935 | | 6.8 | 6812 | | | |
| 23 | 19,100 | Spent Cyanide Soln. 10,830 gallons | F007 - F009 | UN1935 | 1.075 | 6.7 | 19,925 | Soluble | 12.7 | |
| X | 19,430 | Spent Cyanide Soln. 12,570 gallons | F007 - F009 | UN1935 | 1.01 | 6.6 | 937.5 | Soluble | 12.9 | |
| 21 | 21,000 | Spent Cyanide Soln. 6056 gallons | F007 - F009 | UN1935 | | 6.4 | 9812 | Soluble | | |
| CY-1 | 22,100 | Spent Cyanide Soln. 1480 gallons | F007 - F009 | UN1935 | NO SAMPLE | | | Soluble | | |
| SUMP-2 | | Spent Cyanide Soln. | F007 - F009 | UN1935 | 1.11 | 6.3 | 10150 | Soluble | 13.6 | |

LIST OF MATERIALS - TANK CONTAINERS

| TANK NO. | CAPACITY GALLONS | CONTENT | EPA HW NO. | DOT SHIPPING NO. | SPECIFIC GRAVITY | ZAHN/SEC VISCO-SITY | $CN^-$ PPM | SOLUBI-LITY IN WATER | pH | POTENTIAL HAZARDS |
|---|---|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | Pickle Liquor, $FeCl_2$ 4000 gallons | K062 | NA1760 | 1.346 | 6.6 | | Soluble | <1 | Contact causes burns to skin and eyes. If inhaled, it may be harmful. If the material is included in a fire, it may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution. It may burn, but it will not ignite readily. Explosive concentrations of gas may accumulate in tanks. |
| CB-2 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-3 | 14,200 | Pickle Liquor Empty | K062 | NA1760 | EMPTY | | | | | |
| CB-4 | 14,200 | Pickle Liquor | K062 | NA1760 | EMPTY | | | | | |
| R-3 | 10,250 | Pickle Liquor, $FeCl_2$ 500 gallons | K062 | NA1760 | NO SAMPLE | | | | | |
| R-33 | 7,420 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| R-30 | 7,000 | Pickle Liquor, $FeCl_2$ 7000 gallons | K062 | NA1760 | 1.37 | 6.5 | | Soluble | <1 | |
| 12 | 12,200 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | EMPTY | | | | | |
| F-3 | 16,000 | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.324 | 6.5 | | Soluble | <1 | |
| 1A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | 1.356 | 6.4 | | | <1 | |
| 3A | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| 14 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-1 | 21,400 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| F-2 | 21,100 | $FeCl_3$ Process Tank | | UN2582 | | | | | | |
| Rubber lined sump | | Pickle Liquor $FeCl_2$ | K062 | NA1760 | 1.37 | 6.4 | | | <1 | |

LIST OF MATERIALS

T-19 Has No. 5 fuel oil and water. It is a steel tank. It has about 191,000 gallons of water and fuel oil. Only 25,000 gallons of oil and rest is water. Oil has specific gravity of 0.02 and it has viscosity of 9.3 ZAHN/sec. at 110°F. pH of the oil is 5.6. Oil is contaminated with PCB.

T-22 Has No. 5 fuel oil/asphalt mixture. It is also a steel tank. It has about 470,850 gallons of material in it. Oil has specific gravity of 0.92 and has viacosity of 8.7 ZAHN/sec. at 105°F. pH of the oil is 5.6. Oil is also contaminated with PCB.

Plant has surface impoundment. This surface impoundment has solids and liquids in it. Liquids has pH of 1.8; specific gravity of 1.0. Solids from the surface impoundment has pH of 4.8.

Waste pile has only solids in it. pH of these solids is 5.8. Oil separator has also liquids and solids in it. Liquid has pH of 6.8 and specific gravity of 1.0; Solids pH is 5.4. Process sump before neutralization has pH of 1.8 and specific gravity of 1.0.

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| CB-2 | 14,200 | 12'x13' with cone bottom | Steel | Ferrous Chloride In process tank | K062- | NA1760 | | |
| CB-3 | 14,200 | 11'3"x16' with cone bottom | Steel | In process tank | | NA1760/UN2582 | | |
| CB-4 | 14,200 | 11'3"x16' with come bottom | Steel | In process tank | | NA1760 | | |
| 1A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582/NA1760 | | |
| 3A | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| 14 | 21,400 | 10'11x30' | Steel | $FeCl_3$ process tank | | UN2582 | | |
| R-3 | 10,250 | 7'6"x30'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |
| R-33 | 7,420 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Needs to be repaired. |
| R-30 | 7,000 | 6'6"x28'10" | Steel | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |
| 12 | 12,200 | 10'5"x19' | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | Being repaired |
| F-1 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-2 | 21,100 | 11'9"x26' | Fiberglass | $FeCl_3$ process tank | | UN2582 | | |
| F-3 | 16,000 | 12'3"x21'5" | Fiberglass | Pickle liquor ($FeCl_2$) process tank | K062 | NA1760 | | |

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| F-11 | 6,000 | | | Chlorinated solvent | F001 & F002 | | 2 1 0 | |
| SPHERE | 22,800 | 18'dia. | Steel, rubber lined | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | Has a hole part way up. |
| TOWER | 30,000 | | Steel | Spent cyanide sol'n & sludge | F007 - F009 | UN1935 | 3 0 0 | |
| RR-2 | 10,000 | 7'3"x32'9" | Steel | Cyanide sol'n and solvent | F007 - F009 | UN1935 | 3 0 0 | |
| TR38 | 6,500 | Trailer | Stainless steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| ST1 | 20,000 | 10'6"x31' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| DB1 | 12,000 | 11'9"x13'8" | Steel | Cyanide Sludge | F007 - F009 | UN1935 | 3 0 0 | |
| 2A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 4A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 6A | 21,400 | 10'11"x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | Empty now;could be used for cyanide storage. |
| 8A | 17,625 | 10'x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 26 | 14,350 | 10'5"x26'1" | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 28 | 19,100 | 10'x30' | Steel, rubber lined | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |
| 23 | 19,100 | 10'x30' | Steel | Spent cyanide sol'n | F007 - F009 | UN1935 | 3 0 0 | |

# LIST OF TANKS

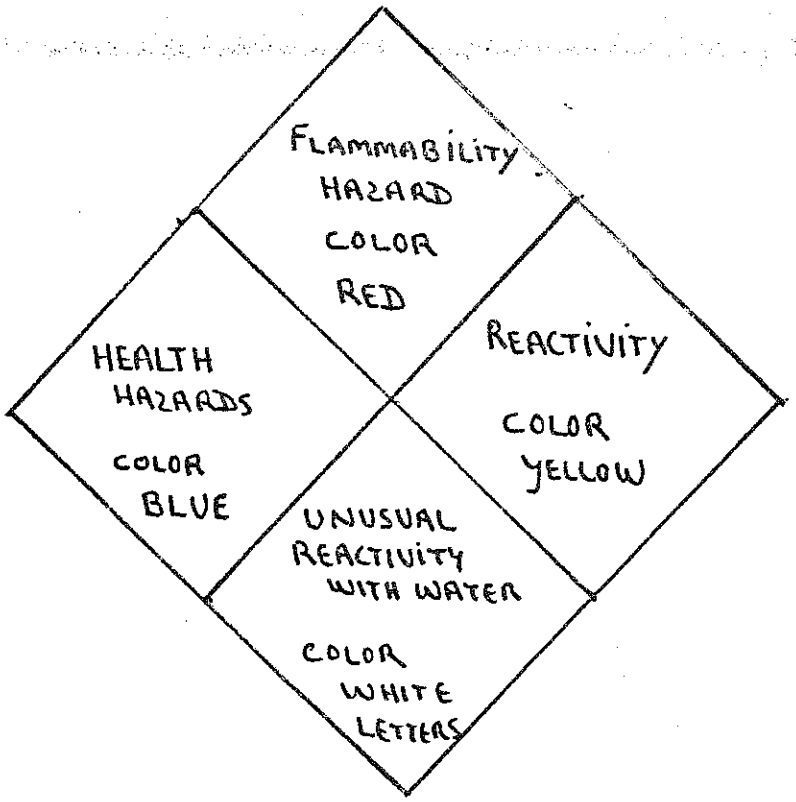
| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| X | 19,430 | 10'5"x30' | Steel | Spent cyanide sol'n | F007 F009 | UN1935 | 3 0 0 | |
| 21 | 21,000 | 10'x30' | Steel | Spent cyanide sol'n | F007 – F009 | UN1935 | 3 0 0 | |
| 24 | 21,000 | 10'x30' | Steel | Water | | | 0 0 0 | To be used for cyanide sol'n. |
| CYI | 22,100 | 11'2"x30' | Steel | Spend cyanide sol'n | F007 – F009 | UN1935 | 3 0 0 | |
| FG Tank | 7,875 | 10'8"x11'10" | Fiberglass tank | Empty | | | | May be used wh scrubber is in stalled. |
| 11 | 4,300 | 10'x9'6" | Steel | Storage for bags of lime. | | | 0 0 0 | Empty now;we are going to scrape the tank |
| 41 | 4,300 | 10x0'6" | Steel | Caustic solution empty | D002 | UN1824 | 3 0 1 | Empty now;we are going to scrape the tank |
| R-17 | 14,488 | 24'8"x10' | | Empty | | | | We are going to scrape th tank |
| 16 | 6,040 | 11'x8'6" | Steel | Neutralized nitric acid plating sol'n | D002 | NA9189 | 2 0 0 | We will use th tank to neutra lize acid |
| A1 Fuel oil tank | 1,174 | 5'x8' | Aluminum | Fuel oil,very small amount | | | 0 2 0 | No plans to scrape |
| 1 | 20,000 | 10'x32'8" | Steel | Empty | | | | Scrape tank |
| | | | | | | | | |

G 20

# LIST OF TANKS

| TANK # | CAPACITY GALS | DIMENSIONS | MATERIAL OF CONSTRUCTION | CONTENTS | EPA HW # | DOT SHIPPING# | NFPA CODE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| RR-1 | 8,057 | 6'8"x31'8" | Steel, rubber lined | Pickle liquor ($FeCl_2$) process tank | K062 & K063 | NA1760 | 0 1 1 | |
| R-15 | 8,000 | 6'10"x28'9" | Steel | Waste acid | D002 | NA9189 | 0 2 2 | Scrap tank |
| R-31 | 8,000 | 6'7"x32' | Steel | Waste acid | D002 | NA9189 | 0 2 2 | |
| R-38 | 2,400 | 6'6"x12'5" | Steel, rubber lined | Waste acid (playing sol'n) | D002 | NA9189 | 0 2 2 | |
| 20 | 550,000 | 47'x32' | Steel | Neutralized acid sludge | D002 | NA9189 | 0 0 0 | |
| 5 | 12,100 | 10'x20'6" | Steel | Silica tetra-chloride | D003 | UN1818 Corrosive | 1 2 3 | |
| 2 | 46,200 | 21'x17'8" | Steel | Solvent-chlori-nated and oil | F001 & F002 | NA1993 | 1 2 0 | |
| D-1 | 12,000 | 10/6"x18' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 1 2 0 | |
| 1-S | 23,400 | 11'x33' | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 1 2 0 | |
| 2-S | 17,200 | 11'x24'2" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 1 2 0 | |
| 19 | 842,000 | 63'x36' | Steel | Oil sludge and water | | NA1993 | 1 2 0 | |
| 22 | 1,855,000 | 77'x41' | Steel | Fuel oil-water contaminated with PCB | D003 | NA1993 | 1 3 0 | |
| CONL | 13,366 | 10'6"x20'3" | Steel | Chlorinated solvent | F001 & F002 | NA1993 | 1 2 0 | |

# NFPA CODES


FLAMMABILITY
HAZARD
COLOR
RED
HEALTH
HAZARDS
COLOR
BLUE
REACTIVITY
COLOR
YELLOW
UNUSUAL
REACTIVITY
WITH WATER
COLOR
WHITE
LETTERS

| Identification of Health Hazards Color Code: BLUE | | Identification of Flammability Color Code: RED | | Identification of Reactivity (Stability) Color Code: YELLOW | |
|---|---|---|---|---|---|
| | Type of Possible Injury | Susceptibility of Materials to Burning | | Susceptibility to Release of Energy | |
| Signal | | Signal | | Signal | |
| 4 | Materials which on very short exposure could cause death or major residual injury even though prompt medical treatment were given. | 4 | Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temeprature, or which are readily dispersed in air and which will burn readily. | 4 | Materials which in themselves are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures. |
| 3 | Materials which on short exposure could cause serious temporary or residual injury even though prompt medical treatment were given. | 3 | Liquids and solids that can be ignited under almost all ambient temperature conditions. | 3 | Materials which in themselves are capable of detonation or explosive reaction but require a strong initiating source or which must be heated under confinement before initiation or which react explosively with water. |
| 2 | Materials which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given. | 2 | Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. | 2 | Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. Also materials which react violently with water or which may form potentially explosive mixtures with water. |
| 1 | Materials which on exposure would cause irritation but only minor residual injury even if no treatment were given. | 1 | Materials that must be preheated before ignition can occur. | 1 | Materials which in themselves are normally stable, but which can become unstable at elevated temperatures and pressures or which may react with wate with some release of energy but not vi lently. |
| 0 | Materials which on exposure under fire conditions would offer no hazard beyond that ordinary combustible material. | 0 | Materials that will not burn. | 0 | Materials which in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water. |

The fourth space in the diagram shall be used to indicate unusual reactivity with water. The recommended signal to indicate this unusual reactivity with water and to alert the fire fighting personnel to the possible hazard of using water is the letter W with a line through the center (W).

Tanks 41, R-17, 1 and fiberglass tank are empty, except fiberglass tank; rest (41,R-17 & 1) we are going to scrap it. Fiberglass tank we may use as scrubber tank.

Aluminum tank has fuel oil in it. Fuel oil is not a hazardous material. It will burn and may ignite. NFPA code is Water from fire control or dilution water will cause water pollution. May irritate the skin and eyes on contact.

Vapor Pressure_____Sp.Gr. 0.92 ,Solubility in Water insoluble
pH_____

Silica tetrachloride: EPA HW No. D003

This material we have in tank 5. Violent reaction will occur on contact with water. Contact may cause burns to skin and eyes. If the material involved in fire, it will produce irritating and/or poisonous gases of HCl. Runoff from fire control will produce water pollution. It will not ignite readily. Explosive concentrations of gas may accumulate in tanks and sewer.

Liquid Chlorine: EPA HW No. D003,
DOT Shipping No. UN1017

Vapor Pressure_____Sp.Gr. 1.56 ,Solubility in Water SOLUBLE
pH_____

Facility has this material in rail car near office area. It is considered a poison. If inhaled, may be fatal. Vapors may cause dizziness or suffocation. Contact will burn to skin and eyes. Contact may cause frostbite. Runoff from fire control or dilution water may cause pollution. May ignite combustibles. Mixture with fuels may explode. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors or in sewers.

Tank 22 has contaminated No. 5 fuel oil with asphalt and 100-150 PPM PCB.

Tank 19 has oil sludge and water, which is also contaminated with PCB.

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
BOX 6066, GARY, INDIANA 46406
Area Code 219 949-8229

April 28, 1983

Captain Fred Kowski
1301 Broadway
Gary, IN 46407

Dear Captain Kowski:

Under the Federal EPA laws, our plant is required to notify the police, firemen and emergency hospital services of our status as an hazardous waste site.

We are located at 6500 Industrial Highway with the entrance road to our property NORTH of and parallel w/EJ&E overpass (at NORTH end of Gary airport). The road goes straight back, WEST.

The enclosed drawing shows the location of primary work areas, location of tanks w/material contained therein, amount of material and the hazard classification of material.

The types of injuries with which we would be concerned, would be inhalation of chlorine as the result of a leak anywhere from the tank car through the system; skin damage or eye damage from exposure to corrosive liquid; burns from stored solvents; an accidental mixing of waste cyanide and acid which would result in poisonous gas.

The best evacuation route would probably be over the EJ&E embankment so as to use it as a protective barrier.

Sincerely,

James Poisel

James Poisel,
Plant Manager

Encl.

G 25

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
BOX 6066, GARY, INDIANA 46406
Area Code 219 949-8229

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Sincerely,

James Poisel

James Poisel,
Plant Manager

Encl.

CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
BOX 6066, GARY, INDIANA 46406
Area Code 219 949-8229

April 28, 1983

St. Catherine Hospital Emergency Room
4321 Fir Street
East Chicago, IN 46312
Attn: Rosemary Moore
Johnnie Roscoe

Dear Miss Moore:

Under the Federal EPA laws, our plant is required to notify the police, firemen and emergency hospital services of our status as an hazardous waste site.

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The best evacuation route would probably be over the EJ&E embankment so as to use it as a protective barrier.

Sincerely,

James Poisel

James Poisel,
Plant Manager

Encl.

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OF ILLINOIS
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Area Code 219 949-8229

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Sincerely,

James Poisel

James Poisel,
Plant Manager

Encl.

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OF ILLINOIS
BOX 6066, GARY, INDIANA 46406
Area Code 219 949-8229

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James Poisel

James Poisel,
Plant Manager

Encl.

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Sincerely,

James Poisel

James Poisel,
Plant Manager

Encl.

EMERGENCY PROCEDURES 264.56

A. Whenever there is an imminent or actual emergency situation, the Emergency Coordinator (or his designee when the emergency coordinator is on call) immediately:

1. Activate internal facility communication systems, to notify all facility personnel and
2. Notify appropriate local agencies with designated response role of their help is needed.

B. Whenever there is a release, fire or explosion, the emergency coordinator will immediately identify the character, exact source, amount and a real extent of any released materials. He may do this by observation or review of facility records or manifest, and if necessary, by chemical analysis.

C. Concurrently, the emergency coordinator will assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment will consider both direct and indirect effects of the release, fire or explosion. He will take in account the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water runoff from water or chemical agents used to control fire and heat-induced explosions.

D. If the emergency coordinator determines that the facility has had a release, fire or explosion which could threaten human health or environment, outside the facility, he will report this finding as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he will immediately notify appropriate local authorities. He will keep himself available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He will immediately notify either the government official designated as the on-scene coordinator for the geographical area or the National Response Center issuing their 24-hour toll-free number, 1-800-424-8802.

His report will include:

(a) Name and telephone number
(b) Name and address of facility
(c) Time and type of incident
(d) Name and quantity of material(s) involved

to the extent known
(e) The extent of injuries, if any and
(f) The possible hazards to human health; or the environment outside facility

E. During an emergency, the emergency coordinator will take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, reoccur or spread to other hazardous waste at the facility. These measures will include, where applicable, stopping the processes and operations, collecting and containing released waste and removing or isolating containers.

F. If we stop operations in response to a fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves or piping.

G. Immediately after an emergency, the emergency coordinator will provide for treating, storing or disposing of recovered waste, contaminated soil or surface water or any other material that results from a release, fire or explosion at the facility.

H. Emergency coordinator will insure that, in the affected area(s) of the facility:

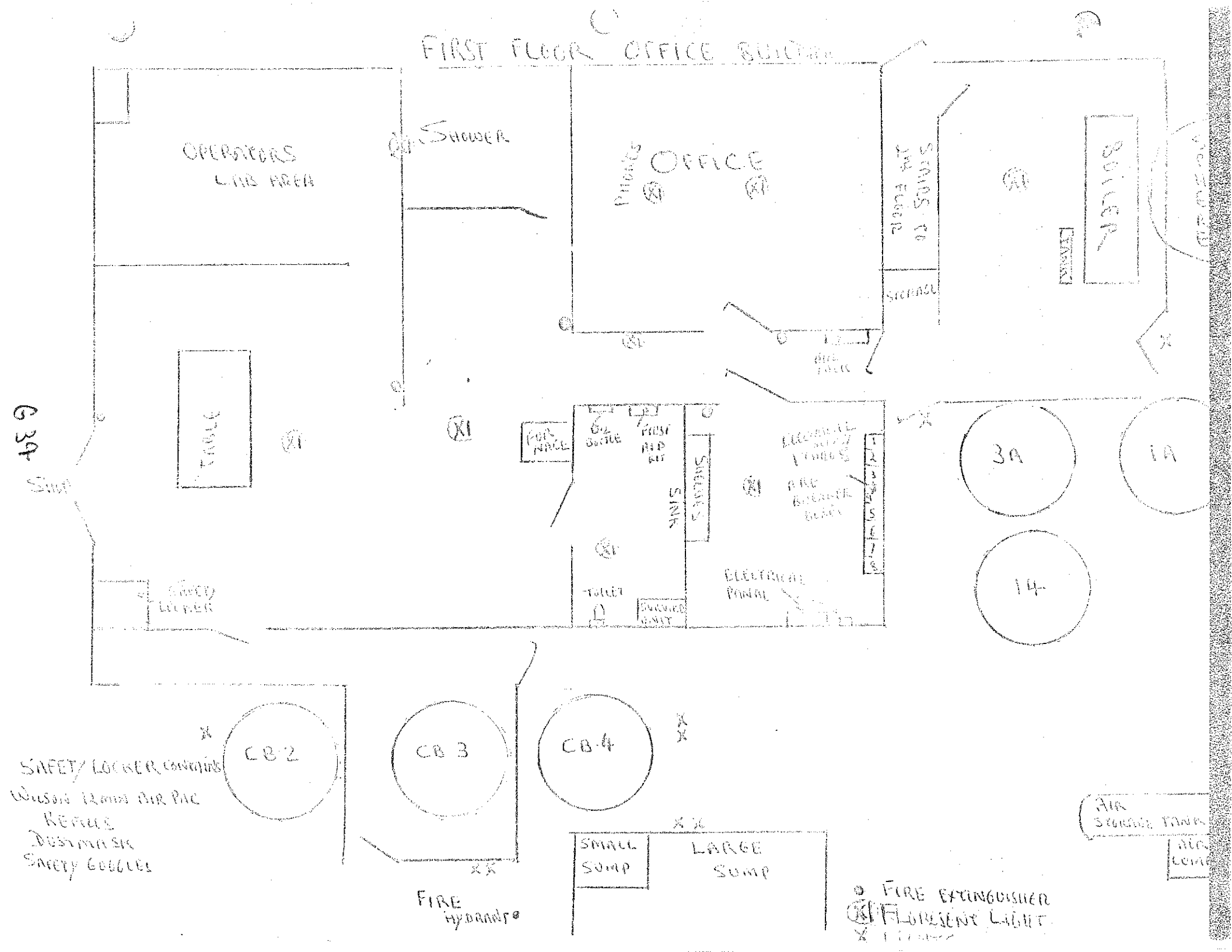
(a) No waste that may be incompatible with the released material is treated, stored or disposed of until cleanup procedures are completed and,
(b) all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

I. The owner or operator in our case, the emergency coordinator, will notify the Regional Administrator, and appropriate State and Local authorities, that the facility is in compliance with paragraph (H) of this Section before he will resume the operations in the affected area(s) of the facility.

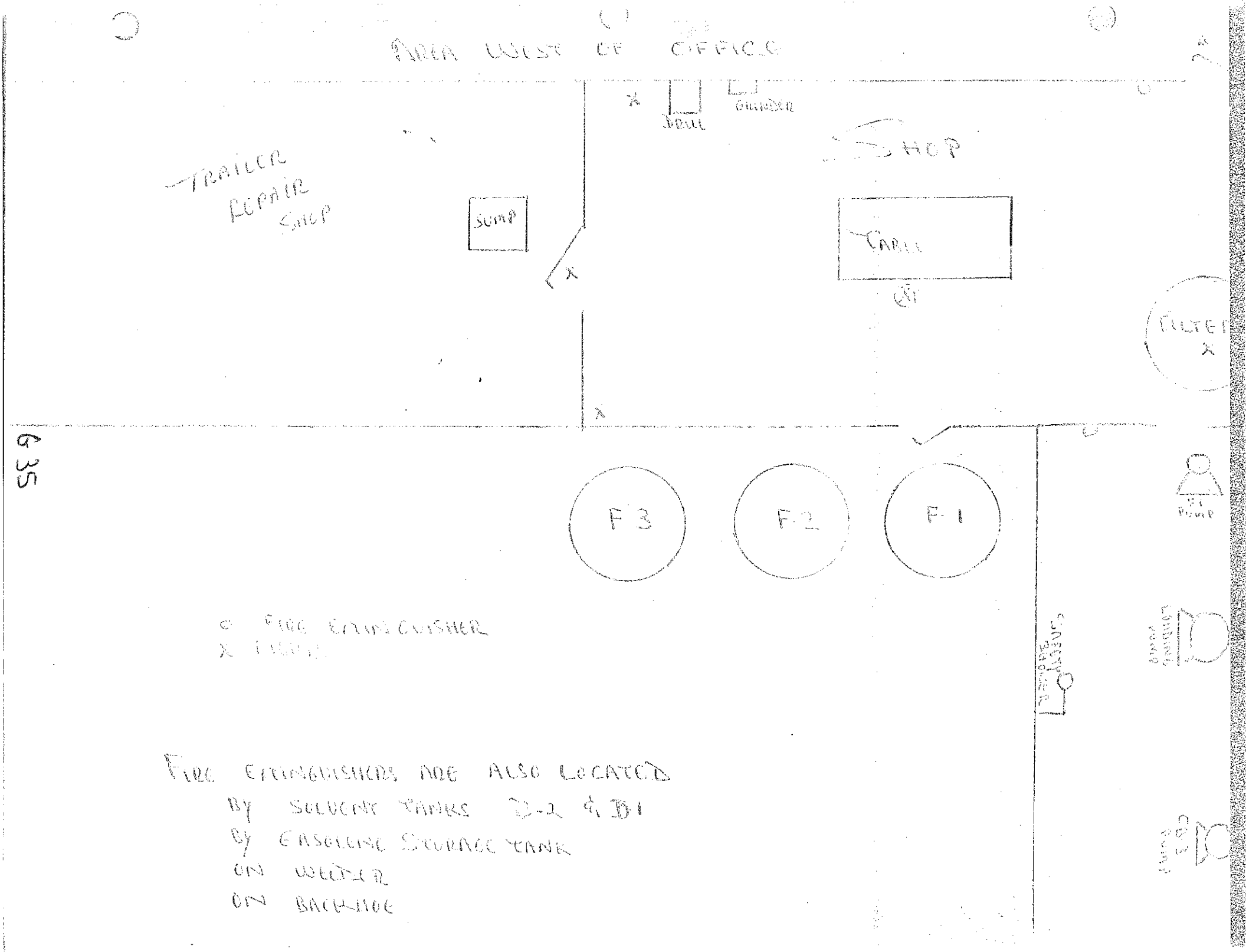
J. He will note in the operating record the time, date and details of the incident that requires implementing the contingency plan. Within 15 days after the incident, he will submit a written report on the incident to the Regional Administrator. His report will include:

(a) Name, address, and telephone number of the owner or operator;

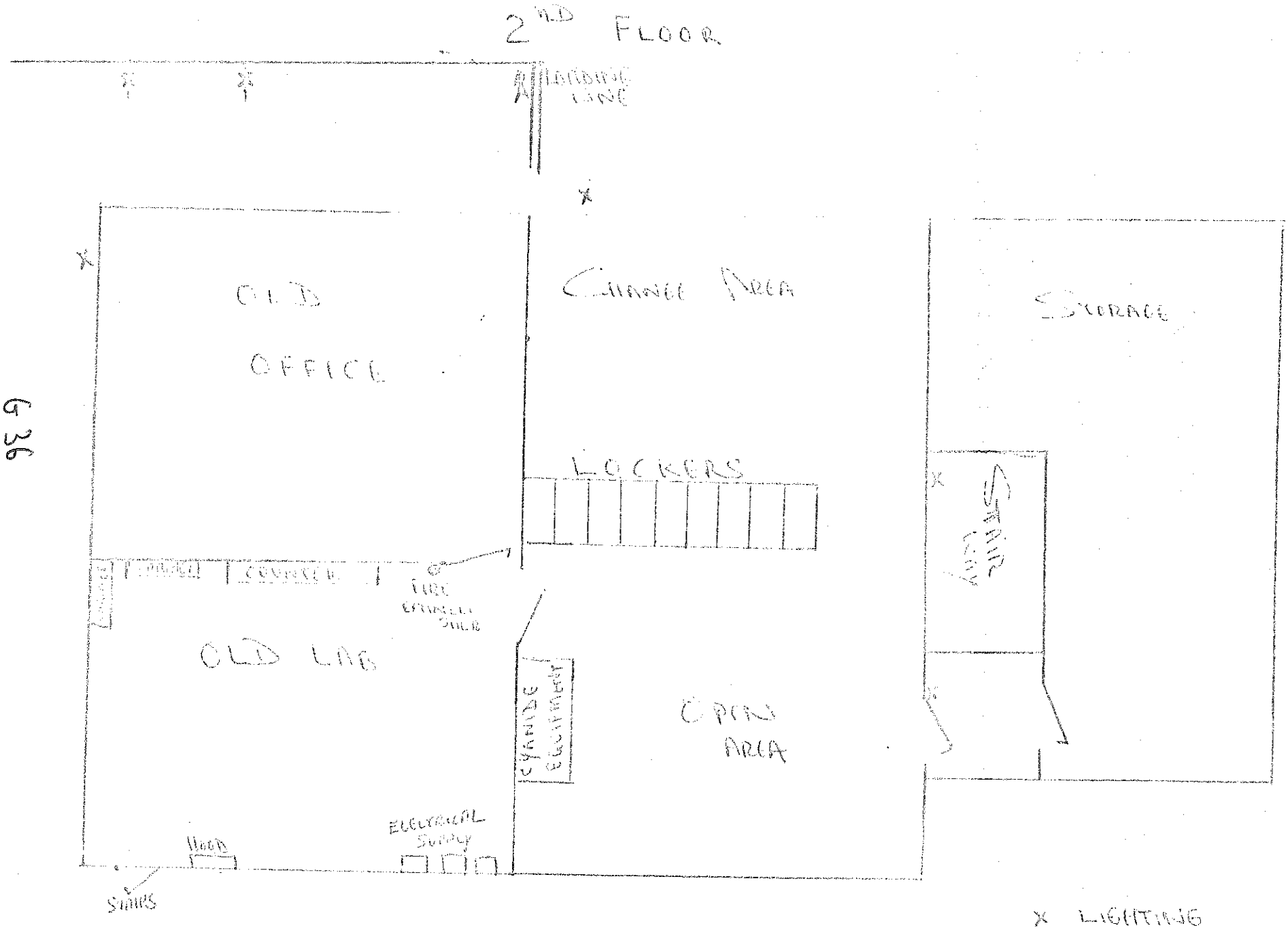
(b) Name, address and telephone number of the facility;
(c) Date, time and type of incident;
(d) Name and quantity of material(s) involved;
(e) The extent of injuries, if any;
(f) An assessment of actual or potential hazards to human health or environment and;
(g) Estimated quantity and disposition of recovered material that resulted from the incident.


FIRST FLOOR OFFICE BUILDING
OPERATORS LAB AREA
SHOWER
OFFICE
PHONES
STAIRS TO 1st FLOOR
STORAGE
BOILER
TABLE
FOR NACE
O2 BOTTLE
FIRST AID KIT
SINK
SHELVES
ELECTRICAL PANEL
TOILET
SURVIVE UNIT
SAFETY LOCKER
3A
1A
14
CB 2
CB 3
CB 4
SAFETY LOCKER CONTAINS
WILSON 12 MIN AIR PAC
REFILLS
DUSTMASK
SAFETY GOGGLES
FIRE HYDRANT
SMALL SUMP
LARGE SUMP
AIR STORAGE TANK
FIRE EXTINGUISHER
FLORESENT LIGHT

G 34


AREA WEST OF OFFICE
DRILL
GRINDER
SHOP
TRAILER REPAIR SHOP
SUMP
TABLE
FILTER
F 3
F 2
F 1
FIRE EXTINGUISHER
FIRE EXTINGUISHERS ARE ALSO LOCATED
BY SOLVENT TANKS D-2 & D1
BY GASOLINE STORAGE TANK
ON WELDER
ON BACKHOE

G 35


2ND FLOOR
LOADING LINE
OLD OFFICE
CHANGE AREA
STORAGE
LOCKERS
STAIR WAY
COUNTER
FIRE EXTINGUISHER
OLD LAB
CYANIDE EQUIPMENT
OPEN AREA
ELECTRICAL SUPPLY
HOOD
STAIRS
X LIGHTING

G 36

SECTION. H

## SECTION H

## PERSONNEL TRAINING

40 CFR 264.16 Requires:

A. (1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training.

(2) This program must be directed by a person trained in hazardous waste management procedures.

(3) Training program must be designed to ensure that facility personnel are able to respond effectively to emergencies.

(i) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment.
(ii) Key parameters for automatic waste feed cut-off systems.
(iii) Communications or alarm systems.
(iv) Response to fires or explosions.
(v) Response to ground-water contamination incidents.
(vi) Shutdown of operations.

B. Facility personnel must successfully complete the program required in paragraph (A) within six months.

C. Facility personnel must take part in an annual review of the initial training required in paragraph (A).

D. The owner or operator must maintain the following documents and records at the facility:

(1) The job title for each position, and the name of the employee filling each job.
(2) A written job description for each position. It must include the requisite skill, education or other qualifications and duties of employees assigned to each position.
(3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position.
(4) Records that document that the training of job experience required under paragraphs (A),(B) and (C) has been given to and completed by facility personnel.

E. Training records of current personnel must be kept until closure of the facility; training records on former employees must be kept for at least 3 years from the date the employee last worked at the facility.

Conservation Chemical Company of Illinois presently employs a total of 11 plant employees, including plant manager. The company has 1 Plant Manager, 1 Maintenance Foreman, 3 Operators, 1 Operator/Driver, 1 Maintenance person and 1 Maintenance/Welder.

Plant Manager is trained in hazardous waste management procedures by company's President, seminars and other published literatures and prior experience. He gave training to the remaining 7 employees as required by 40 CFR 264.16.

Facility personnel got the training in the following areas as per requirement of 40 CFR 264.16 and they got other training as required by our company's policy:

1. Basic Safety Rules
2. Using, inspecting, repairing and replacing:
   (a) Fire extinguishers
   (b) Face masks
   (c) Air supply system
   (d) Loudspeaker system operation
   (e) Use of safety equipment
3. Manifest - preparation, inspection and recordkeeping
4. Definition of hazardous waste and their characteristics
5. How to sample hazardous waste
6. Tank cleaning procedure
7. How to safely enter a tank and work therein
8. Electrical switch lockout procedure
9. Appropriate response to fire
10. Appropriate response to spill at facility
11. Response to spill during transportation
12. Hazardous waste shipments pickup before transportation
13. General knowledge of RCRA
14. How to inspect the hazardous waste storage area, container and tanks, (SECTION D)
    Facility prepare an inspection (weekly)
    Forms for the inspection of tanks and container
    Operating personnel inspect the areas weekly. Forms are in the container management and tank management section.
15. Contingency plan implementation (SECTION G)
16. Potential hazards of chemical facility
    Facility does have job description for each employee. Each employee got the training in the above mentioned area. All the training records are kept at the facility.

JOB DESCRIPTIONS

# PLANT MANAGER

## JOB RESPONSIBILITIES

In accordance with prescribed procedures and safety regu lations, oversee and manages all operations at Plant Level. This includes selecting, training, evaluating, and terminating employees at the Plant Level.

## JOB DUTIES

Approve all forms of written communications between plant office and customers and/or Corporate Office. Train and evaluate all employees on safety requirements. Conduct monthly safety meetings. Notify and train employees on current OSHA, RCRA & EPA rulings and oversee that proper regulations are being followed. Perform all duties as designated by President of Company.

# OPERATOR-A

## JOB RESPONSIBILITIES

In accordance with prescribed procedures and safety regulations, perform operations involving mixing of chemical materials in order to produce a new chemical or material. As required, perform vehicle loading and unloading operations to move and store chemicals.

## JOB DUTIES

Receive directions from Foreman or Plant Supervisor on materials to be mixed or reacted. Make necessary hose connections and valve changes necessary to transfer materials from storage to reacting vessel. Activate pumps in order to move material and monitor process. Observe reaction process to prescribed measures or methods. Continue to adjust chemical reactions based on results of chemical tests and gauge monitoring. Determine when chemical reaction has been completed to required specifications. Take actions to store material in an appropriate storage areas.

Be prepared to take appropriate emergency actions to resolve operating difficulties. Perform operations to include loading and unloading of truck and rail equipment. Perform cleanup operations to clean the area of debris and chemical spill material.

Neutralize hazardous waste. Do the routine chemical analysis, e.g., titration, ph, gravity determination, etc.

## ADDITIONAL DUTIES FOR OPERATORS

Every load of pickle liquor that is received must be checked for color, Sp. Gr., and mils. The Sp. Gr. and mils of the sample should conform closely to the chart.

EXAMPLE: 1.24 sp. gr. 10 Fe

$$\frac{24 \text{ mils} \times .5585}{1.24} \quad 10.81 \text{ Fe}$$

This sample is OK.

EXAMPLE: 1.24 sp. gr. 10 Fe

$$\frac{16 \text{ mils} \times .5585}{1.24} \quad 7.21 \text{ Fe}$$

This means that the sample is probably contaminated with another heavy metal or your chemicals are bad. CONTACT the Plant Manager <u>before</u> unloading.

## QUALIFICATIONS

Minimum high school graduation. 3-5 years of previous experience as operator in chemical manufacturing company. Mechanical aptitude. Some knowledge of Chemistry is preferred. Must be able to use calculator and must be good with mathematics.

# OPERATOR-B

## JOB RESPONSIBILITIES

Perform routine operations involving mixing of chemical materials in order to produce a new chemical or material. As required under the supervision of Operator A, perform vehicle loading and unloading operations to move and score chemicals.

## JOB DUTIES

Under the direct supervision of Operator A or Foreman, make reaction. Make necessary hose connections and valve changes nedessary to transfer materials from storage to reacting vessels. Activate pumps in order to move material and monitor process. Take actions to store material in an appropraite storage areas. Must be able to drive backhoe, front loader and pickup trucks. Perform operations to include loading and unloading of truck and rail equipments. Perform cleanup operations to clean the area of debris and chemical spill material. Has to learn how to neutralize the hazardous waste, learn routine chemical analysis, and learn what to look for to consider the reaction is completed.

## QUALIFICATIONS

High school graduation. 1-2 years of previous experience as operator. Mechanical aptitude is a must. Good with the numbers.

# DISPATCHER-OFFICE CLERK

## JOB RESPONSIBILITIES

At the operating plant level, perform dispatching duties which include receiving trucking requirements, assigning trips to drivers, and maintaining necessary drivers logs and records. Perform general office operations which include preparation of correspondence, customer invoicing, payables receiving and coding, payroll calculations, and maintenance of other files and records as required by the office operation. A person will be expected to know how to and will be required to perform all of the functions listed.

## JOB DUTIES

In accordance with directions from the Administrative Manager and the Plant Manger, persons will perform the following operations:

Dispatching-Receive customer inquiries for service. Process new inquiry on inquiry form. For existing customer, schedule pickup in accordance with established procedures. Prepare dispatching documents to include bill of lading, credit cards, routing information, and other documents required by the driver. Schedule material for pickup to include assigning a driver and dispatching the driver. On return of the driver, correct completed paperwork required for invoicing and fuel tax reports. Check documents for accuracy of material and completion of material. Prepare material required for invoicing. Maintain logs required to control trucking operations. Assure that drivers do not exceed DOT minimums for hours. Refer unusual situations to Plant Manger.

Maintain customer information to include routing isntructions and equipment required for material pickup.

## CLERICAL ACCOUNTING

Perform office clerical functions to include maintaining file system, receiving and distributing mail, preparing material to be mailed out, preparing company correspondence, and other functions as required. Requires ability to use transcriber.

Perform accounting functions to include preparing and maintaining customer files, preparing invoices, maintaining receivable records, processing payables, preparing payroll records, and compiling other accounting data as required.

## QUALIFICATIONS

High school graduation. 3-5 years of previous experience as a dispatcher is a must. Familiarity with DOT regulation is helpful. Has to have ability to use calculators and adding machine. Must have pleasant phone voice. Must have accounts payable and receivable knowledge.

# MAINTENANCE TECHNICIAN

## JOB RESPONSIBILITIES

Perform maintenance on plant machinery and equipment and vehicles to include but not limited to performance of the following operations: welding, painting, rubber lining, pipe fitting, plumbing, carpentry, wiring, and other functions necessary to repair a place or install plant equipment.

## JOB DUTIES

Repair the chemical hoses. Hook up of railcars and trucks. As directed by Foreman or Plant Manager, install piping, valves and equipment. Do the chemical equipment installation. Repair heating and cooling equipment as necessary. Required to do the plumbing work. Do the preventive maintenance work. Do the minor repair work on trucks. Lift trucks. Has to do painting work.

## QUALIFICATIONS

Must have knowledge of heating and cooling equipment. 3-5 years of previous experience as maintenance man in a manufacturing plant.

## WELDER

### JOB RESPONSIBILITIES

Welds and repairs machinery and equipment and vehicles. Welds with gas, arc and in any position. Burns and cuts as required. Designs and layouts steel and plumbing requirements. Performs general maintenance in other operations as painting, rubber lining, pipe fitting, plumbing, carpentry, wiring and other functions necessary to repair in place or install equipment. Cleans work area and cleans up work site.

### JOB DUTIES

Does all maintenance new and old on all equipment and vehicles. Directs when necessary Maintenance Technicians and Welders of less skill levels.

### QUALIFICATIONS

3-5 years of welding and cutting experience is a must. Welder license is preferred.

## WELDER TRAINEE OR WELDER TEMPORARY

### JOB RESPONSIBILITIES AND DUTIES

Same as in Welder above but with exception of directing other personnel.

# TRUCK DRIVER

## JOB RESPONSIBILITIES

Inasmuch as the nature and duties of transport drivers require them to work independent of continual direct supervision; driver is charged with the responsibility of insuring that their units are properly inspected prior to departing and upon return from a trip. He is responsible for ensuring that the proper placards are prominently displaced on their units. He must have to make sure the load he is transporting has proper shipping papers, manifest and the load is properly packaged. In the event of an accident, breakdown or other emergency, the driver must follow the established company procedures for protecting the scene. Obtaining assistance, notifying the company and local authority and gathering information necessary for making reports.

## JOB DUTIES

He has to load and unload the materials from a storage tank or into a storage tank. He may have to travel interstate or intrastate to pickup, or to deliver a load. He will have to keep a log of time and mileage. He has to inspect the load for proper labeling, marking manifest, condition of packaging, etc. He will help operator in his spare time. Must do minor repair work on trucks.

## QUALIFICATIONS

Must be 21 years of age. Must be conversant with and can read and write the English language. Must be physically qualified in accordance with DOT medical criteria as specified in Sections 391.41 of the Federal Motor Carrier Safety Regulations. Holds a current and valid operator's or chauffeur's license. Has successfully completed a roadtest and passed a written examination. Must be familiar with all the DOT regulations.

# LABORER

## JOB RESPONSIBILITIES

Perform manual operations as directed by the Plant Manager or Foreman to assist others in cleaning, loading, unloading, construction operations, manual labor, or work of a nontechnical nature.

## JOB DUTIES

Assist with and/or unload bulk tank trucks. Requires obtaining necessary hoses and pumps. Making necessary connections, and operating pumps and valves to unload material. Perform the same operation on unloading tank cars. In all instances prescribed, safety procedures will be observed. Unload and handle drums of material using available eqiupment. Perform general cleaning operations to include handling, moving, and storage of drums and other materials. Perform general cleaning operations in contruction involving removing and disposing of accumulated debris and material. Perform other operations where maintenance personnel need assistance in handling, hauling or removing materials. Operate backhoe, front loader and pickup truck.

## QUALIFICATIONS

Minimum high school graduation. Must be able to read, write and understand the chemical terms. Must have mechanical aptitude.

# 1. BASIC SAFETY RULES

At Conservation Chemical Company, safety is everybody's concern. The prevention of accidents is of vital concern to the company, and is an employee's most important duty to himself, his family, and his fellow employees. It is therefore the duty of each employee to correct an unsafe condition immediately, if possible, or report any unsafe condition or any violation of safety rules to his immediate supervisors.

A. Personal Protective Eqiupment

1. Hard hats are to be worn when in any loading, unloading, warehousing, operating or shop area.

2. Safety glasses are to be worn in all locations and at all times except when in office, break or lunch areas.

3. All operating employees are to wear safety shoes at all times.

4. Chemical splash goggles are to be worn when handling any liquids and any dusty solids.

5. Face shields are to be worn when handling any corrosive materials.

6. Protective suits made of chemical resistant material are to be worn when handling any corrosive material.

7. Rubber gloves shall be worn at all times when handling any chemicals.

8. Approved respirators shall be worn while handling products and materials that produce corrosive and toxic vapors, fumes, mist or dust.

B. Practices

1. Smoking is strictly prohibited in all areas except where designated. Drivers, when transporting Class A and B flammables, are not permitted to smoke when driving.

2. All employees are expected to keep their work area and equipment in a clean and orderly condition.

3. It is recommended that jewelry not be worn.

4. Horseplay is strictly prohibited.

5. Safety signs shall be observed and complied with.

6. Vehicles shall not exceed 15mph while operating in plant areas.

7. Industrial trucks shall be operated only by trained and authorized employees.

8. All machine guards shall be kept in place.

9. Before repairs are made on moving or electrical equipment, all machinery and auxiliary equipment shall be stopped, de-energized and locked out.

10. During loading or unloading of flammable products in containers, tank or trailer, the containers, tank or trailer should be grounded.

11. All injuries, no matter how slight, must be reported and receive immediate treatment. Supervisory personnel should be informed immediately of all injuries.

3. The Manifest

Manifest means the shipping document originated and signed by the generator.

General requirements for generator: 40 CFR 262.20

1. A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage or disposal must prepare a manifest before transporting the waste off-site.

2. A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

3. A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

4. If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

Required information: 40 CFR 262.21

(A) The manifest must contain:

1. Manifest document number.

2. Generator's name, mailing address, telephone number, and EPA identification number.

3. Transporter's name, and EPA identification number.

4. The name, address and EPA identification number of the designated facility and an alternate facility if any.

5. Proper shipping name of the waste required by regulations of the U.S. DOT in 49 CFR 172.101, 172.202 and 172.203.

6. Total quantity of each hazardous waste by units of weight or volume and the type and number of containers as loaded into or onto the transport vehicle.

(B) The following certification must appear on the manifest: "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA."

Number of Copies: 40 CFR 262.22

Manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator.

Use of the Manifest: 40 CFR 262.23

(a) The generator must:

1. Sign the manifest certification by hand.
2. Obtain hand written signature of the initial transporter.
3. Retain one copy in accordance with 262.40(a).

(b) Generator must give remaining copies to the transporter.

(c) For shipment of hazardous waste solely by railroad or solely by water within the U.S., the generator must send three copies of the manifest dated and signed to the owner or operator of the designated facility. 40 CFR 262.40 generator must keep a copy of each manifest signed for 3 years.

Requirements for Transporter: 40 CFR 263.20

(a) Transporter may not accept hazardous waste from a generator without manifest.

(b) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste. Transporter must return a signed copy to the generator.

(c) Transporter must ensure that the manifest accompanies the hazardous waste.

(d) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:

    (1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest.

    (2) Retain one copy of the manifest.

    (3) Give remaining copies of the manifest to the accepting transporter or designated facility.

(e) Paragraphs (c) and (d) do not apply to rail or water transporters.

Recordkeeping: 40 CFR 263.22

(a) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and owner or operator of the designated facility for a period of three years.

Requirements for Facility: Sub Part E
Use of Manifest System 40 CFT 264.71

(A) If the facility receives hazardous waste accompanied by the manifest, the owner or operator or his agent must:

    1. Sign and date each copy of the manifest to certify that the HW covered by the manifest was received.

    2. Note any significant discrepancies in the manifest.

    3. Give one signed copy to the transporter.

    4. Within 30 days after the delivery send a copy of the manifest to the generator.

    5. Retain one copy of the manifest at the facility for at least three years.

4. Hazardous Waste and Their Characteristics

No material can be a "hazardous waste" without first being a "solid waste." RCRA defines a solid waste as:

> "Any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial or mining and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage or solid or dissolved material in irrigation return flows, or industrial discharges which are point sources subject to permit under Section 402 of the Federal Water Pollution Control Act--or source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954." A solid waste is a hazardous waste is it is not excluded under 40 CFR 261.4(b) and it either (1) is listed as a hazardous waste in Sub-Part D, (2) is a waste mixture containing one or more hazardous waste listed in Sub-Part D or (3) exhibits one or more characteristics of hazardous waste identified in Sub-Part C.

CHARACTERISTIC OF IGNITABILITY

EPA defined ignitable waste to include the following:

1. Liquid having a flashpoint of less than 140°F.
2. Non-liquids liable to cause fires through friction, absorption of moisture, spontaneous chemical change or retained heat from manufacturing or liable, when ignited, to burn so vigorously and persistently as to create a hazard.
3. Ignitable compressed gases.
4. Oxidizers.

CHARACTERISTIC OF CORROSIVITY

EPA defined corrosive waste to include:

1. Aqueous wastes exhibiting a pH of less than or equal to 2.0 or greater than or equal to 12.5.
2. Liquid waste capable of corroding steel at a rate greater than 0.250 inches per year.

CHARACTERISTIC OF REACTIVITY

EPA defined reactive waste to include waste which:

1. Readily undergo violent chemical change.
2. React violently or form potentially explosive mixture with water.

3. Generate toxic fumes when mixed with water or in the case of cyanide or sulfide gearing wastes, when exposed to mild acidic or basic conditions.

4. Explode when subjected to a strong initiating force.

5. Explode at normal temperatures and pressure, or

6. Fit within DOT's forbidden explosives Class A explosives or Class B explosives classifications.

CHARACTERISTIC OF EP TOXICITY

EPA addressed this problem by developing a test procedure called the Extraction Procedure (EP) designed to identify wastes likely to leach hazardous concentrations of particular toxic constituents into the groundwater under conditions of improper management.

5. Sampling of Tank Car and Tank Truck Shipments

Liquid Chemicals

Purpose

The sampling of chemicals in tank cars and tank trucks can be hazardous. The risk of fire or personnel injury can be minimized by the use of sound sampling techniques and proper equipment and by thorough training of the personnel involved.

A. Properties of Liquid Chemicals

All personnel working with the liquid chemicals should be familiar with the properties of the material involved. Information revealing hazardous properties should be available in ready-reference form. This includes:

Flash point $^{o}F$
Auto ignition temperature $^{o}F$
Explosive units. lower and upper (% by volume in air)
Vapor density ratio (air=1)
Boiling point $^{o}F$
Reactivity - stability
Personnel Hazard
Maximum allowable concentration

B. Equipment and Procedures

(1) Placement of Tank Cars and Tank Trucks

Tank cars should be accurately spotted and on the level track. Brakes must be set and wheels blocked on cars being loaded or unloaded. Standard blue railroad caution signs must be placed on the truck, at least one car length away. The signs must bear the words "Stop--Tank Car Connected" or "Stop--Men at Work."

Tank trucks should be accurately positioned in relation to the piping connections, preferably on level ground. Brake must be set and the wheels securely chocked. If a semi-trailer is disconnected from the tractor, the tractor end must be securely blocked to prevent falling.

If the tank car or tank truck contains flammable material, the tank must be effectively grounded by means of an approved cable and clamping device before any sampling is performed.

The characteristics of the material to be sampled will govern the type of protective equipment required. Since sampling may prevent such hazards or splashing or spilling, protective clothing, goggles and/or face-shields and rubber gloves should be worn. Respiratory protection should be worn when required.

(2) Sampling Non-Pressurized Tank Cars and Tank Trucks

It should be assumed that 10ml internal pressure is present which must be vented before sampling is attempted. If possible, the tank should be vented by opening the dome vent or by raising the safety valve. If a subsequent amount of vapor discharges when the dome cover is partially loosened, the tank car or tank truck must be further vented or cooled to reduce pressure before proceeding. Workmen should position themselves so that vapor or liquid droplets will blow away from them when venting. If the chemical in question is flammable, spark-resistant tools should be used in removing dome covers.

In sampling, it is usually necessary to rinse the sample container in the product to assure purity of the sample. Care must be used in disposing of the rinse material to avoid creating a hazard. The safest practice is to pour the rinse material back into car or truck. Only sampling accessories such as a dip basket or a sampling thief-resistant to chemical attach should be used. Sample bottles must not be filled liquid full, sufficient vapor space must be left to allow for thermal expansion.

(3) Sampling Pressurized Tank Cars and Tank Trucks

Normally samples caught under pressure will be contained in special pressure containers or bombs. Such containers must be capable of withstanding the pressures to which they are exposed and must never be filled liquid full. If the pressure of the chemical to be sampled does not require a pressure bomb, a special pressure sample bottle with an external pressure relieving cap or closure may be satisfactory. Avoid the use of screw-top sample bottles.

C. Handling and Transporting Samples

All sample containers should be capped and tagged immediately so as to show complete identification. The external surfaces of containers should be cleaned free of liquid chemical by careful wiping and/or water rinsing. In transporting samples, safety type carriers should be used. The recommended carrier for general use is a compartmented box with a suitable handled. Volatile materials should not be left in a warm place because of the danger of over-pressure due to temperature rise.

6. Tank Cleaning Procedure

No employee should enter any tank without reporting to and securing approval from his immediate supervisor who in turn secures entry approval from the supervisor to whom the tank is assigned. Supervisors of various men to be involved should review and complete the Entering Tanks Permit form jointly.

Evaluate the hazards of last contained chemicals. If the tanks contain flammable liquids before, then all sources of ignition should be elimiated.

Personnel protective clothing, face-shield, gloves, rubber shoes, coverall or rubber suits must be worn. Depending upon the hazards of chemical, respiratory protection should be used.

Drain out all the materials from the tank. Take a sample for analysis. Close the container and apply proper label on the container.

Isolate tank completely from all other systems and equipment. Ventilate the tank. Open the side manhole cover carefully. Suck out the remaining material from the tank by pump. Take a sample of this material also; if the analysis shows a good product, close the container and apply proper label. If the product is contaminated and can be reworked, apply the proper label and rework at the first earliest moment. If the product cannot be used, rework then apply hazardous waste label on container if the product falls into hazardous substance category. In any case, do not discharge any product on ground or in sewer.

If the last contained product was solvents, easily evaporate then simple air or nitrogen purge should clean the tank out real good. Let it purge at least for four to eight hours, depending upon the size of the tank.

If the last contained product was acids or alkalis, then best way to clean out is by water flushing the tank. Water used for cleaning should be neutralized before discharging to sewer. If the last contained product is very viscous material, you may have to use solvent for cleaning the tank. The spent solvent should be collected, analyzed and proper hazardous waste or spent

solvent for reclamation label should be applied.

Sometimes, you may have to use steam for cleaning the tank, e.g., alkalis, then close the side manhole cover. Hook up low pressure steam, and let it steam for four to eight hours and collect the condensate in a tank or container for neutralization before discharging to sewer.

After the tank is cleaned, make a report how the tank was cleaned and how much materials was collected as good product and how much waste was generated. This report should be filed with all the other RCRA;s documents.

Before any new product is allowed in that tank, check whether all the connections is on the tank. Manhole cover is closed tight, and leakproof. First time when the new product is put in clean tank, let the maintenance man around during loading for possibility of leak. Check the tank everyday for first 2-3 days to make sure the tank is not leaking.

If the tank needs cleaning from inside by putting man inside, please follow the Entering Tank procedure.

7. Entering Tanks and Other Enclosed Spaces

Chemical plant personnel must enter enclosed spaces, hereafter called tanks, to clean, inspect, repair and perform other duties. Enclosed spaces are potentially hazardous including:

(a) Enclosures with limited access openings.

(b) Tanks, pits, tubs, vaults, vessels or other confined spaces with one side oepn to the air but so deep as to require entrance and aid of an assistant in case of emergency.

(c) Hazards commonly encountered are:

(i) Toxic vapors in fatal concentrations.
(ii) Flammable gases, with potential of fire or explosion.
(iii) Lack of oxygen, causing asphyxiation.
(iv) Electric shock from portable lights, tools.
(v) Injury from mechanical equipment such as mixers.
(vi) Bodily injury from direct contact with corrosive or dermatitis producing chemicals.
(vii) Physical hazards such as slipping, falling.
(viii) Burn hazards resulting from accidental opening of a steam valve.

The hazards in an inherent tank entry can be avoided or overcome by pre-planning and educating, physically isolating and cleaning it, and using the work permit.

A. Pre-Planning and Education

Evaluate the hazard potential. Worker and supervisor alike should fully be informed both as to fundamentals and specific requirements. There should be appropriate follow-up to insure the system is being followed exactly. Follow-up is necessary.

B. Preparation of Tank

1. Cleaning: According to the nature of the product, the tank should be made clean and void of residual product by hot or cold water flush, by steaming, by chemical neutralization or by air or nitrogen purge with harmful vapors vented safely to the outdoors.

If the tank is steamed, it should be allowed to cool before entry. Steam should not be introduced below liquid surfaces. Nonmiscible solvents sometimes will stratify and bump out at almost explosive pressure due to the difference in boiling point.

Protective clothing and respiratory protection should not be used as a substitute for cleaning and ventilating.

2. Ventilation: The tank should be thoroughly ventilated. Prefereably by some positive method of mechanical exhaust ventilation so arranged as to avoid recirculating contaminated air. After the tank is cleaned and ventilated, the mechanical exhaust ventilation equipment should be kept operating to provide secondary protection.

Should decontamination involve flammable liquids, vapors, gases, or dusts, all sources of ignition should be eliminated.

3. Isolation: Tank should be completely isolated from all other systems and equipment. In all cases where lines have contained hazardous fluids or inert gas, or where they contain fluids at high temepratures and high pressures, the lines should be physically disconnected by removal of valves, spool pieces, or expansion joints, and blank flanges placed in the lines.

4. Lock-out: Line disconnect switches supplying power to any mechanical apparatus in the tank should be tagged and locked in the "off" position. The key should be kept by the man in the tank, and he alone should be authorized to unlock the switch and remove the tag on completion of the job.

5. Testing: A test of the atmosphere in the tank should be made immediately before entering and before performing any hot work such as lighting of torches.

C. Issuance of Permit for Entry

It serves as a method of formalizing agreed upon procedures and also as a checklist to insure that all existing hazards are considered, evaluated and correct protective measures taken. Commencement of a new shift should always require reinvestigation and a new permit. No permit should be valid except for the job, location, persons and time specified.

WORK PERMIT

REQUIRED FOR:

1. Welding or cutting in any location other than shops or auxiliary shops.
2. Hot work in hazardous and semi-hazardous areas.
3. Vessel Entry Work.

| DATE | From A.M. P.M. | To A.M. P.M. | TYPE OF WORK |
|---|---|---|---|

ISSUED FOR WORK On/In _____

WORKMAN ASSIGNED TO JOB  DEPT ASSIGNED JOB  AUTHORIZING SPVR.

Check (✓) only if answer is YES

1. _____Is welding and cutting necessary?

Are lines carrying material to or from equipment blinded or removed?

2. _____Flammable  _____Corrosive

Are shut-off valves tagged or locked in OFF Position?

3. _____Flammable  _____Corrosive  _____Steam

Equipment Preparation

4. _____Steamed  _____Washed  _____Purged

Source of Power for agitators and pumps lock in OFF Position?

5. _____Electrical Switches  _____Belt removed

Protective Equipment needed?

6. _____Respiratory protection  _____Goggles  _____Air Mover

_____Fire Protection  _____Clothing  _____Safety Belt

Will an operating representative be present?

7. _____

Has equipment been checked for residuals?

8. _____

Have hazards of nearby areas been considered?_____

9. _____Other floor levels  _____Welding Machinery properly grounded

_____Sewers  _____Other machinery

PRECAUTIONS

A. Spark-resistant hand tools are usually preferred. Portable power tools and equipment such as lamps and extension cords should be grounded, and of the explosion-proof type. It may be advisable to use air-operated power tools. Ladders used in tanks should be lashed at the top and if possible, at bottom. Cylinders of oxygen or other gas should never be taken into tanks, and should be turned off. The cylinder valve when not in use should also be turned off. Special signs should be posted near the tank.

B. Personnel protective equipment: The use of canister-type masks, which operate on the principle of chemical absorption or mechanical filtration, may not afford adequate protection and should therefore, not be used. Chemical resistant protective complete suits, chemical goggles, hard hats, gloves and safety shoes should be worn to protect against routine hazards.

C. Emergency and Rescue: Where the potential exposure in the tank is acute or requires an employee to wear respiratory protection or where rescue may be difficult, he must be provided with a body harness with lifeline attached. It is good practice to use body harness for any wellel entry work. When the diameter of the manholes are smaller than 20", wrist harnesses are often practical. There should be an observer who will keep the man in the tank always within his vision. The observer may pass tools, but he must have no other job. In case of emergency, the outside observer must never enter the tank until he is relieved at his post. It is his job to summon aid immediately. For rescue purposes, at least one unit of self-contained breathing equipment should be located outside and convenient to the tank together with harness, rope and such other emergency equipment as may be necessary.

8. Electrical Switch Look-Out Procedure

The standard control circuit switch or push-button switch does not lend itself to "Locking Out" and has also been known to "short out." Therefore, positive protection is gained only by pulling and locking the main switch in the open position.

Before work is started on electrically driver equipment, the operating department should stop the equipment and be responsible for pulling the main switch and for attaching a lock-out bar, lock, and tag. Maintenance personnel should then add their single or several locks and tags. The operator should make double certain he has locked out the switch controlling the unit to be worked on. This check can be made by pushing the start button and then checking to see whether the equipment has started or not.

Tags should never be used in place of a lock; this destroys the "Security" of locking out. The maintenance man's name, department, date signed and supervisors are normally included in the information on the tag. The employee signing the tag indicates by his signature his possession of the lock's only key. He and his department supervisors are the only ones who can authorize removal of the lock in case the key is lost or mislaid.

Equipment and controls used on circuits in excess of 600 volts do not lend themselves to the locking-out procedures outlined. In these instances, disconnects must be pulled and tagged.

9. Appropriate Response to Fire

Plant intercom system will be used to sound an alarm. All personnel will immediately leave the plant, and report to the designated assembly point for a headcount and for subsequent duty assignments.

We will notify the fire and police departments first. We will have one person outside the facility to guide the firemen and police to the scene.

If the fire is small, plant personnel authorized will try to keep the fire under control. Plant emergency coordinator will advise the firechief about the content and the hazard in the area. Fire department has our plant's tanks chart, which is updated, so they have general idea of the chemicals and hazards involved in the fire at our facility.

We will notify in writing to the Indiana State and Federal EPA about the fire. We will investigate thoroughly the cause of the fire and we will submit our explanation to the local authorities also. All the waste produced by the fire we will put in a container and dispose it at a later date.

10. Response to Spill at Facility

Facility does not have too many different kinds of materials. Due to the small size of the plant, all of our employees are aware of hazards of all the chemicals plant has. In case of spill, the employee will follow the outlined procedure:

1. He will call emergency coordinator.
2. First he will wear his protective safety equipment.
3. He will try to get the help of other co-workers.
4. If the spill is small, he will try to take the spill with sand or inert absorbent material. If the spill is of a solid, he will try to put in a clean container.
5. Spill they collected in a container, they will appropriately label. If the spill cannot be reworked, will store the material in a container for off-site disposal.

6. If the spill is large and needs evaluation, plant intercom system will be used to sound an alarm. All personnel will immediately leave the plant in a safe and appropriate manner. Head count will be taken. Emergency coordinator will call local authority. If the spill is of flammable material, he will also call the fire department. Authorized plant personnel will try to build a dike far ahead of spill for later disposal. Specific chemical spills response procedures are individually in detail explained in Contingency Plan.

11. Response to Spill During Transportation: 40 CFR 260.30 Immediate Action

(a) In the event of a discharge of hazardous waste during transportation, the transporter must take immediate action to prevent human health and environment.

(b) When authorities on the scene declare an emergency, they can temporarily suspend the requirement that waste can be handled only by those holding EPA I.D. numbers and complying with the manifest system. This suspension ceases when the emergency no longer exists.

(c) In certain cases DOT requires that the transporter telephone the National Response Center 800-424-8802, to supply information on a discharge. In the District of Columbia, the number is 202-426-2675. Report in writing as required, by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590, must be submitted; they will forward a copy to EPA.

Our drivers are trained in the spill response regulations. Usually, they carry with them (1) emergency response guide, (2) manifest, (3) rubber suits, (4) rubber safety shoes, (5) long sleeve neoprene or solvent-resistant gloves, (6) safety splash goggles, (7) small respirator, (8) sample bottle, (9) pH paper, (10) heavy plastic polyethylene bags, (11) fire extinguisher, (12) sand bags.

Our drivers will protect the scene by preventing people from entering the immediate area unless they are authorized to help control the situation. They will set up warning signals on the highway, as they know that reflectors are to be set up within 10 minutes after stopping the unit.

Our drivers will try to stop leak if they can do it without risk. For small spills, they will try to take up with sand, then flush area with water if they can. For large spills, they will try to dike far ahead of spill. They will call 1-800-424-8802 as soon as local authorities arrives on site. They will assist local

authorities in everyway they can, e.g., giving them all the details about hazardous waste, manifest, and hazard imformation on the material. They may call Chemtrec, 800-242-9300, and also, in case of water pollution, they will call local authorities. They will call the company's emergency coordinator also. Drivers will stay with the spill area until it will clear out. If the spill is worse, and in nearby area, we will send another trailer to transfer the material. We will pickup all the waste and spills and dispose it according to the regulations.

12. Hazardous Waste Shipments Pickup Before Transportation and Pre-Transport Requirements

Section 40 CFR 262.30 requires that before transporting HW or offering HW for transportation off-site, a generator must package the waste in accordance with applicable DOT regulations on packaging under 49 CFR Parts 173, 178 and 179. It is also transporter's responsibility to inspect the packaging before transporting HW, e.g., check if its containers shipment, that containers are closed tightly, proper marking on container, condition of the containers.

Section 40 CFT 262.31 and 262.32 requires that before transporting or offering HW for transportation off-site, a generator must label and mark each package in accordance with the applicable DOT regulations on HW under 49 CFR Part 172. Generator must mark each container of 110 gallons or less used in transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency. Generator's Name and Address_____
Manifest Document Number_____

Before transporting HW or offering HW for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under 49 CFR Part 172, Sub-Part F.

13. General Knowledge of RCRA

The Resource Conservation and Recovery Act (RCRA) of 1976 requires the U.S. Environmental Protection Agency (EPA) to institute a national program to control hazardous waste. Regulations for carrying out RCRA are set forth in the Code of Federal Regulations 40 CFR Parts 260 to 265 and 122 to 124. This regulation includes a list of waste sources, waste streams, and some specific wastes that are hazardous, as well as four characteristics of a hazardous waste: ignitability, corrosivity, reactivity and toxicity as determined by a specified extraction procedure.

The keystone of the program is control of hazardous waste from point of generation through treatment, storage and ultimate disposal via transportation manifests and reporting. Anyone who generates or transports hazardous waste or owns or operates a facility that treats stores or dispose of hazardous waste must notify EPA.

RCRA program will reduce the damage to human health and environment from improper management of hazardous waste.

PERSONNEL TRAINING RECORD

TITLE_____ EMPLOYEE_____

| DESCRIPTION OF TRAINING PROVIDED | TRAINING METHOD | | DATE TRAINING COMPLETED |
|---|---|---|---|
| | OJT | CLASSROOM | |
| 1. Contingency Plan Implementation | | | |
| 2. Using, Inspecting, Repairing, Replacing<br>a. Fire extinguishers | | | |
| b. Face masks | | | |
| c. Air supply system | | | |
| d. Loudspeaker system operation | | | |
| 3. Manifest | | | |
| 4. Definition of HW and their Characteristics | | | |
| 5. Sampling of Hazardous Waste | | | |
| 6. Tank Cleaning Procedure | | | |
| 7. Tank Entry for work therein | | | |
| 8. Electrical Switch lock-out procedure | | | |
| 9. Response to Fire | | | |
| 10. Response to spill at facility | | | |
| 11. Response to spill during transportation | | | |
| 12. Pre-transport requirement | | | |
| 13. General RCRA | | | |
| 14. Inspection of HW storage area | | | |

# QUIZ

1. RCRA means:

2. What is Hazardous Waste:

3. Four Characteristics of Hazardous Waste are:
   1)
   2)
   3)
   4)

4. What is Manifest:

5. True or False

(a) T F We do not have to report spills if it happens at facility.
(b) T F If the waste liquid has pH lower than 2, it is considered a hazard waste.
(c) T F If the waste has flashpoint lower than 140°F, it is considered a hazardous waste according to the EPA.
(d) T F Transporter is not responsible for inspecting the pre-transport requirements before transporting a load.
(e) T F Manifest has to be prepared by the transporter.
(f) T F It is generator's responsibility if his waste if not properly disposed.
(g) T F Generator does not require a storage permit even though he stores the material more than 90 days in his property.
(h) T F It is the generator's responsibility to clean up spill if it occurs during transportation.
(i) T F Transporter is not required to sign the manifest.
(j) T F Generator can type his signature on the manifest.
(k) T F If we follow RCRA rules and regulations, we do not have to follow DOT regulation during transportation.
(l) T F Weekly inspection is not required if the tanks or containers are not leaking.
(m) T F We can put hazardous waste in any kind of used container as long as they are in good condition.
(n) T F Manifest carries the generator's telephone number.

16. Potential Hazards of Chemicals Facility Carries

Facility carries following chemicals:

1. Ferri-Chlor 2. Ferrous Sulfate 3. Cyanide Sludge
4. Ferrous-Chloride 5. Cyanide 6. Waste Caustic
7. Chemill Sludge 8. Scrap Iron 9. Liquid Chlorine
10. Ammonium Persulfate 11. Copper Oxide 12. Nitric Acid
13. Hydrocarbon Solvents (chlorinated) 14. Fuel Oil
15. Asphalt

1. Ferri-Chlor Solution 4. Ferrous-Chloride Solution
6. Waste Caustic

1. DOT I.D. # UN2582 EPA HW# D002
4. DOT I.D. # NA1760 EPA HW# D002
6. DOT I.D. # NA1719 EPA HW# D002

Health Hazards: Contact causes burns to skin and eyes. If inhaled, may be harmful. If the material involved in a fire, it may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution.

Fire or explosion: It may burn, but it will not ignite readily. Explosive concentrations of gas may accumulate in tanks.

2. Ferrous Sulfate

DOT I.D. #NA9125 EPA HW# D002

Health Hazards: Little immediate health hazards contact may, in very rare cases, cause burns to skin and eyes. Fire may produce irritating or poisonous gases.

Fire or explosion: May burn, but does not ignite readily.

3. Cyanide Sludge 5. Cyanide Solution

DOT I.D. #UN1935 EPA HW #F007- F009

Health Hazards: Material is considered as poison. If inhaled, may be fatal. May be fatal also if swallowed or absorbed through skin contact may cause burns to the skin and eyes. Runoff from fire control or dilution water causes pollution.

Fire or explosion: It may burn, but does not ignite readily.

9. Liquid Chlorine

DOT I.D. #UN1017 EPA HW #D003

Health Hazards: Poison. If inhaled, may be fatal. Vapors may cause dizziness or suffocation. Contact will burn to skin and eyes. Contact may cause frostbite. Runoff from fire control or dilution water may cause pollution.

Fire or explosion: May ignite combustibles. Mixture with fuels may explode. Container may explode if heat or fire. Vapor explosion hazard indoors, outdoors or in sewers.

10. Ammonium Persulfate

DOT I.D. #UN1444

Health Hazards: Contact may cause burns to skin and eyes. Vapors or dust may be irritating. Fire may produce irritating or poisonous gases.

Fire or explosion: May ignite combustibles. Reaction with fuels may be violent. Runoff to sewer may create fire or explosion.

12. Nitric Acid - More than 40% Acid

DOT I.D. #UN2031 EPA HW # D002 - D003

Health Hazards: Poison. May be fatal if inhaled, swallowed or absorbed through skin. Contact casues burns to skin and eyes. Fire will produce irritating and/or poisonous gases. Runoff from fire control or dilution water causes water pollution.

Fire or explosion: May ignite combustibles. Violent reaction with water. Reaction with fuels may be violent. Explosive concentrations of gas my accumulate in tanks. Runoff to sewer may create fire or explosion hazard.

13. Hydrocarbon Solvent

DOT I.D. #NA1993
EPA HW #F001

14. Fuel Oil

DOT I.D. #NA1993

Health Hazards: Vapors will cause dizziness or suffocation. Contact will irritate the skin and eyes. Fire may produce irritating or poisonous gases. Runoff from fire control or dilution water may cause pollution.

Fire or explosion: Will burn. Ignited by heat, sparks and flames. Container may explode in heat or fire. Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

## SECTION H

### TANK TRUCK LOADING OF CHEMICALS AND SOLVENTS:

Standard Safety Protection Equipment are Mandatory.

Stop engine. Smoking on or within 25 feet of a cargo is forbidden during loading process.
Chock wheels.
Ground the unit.
Secure loading report.
Inspect compartments for product residue and cleanliness. If cleaning is necessary, consult supervisor.
Inspect loading report indicating product, amount, and tank from which product is to be loaded.
Check the hose and valves on the unit.
Connect hose to pipeline to bottom discharge valve of the unit. Put the bucket underneath the valve to collect the spill.
Open valves to tank from which the product is drawn.
Leave dome lid slightly cracked to vent.
Start pump and commence loading.
Periodically check hose and fittings - Note: Clothing and shoes saturated with flammable/combustible liquids must be removed immediately and not reworn unless completely decontamination can be provided.
Note temperature on production loading report.
When loading is completed, turn pump off.
Close unit bottom valve.
Reverse valving at pump and tanks to pump out material from hose back to tank.
Start pump.
Disconnect hose from unit. Use bucket to collect any spillage.
Shut valve at loading position and stop pump.
Complete disconnection of hose and store on rack.
Close all valves to tank.
Draw retain sample, label it. Bring it to the lab for approval.
Close dome - making sure gasket is in place. Tighten lugs.
Disconnect ground.
Place proper placard on the truck.
Remove chocks. Weigh unit and stamp gross weight on loading report.
Note: In the event of spills or leakage, suspend unloading operations. Notify supervisor for instruction on cleaning and flushing the area. Make sure all manholes and liquid discharge valves must be closed and leak free before a vehicle containing flammable liquids can be driven.

## SECTION H

PROCEDURE FOR UNLOADING BULK SOLVENT:

General rules: Engine should be stopped. The only possible exception is if the engine is used to operate a pump used in the unloading process. Keep fires away. When unloading through a non-vapor tight connection into a stationary tank, no bonding or grounding is required if the metallic filling connection is in contact with the filling hole at all times. A cargo tank must be attended by a qualified person at all times while it is being unloaded. Smoking or within 25 feet of a cargo is forbidden during unloading process.

1. Upon arrival at the customer, go to receiving office with a pleasing personality.
2. Inform the customer of the name of the product or products you have, number of gallons of each product or products or what is typed on the bill of lading only.
3. Customer may pull sample for lab approval prior to unloading.
4. After approval of sample, hook discharge hose to pump to fill pipe or tank that customer asks for.
5. Wear all the protective equipment, e.g. gloves, goggles.
6. Hook suction hose to pump than to compartment which has product customer asked for.
7. Ask the customer if the product you are going to pump will fit in his tank.
8. Use a safety ground cable if the customer fill pipe or tank is not grounded.
9. Start truck pump.
10. Ask customer if all of his valves are opened to his tank.
11. Open belly valve, then gate valve as the product starts to pump. Check for leaks.
12. If there is a leak, shut off belly valve, gate valve & pump. If no leaks are visible, continue pumping.
13. After compartment runs empty, race pump up to 1,000 to 1,200 RPM for 1 minute. This will allow to blow out hoses and customer line.
14. Repeat 6, 7, 8, 9, 10, 11, 12 and 13 if the customer has more than one product.
15. When the last product has been pumped off and line blown out, shut off customer's valve. Shut off pump and valves on truck.
16. Disconnect hoses very carefully and drain hoses in a bucket. Give bucket or what little solvents that drained out to the customer.
17. Place hoses back on truck.

PROCEDURE FOR UNLOADING BULK SOLVENT: continued

18. Have the customer sign the bill of lading and give the customer his copy.
19. Thank the customer for the order and wish him a good day.
20. Recheck area of delivery for spillage.
21. Leave customer's property slowly. No one likes speedy hot riders.

SECTION I

CLOSURE PLAN
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, IN
EPA I.D. No. IND040888002

C.F.R. 40
Reference

265.112(a)(1) Item I - How the Facility Will Be closed: Currently, only liquid Ferric Chloride ($feCl_3$), Ferrous Chloride ($FeCl_2$) and Ferri-Chlor ($FeCl_3$ + $Fe_2(SO_4)_3$ ) are produced at the facility. Raw materials which are purchased in the open market are utilized to manufacture each of these products. Therefore, any raw materials or finished products in inventory would be sold prior to closure.

With respect to ongoing operations, the only hazardous waste brought into the facility is waste pickle liquor (i.e., either ferrous chloride or ferrous sulfate). The ferrous chloride is used as a raw material in manufacturing ferric chloride or a more concentrated ferrous chloride solution. The ferrous sulfate is used as a raw material in manufacturing Ferri-Chlor. Both of these products are then sold directly to end users primarily for water treatment. Since Conservation Chemical Company of Illinois must pay for the ferrous chloride which it brings into the facility for processing and storage, it fully expects to sell any material in inventory or use it as a raw material in the production of a finished product. Although Conservation Chemical Company of Illinois is sometimes paid by generators of waste ferrous sulfate pickle liquor to take the material, it is under no obligation to do so through a contractual arrangement. Therefore, none would be taken into the plant facility unless it could be processed and marketed as a finished product. Accordingly, the closure plan for these activities is primarily just to stop handling the waste pickle liquors. Plant equipment involved may be moved to another plant site, sold or scrapped.

Closure of the bulk storage tanks used for storing either raw materials or finished products will be accomplished by draining the tanks completely, washing down the interior of tanks with water until the water is neutral and does not contain any hazardous waste constituents, bolting down the manway covers securely to prevent access by unauthorized persons. Tanks would then be moved to another plant site, sold or scrapped. Material from the tanks will be neutralized and sent to an offsite for disposal.

In manufacturing iron salts, the iron content in the solution is increased by running a partially finished solution containing ferric iron over scrap iron. Over a period of time, insoluble residues accumulate in the vats where the scrap iron is dissolved. These residues usually consist of carbon, silica or other extraneous matter that come with the scrap. This residue would be removed from the dissolving tanks and disposed of at an approved landfill.

Conservation Chemical Company of Illinois' primary business activity prior to 1980 was the storage, treatment and transportation of chemical hazardous waste. As mentioned above, the only hazardous waste currently being brought into the facility if waste pickle liquor, which is used as a raw material to produce a salable finished product. However, hazardous waste from prior year's operations is still stored at the plant. The plans for handling those wastes are itemized below.

There is approximately 150,000 gallons of cyanide waste stored in steel storage tanks at the plant. This materials will either be disposed of offsite at an approved disposal facility or treated at the plant. A process has been developed which converts the cyanide into KCN, which we are going to sell in open market and the process has been described in detail in general waste analysis section. The residual metals bearing material would be shipped to an approved facility for disposal.

The storage tanks used to store this material will be drained completely, washed with hot water first and if it is necessary it would be washed with a sodium hypochlorite solution until the tanks are cleaned and all the solids are out of the tanks. Tanks would be bolted down and them moved to another plant site, sold or scrapped. The wash-down water and hypochlorite solution would be sent offsite for disposal.

There are approximately 100,000 gallons of waste solvents stored in bulk at the plant. If we get a permit to burn this solvent, (incinerate), we are planning to incinerate the solvents. We are trying to sell also, these solvents. If we do not get a permit, we are going to dispose of at an offsite facility.

The tanks used to store this solvent will be drained completely first. Wash it out with water, bolt it down, the manway covers securely to prevent access by unauthorized persons. Tanks would then be moved to another plant site, sold or scrapped. The waste generated from cleaning process will be sent to an offsite facility for disposal.

There is approximately 350,000 gallons of a neutralized sludge pickle liquor. This material will be disposed of at an offsite facility. The tanks will be cleaned the same way as chlorinated solvents tanks.

There is approximately 3,000 gallons of silica tetrachloride. This material will be converted into silica and HCl. Silica is not a hazardous waste. The process is explained in detail in the waste analysis section. Silica will be disposed off-site after neutralizing and washing at offsite facility. HCl acid will be sold or disposed at an offsite facility. The tank will be cleaned the same way as solvents tank and moved to another plant site, sold or scrapped.

There is approximately 3,000 gallons of a calcium nitrate solution containing copper and nickle hydroxide. This material will be sold or disposed of at an offsite facility.

There are approximately 150 drums containing paint sludges, soil clean up residue, lapping oil residue, chrome and a copper sludge, laboratory chemicals and miscellaneous materils stored at the facility. They will be disposed of an an offsite facility.

There is a waste pile (Pie-shaped) basin at the facility which has been previously used as a cooling water pond and collection for plant clean up. It will be stabilized either by removing the residue contained therein and back filling or by mixing the residue with fly ash to create a firm mass. If the residue is removed, it will be disposed of at an offsite facility.

There is a surface impoundment also at the facility which has been previously used as a dike for Tank 19. Presently, it is used as an evaporation pond for rain water and pump seal water from the pickle liquor processing area. Surface impoundment has solids in it. Water on the top is neutral and does not contain any hazardous constituents. It will be disposed at offsite facility.

The solids will be removed from the pond and it will be disposed at offsite facility if it is necessary; otherwise, it will be mixed with concrete in back filling the surface impoundments.

Facility also has 2 process sumps. One is concrete and other is rubber lined. Rubber-lined sump is used to collect the spills and washdown and is used back into process. Concrete sump is used to collect the water from pump seal and rain water. Presently, we neutralize this sump and pumping it to surface impoundments. This sump will be cleaned by removing the entire material from the sump and dispose at offsite facility and then fill with dirt and concrete again.

Facility has approximately 50'x20'x12' deep oil separator. Presently, facility is not using this oil separator. It has about 2' deep water in it and rest solids in it. We will drain the water off or dispose at an offsite facility.

After all of the pumpable liquid has been removed from the bulk storage tanks containing the waste itemized above, the tanks will be mechanically cleaned. Any solid residues will be disposed of at an offsite facility.

Samples of the soil around the tanks, waste pile, surface impoundments and sumps area in which the waste material has been stored, will be taken and analyzed to determine whether any contamination has taken place. If the soil has been contaminated through spills, it will be dug up and disposed of at an offsite facility.

After the bulk storage tanks have been cleaned, they will be closed by bolting down the manway covers securely to prevent access by unauthorized persons. They will then be moved to another plant site, sold or scrapped.

All waste products, solid residues remaining after the pumpable liquid has been removed and soil samples taken from the areas around the tank will be tested to determine their characteristics. In the event that they are determined to be hazardous waste, the appropriate permits will be obtained so that the material can be disposed of at an approved disposal facility.

All of the facility will remain closed until final closure takes place. The bulk storage tanks will be cleaned one at a time. Therefore, the maximum extent of the operation which will be unclosed during the life of the facility will be all of the storage tanks until such time as they are cleaned and decontaminated. The drums used for storage will remain at the present facility until disposal permits are obtained.

265.112(a)(2) Item II - Maximum Inventory of Waste in Storage: There is approximately 180,000 gallons of storage available for waste pickle liquor and/or finished product (i.e., either ferric chloride or Ferri-Chlor). As indicated above, the waste pickle liquors are used as a raw material and Conservation Chemical Company of Illinois would not expect to receive any more pickle liquor than it could sell. The volume of pickle liquor in inventory at any given time will vary according to the demand for finished product and the production schedule slated to meet that demand.

The current inventory of waste by product category accumulated from previous operations is itemized below:

| Type of Waste | Volume (Gals.) |
|---|---|
| Cyanide | 150,000 |
| Solvents | 90,000 |
| Neutralized Sludge | 350,000 |
| Silica Tetrachloride | 3,000 |
| Dilute CALCIUM Nitrate | 3,000 |

The company does not expect to add any significant number of drummed waste to its current inventory. Therefore, 500 waste drums would be considered the maximum inventory.

The company does not expect to add any hazardous waste to its inventory other than reusable pickle liquor. Therefore, the volumes shown above represent the maximum inventory.

265.112(a)(3) and 265.114 Item III - Decontamination of Facility Equipment: If it is determined that mechanically cleaning (i.e., scraping the sides and bottom of the tanks is not sufficient to remove all of the remaining solid residues, the tanks will be washed with an appropriate cleaning solution (e.g., the cyanide tanks would be washed with a sodium hypochlorite solution).

265.112(a)(4) Item IV - Expected Year of Closure and Final Closure Schedule: The handling of waste pickle liquor and production of iron salts is an ongoing operation. There is no expected closure date for that activity. Company personnel are currently exploring the options available for disposal and/or recycling the waste in inventory at the plant. It is not possible to determine exactly when final closure of this part of the facility will take place. In fact, we would expect to add other recovery projects in time.

265.111(a) & (b) Item V - Closure Performance Standard: The closure procedures outlined in the aforementioned Items I and III will minimize the need for further maintenance of the facility. They will also eliminate post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall or waste decomposition products to the ground or surface waters or to the atmosphere.

265.115 Item VI - Certification of Closure: When closure has been completed, Conservation Chemical Company of Illinois will submit to the Regional Administrator a statement from Conservation Chemical Company of Illinois and an independent reigstered professional engineer certifying that the facility has been closed in accordance with specifications in the approved closure plan.

265.197 Item VII - Removal of Hazardous Waste and Hazardous Waste Residues: The closure procedures outlined in Item I provide for disposing of any residues from cleaning the bulk storage tanks. They also provide for disposal of bulk and drummed waste. If the residues, bulk waste, or drummed waste meet one or more of the characteristics of a hazardous waste, then the residues will be managed in accordance with all applicable requirements of C.F.R. 40 Parts 262, 263 and 265.

CLOSURE COST ESTIMATE
Conservation Chemical Company of Illinois
6500 Industrial Highway
Gary, IN
IND040888002

I. Disposal of Waste in Inventory from Past Operations

| | Type of Waste | Volume (Gals.) | Cost/Gal. | |
|---|---|---|---|---|
| *A. | Cyanide Solution | 150,000 | $.10 | $15,000 |
| *B. | Solvents | 100,000 | $.10 | $10,000 |
| C. | Neutralized Sludge | 350,000 | $.25 | $87,500 |
| D. | Silica Tetrachloride | 3,000 | $.50 | $ 1,500 |
| E. | Calcium Nitrate | 3,000 | $.50 | $ 1,500 |

II. Disposal of 55-Gallon Drums Containing Waste Material

A. Total of 150 drums

B. Disposal cost including disposal fee, drum costs and transportation is estimated at $60/drum

C. Total cost - 150 drums x $60/drum $ 9,000

III. Disposal of Empty 55-Gallon Drums

A. Total of 50 drums

B. Disposal cost including disposal fee and transportation is estimated at $5/drum

C. Total cost - 50 drums x $5/drum $ 250

IV. Stabilization of Waste Pile

A. Estimate 2,300 yards to be removed

B. Cost to remove and dispose of residues estimated at $15/yard

C. Total cost - 2,300 yds. x $15/yd. $34,500

V. Stabilization of Surface Impoundments

A. Estimate 3,000 yards to be removed

B. Cost to remove and dispose of residues estimated at $15/yard

C. Total cost - 3,000 yds. x $15/yd. $45,000

VI. Stabilization of Process Sumps

A. Estimate 100 yards to be removed

B. Cost to remove and dispose of residues estimated at $15/yard

C. Total cost - 100 yds./$15 yd. $ 1,500

VII. Stabilization of Oil Separator

A. Estimate 1,000 yards to be removed

B. Cost to remove and dispose of residues estimated at $15/yard

C. Total cost - 1,000 yds.$15/yd $15,000

VIII. Obtain Permits to Dispose of Waste in Inventory from Past Operations

A. Managerial staff time of 40 hours to evaluate potential outlets and review permit applications

B. Hourly cost cost of managerial staff if $14.72

C. Total cost - 40 hours x $14.72/hour $ 589

D. Clerical staff time of 16 hours to prepare permit application

E. Hourly cost of clerical staff is $6.63

F. Total cost - 16 hours x $6.63/hour $ 106

G. Total cost for laboratory analysis to characterize waste as being either hazardous or non-hazardous $ 3,000

IX. Total Cost of Independent Professional Engineer Certification $ 500

X. Total Closure Costs $ 224,945

XI. Contingency Factor of 10% 22,495

XII. Total Estimated Closure Cost $ 247,440

* The afore.mentioned estimates are bases on an approximate figure lying between charges of outside contractors and our own incremental costs of recovery equipment, start up expenses and continuing operating costs of the recovering facilities less sales revenue. We must emphasis that market demand are somewhat speculative. Hence, we cited a some what conservative figure, ie negative return (positive cost).

GENERAL LIABILITY POLICY

No. GL 10 02 500

PL04726
Renewal of Number

INSURANCE IS PROVIDED BY THE COMPANY AS DESIGNATED BY AN ☒ (EACH A STOCK INSURANCE COMPANY)

☒ CENTAUR INSURANCE COMPANY
Chicago, Illinois

☐ ARCADIA INSURANCE COMPANY
Phoenix, Arizona

**DECLARATIONS**

Item 1. Named Insured and Address: (No., Street, Town or City, County, State)
CONSERVATION CHEMICAL CORPORATION & CONSERVATION CHEMICAL CO. OF IL
5201 JOHNSON DRIVE
MISSION, KS 66205

Item 2. Policy Period: (Mo. Day Yr.)
From 1/1/84 to 1/1/85
12:01 A.M., standard time at the address of the named insured as stated herein.

The named insured is:
☐ Individual ☐ Partnership ☒ Corporation ☐ Joint Venture ☐ Other:

Business of the named insured is: (ENTER BELOW)
CHEMICAL TRANSPORTATION & MFG.

Audit Period: Annual, unless otherwise stated. (ENTER BELOW)

Item 3. The insurance afforded is only with respect to the Coverage Part(s) indicated below by specific premium charge(s) and attached to and forming a part of this policy.

| Advance Premiums | Coverage Part No(s). | Coverage Part(s) | Advance Premiums | Coverage Part No(s). | Coverage Part(s) |
|---|---|---|---|---|---|
| $ | | | $ | | Hospital Professional Liability Insurance |
| $ | | | $ | | Manufacturers' and Contractors' Liability Insurance |
| $ | | Completed Operations and Products Liability Insurance | $ | | Owner's and Contractor's Protective Liability Insurance |
| $ | | | $ | | Owners', Landlords' and Tenants' Liability Insurance |
| $ 11,935. | L6394a | Comprehensive General Liability Insurance | | | |
| $ | | Comprehensive Personal Insurance | $ | | Personal Injury Liability Insurance |
| $ INCL | L9263 | Contractual Liability Insurance | $ | | Physicians', Surgeons' and Dentists' Professional Liability Insurance |
| $ | | Druggists' Liability Insurance | | | |
| $ | | Elevator Collision Insurance | $ | | Premises Medical Payments Insurance |
| $ | | Farm Employers' Liability and Farm Employees' Medical Payments Insurance | $ | | Special Protective and Highway Liability Insurance New York Department of Transportation |
| $ | | Farmer's Comprehensive Personal Insurance | $ | | Storekeeper's Insurance |
| $ | | Farmer's Medical Payments Insurance | $ | | |
| $ | | | $ | | |
| $ | | | $ | | |
| $ | | | $ | | |
| $ | | | | | |
| $ | | | | | |

$ BWI1003,BWI1004,GL0300,ENDORSEMENT #1 — Form numbers of endorsements, other than those entered on Coverage Part(s), attached at issue

$ 11,935.00 Total Advance Premium for this policy.

MINIMUM & DEPOSIT

* If the Policy Period is more than one year and the premium is to be paid in installments, premium is payable on:

| Effective Date | 1st Anniversary | 2nd Anniversary |
|---|---|---|
| $ | $ | $ |

Marsh & McLennan
816 221-4422
127 West 10th Street Kansas City, Missouri 64105

Countersigned: 2/20/84 dj
SCHAUMBURG, IL.

*Not applicable in Texas

E. L. Baier
Licensed Ks. Excess Line Agent

By
Authorized Representative

Ptd. In U.S.A.

CIC/AIC 1 GI

I-9

# ENDORSEMENT

This endorsement, effective 12:01 A.M. January 1, 1984, forms a part of policy No. GL 10 02 500 issued to Conservation Chemical Corporation

by Centaur Insurance Company

## KANSAS

## EXCESS LINE COVERAGE

THIS POLICY IS ISSUED BY AN INSURER NOT AUTHORIZED TO DO BUSINESS IN KANSAS AND, AS SUCH, THE FORM, FINANCIAL CONDITION AND RATES ARE NOT SUBJECT TO REVIEW BY THE COMMISSIONER OF INSURANCE AND THE INSURED IS NOT PROTECTED BY ANY GUARANTY FUND.

E L Baier
Licensed KS Excess Lines Agent

# COMPREHENSIVE GENERAL LIABILITY INSURANCE

For attachment to Policy No._____, to complete said policy.

## ADDITIONAL DECLARATIONS

Location of all premises owned by, rented to or controlled by the named insured (ENTER "SAME" IF SAME LOCATION AS ADDRESS SHOWN IN ITEM 1 OF DECLARATIONS)

SAME

Interest of named insured in such premises (CHECK BELOW)

[XXX] Owner [ ] General Lessee [ ] Tenant [ ] Other_____

Part occupied by named insured (ENTER BELOW)

AS REQUIRED

The following discloses all hazards insured hereunder known to exist at the effective date of this policy, unless otherwise stated herein.

## SCHEDULE

The insurance afforded is only with respect to such of the following Coverages as are indicated by specific premium charge or charges. The limit of the company's liability against each such Coverage shall be as stated herein, subject to all the terms of this policy having reference thereto.

| Advance Premiums | Limits of Liability: each occurrence | Limits of Liability: aggregate | Coverages |
|---|---|---|---|
| $ 11,935. | $ SEE BWI1004 | $ | A—Bodily Injury Liability |
| $ INCL | $ ATTACHED | $ | B—Property Damage Liability |
| $ | | | Form numbers of endorsements attached at issue |
| $ 11,935.00 Total Advance Premium | | | |

### General Liability Hazards

| Advance Premiums: Bodily Injury | Advance Premiums: Property Damage | Rates: B.I. | Rates: P.D. | Premium Bases | Code No. | Description of Hazards |
|---|---|---|---|---|---|---|
| INCL | INCL | (a) Per 100 Sq. Ft. of Area<br>(b) Per Linear Foot<br>(c) Per $100 of Remuneration<br>(d) Per $100 of Receipts<br>(e) Per Unit<br>(f) Per 100 Admissions | | (a) Area (Sq. Ft.)<br>(b) Frontage<br>(c) Remuneration<br>(d) Receipts<br>(e) Units<br>(f) Admissions | | Premises - Operations<br>ALL PREMISES-OPERATIONS OF THE NAMED INSURED |
| | | Per Landing | | Number Insured | | Escalators (Number at Premises) |
| | | Per $100 of Cost | | Cost | | Independent Contractors |
| | | (a) Per $1,000 of Receipts | | (a) Receipts | | Completed Operations |
| 11,935.MP | INCL | (b) Per $1,000 of Sales<br>6.82 | INCL | (b) Sales<br>2,581,000 | | Products<br>28105s-CHEMICAL MFG. INDUSTRIAL |
| $ 11,935.MP | $ INCL | Total Advance B.I. and P.D. Premiums | | | | |

MINIMUM & DEPOSIT

When used as a premium basis:

1. "**admissions**" means the total number of persons, other than employees of the **named insured**, admitted to the event insured or to events conducted on the premises whether on paid admission tickets, complimentary tickets or passes;
2. "**cost**" means the total cost to the **named insured** with respect to operations performed for the **named insured** during the policy period by independent contractors of all work let or sub-let in connection with each specific project, including the cost of all labor, materials and equipment furnished, used or delivered for use in the execution of such work, whether furnished by the owner, contractor or subcontractor, including all fees, allowances, bonuses or commissions made, paid or due;
3. "**receipts**" means the gross amount of money charged by the **named insured** for such operations by the **named insured** or by others during the policy period as are rated on a receipts basis other than receipts from telecasting, broadcasting or motion pictures, and includes taxes, other than taxes which the **named insured** collects as a separate item and remits directly to a governmental division;
4. "**remuneration**" means the entire remuneration earned during the policy period by proprietors and by all employees of the **named insured**, other than chauffeurs (except operators of mobile equipment) and aircraft pilots and co-pilots, subject to any overtime earnings or limitation of remuneration rule applicable in accordance with the manuals in use by the company;
5. "**sales**" means the gross amount of money charged by the **named insured** or by others trading under his name for all goods and products sold or distributed during the policy period and charged during the policy period for installation, servicing or repair, and includes taxes, other than taxes which the **named insured** and such others collect as a separate item and remit directly to a governmental division.

(over)

I-11

## I. COVERAGE A—BODILY INJURY LIABILITY
## COVERAGE B—PROPERTY DAMAGE LIABILITY

The company will pay on behalf of the **insured** all sums which the **insured** shall become legally obligated to pay as damages because of

A. **bodily injury** or

B. **property damage**

to which this insurance applies, caused by an **occurrence**, and the company shall have the right and duty to defend any suit against the **insured** seeking damages account of such **bodily injury** or **property damage**, even if any of the allegations of the suit are groundless, false or fraudulent, and may make such investigation and settlement of any claim or suit as it deems expedient, but the company shall not be obligated to pay any claim or judgment or to defend any suit after the applicable limit of the company's liability has been exhausted by payment of judgments or settlements.

### Exclusions

This insurance does not apply:

(a) to liability assumed by the **insured** under any contract or agreement except an **incidental contract**; but this exclusion does not apply to a warranty of fitness or quality of the **named insured's products** or a warranty that work performed by or on behalf of the **named insured** will be done in a workmanlike manner;

(b) to **bodily injury** or **property damage** arising out of the ownership, maintenance, operation, use, loading or unloading of
 (1) any **automobile** or aircraft owned or operated by or rented or loaned to any **insured**, or
 (2) any other **automobile** or aircraft operated by any person in the course of his employment by any **insured**;
 but this exclusion does not apply to the parking of an **automobile** on premises owned by, rented to or controlled by the **named insured** or the ways immediately adjoining, if such **automobile** is not owned by or rented or loaned to any **insured**;

(c) to **bodily injury** or **property damage** arising out of (1) the ownership, maintenance, operation, use, loading or unloading of any **mobile equipment** while being used in any prearranged or organized racing, speed or demolition contest or in any stunting activity or in practice or preparation for any such contest or activity or (2) the operation or use of any snowmobile or trailer designed for use therewith;

(d) to **bodily injury** or **property damage** arising out of and in the course of the transportation of **mobile equipment** by an **automobile** owned or operated by or rented or loaned to any **insured**;

(e) to **bodily injury** or **property damage** arising out of the ownership, maintenance, operation, use, loading or unloading of
 (1) any watercraft owned or operated by or rented or loaned to any **insured**, or
 (2) any other watercraft operated by any person in the course of his employment by any **insured**;
 but this exclusion does not apply to watercraft while ashore on premises owned by, rented to or controlled by the **named insured**;

(f) to **bodily injury** or **property damage** arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water course or body of water; but this exclusion does not apply if such discharge, dispersal, release or escape is sudden and accidental;

(g) to **bodily injury** or **property damage** due to war, whether or not declared, civil war, insurrection, rebellion or revolution or to any act or condition incident to any of the foregoing, with respect to
 (1) liability assumed by the **insured** under an **incidental contract**, or
 (2) expenses for first aid under the Supplementary Payments provision;

(h) to **bodily injury** or **property damage** for which the **insured** or his indemnitee may be held liable
 (1) as a person or organization engaged in the business of manufacturing, distributing, selling or serving alcoholic beverages, or
 (2) if not so engaged, as an owner or lessor of premises used for such purposes,
 if such liability is imposed
  (i) by, or because of the violation of, any statute, ordinance or regulation pertaining to the sale, gift, distribution or use of any alcoholic beverage, or
  (ii) by reason of the selling, serving or giving of any alcoholic beverage to a minor or to a person under the influence of alcohol or which causes or contributes to the intoxication of any person;
 but part (ii) of this exclusion does not apply with respect to liability of the **insured** or his indemnitee as an owner or lessor described in (2) above;

(i) to any obligation for which the **insured** or any carrier as his insurer may be held liable under any workmen's compensation, unemployment compensation or disability benefits law, or under any similar law;

(j) to **bodily injury** to any employee of the **insured** arising out of and in the course of his employment by the **insured** or to any obligation of the **insured** to indemnify another because of damages arising out of such injury; but this exclusion does not apply to liability assumed by the **insured** under an **incidental contract**;

(k) to **property damage** to
 (1) property owned or occupied by or rented to the **insured**,
 (2) property used by the **insured**, or
 (3) property in the care, custody or control of the **insured** or as to which the **insured** is for any purpose exercising physical control;
 but parts (2) and (3) of this exclusion do not apply with respect to liability under a written sidetrack agreement and part (3) of this exclusion does not apply with respect to **property damage** (other than to **elevators**) arising out of the use of an **elevator** at premises owned by, rented to or controlled by the **named insured**;

(l) to **property damage** to premises alienated by the **named insured** arising out of such premises or any part thereof;

(m) to loss of use of tangible property which has not been physically injured or destroyed resulting from
 (1) a delay in or lack of performance by or on behalf of the **named insured** of any contract or agreement, or
 (2) the failure of the **named insured's products** or work performed by or on behalf of the **named insured** to meet the level of performance, quality, fitness or durability warranted or represented by the named insured;
 but this exclusion does not apply to loss of use of other tangible property resulting from the sudden and accidental physical injury to or destruction of the **named insured's products** or work performed by or on behalf of the **named insured** after such products or work have been put to use by any person or organization other than an **insured**;

(n) to **property damage** to the **named insured's products** arising out of such products or any part of such products;

(o) to **property damage** to work performed by or on behalf of the **named** insured arising out of the work or any portion thereof, or out of materials, parts or equipment furnished in connection therewith;

(p) to damages claimed for the withdrawal, inspection, repair, replacement, or loss of use of the **named insured's products** or work completed by or for the **named insured** or of any property of which such products or work form a part, if such products, work or property are withdrawn from the market or from use because of any known or suspected defect or deficiency therein;

(q) to **property damage** included within
 (1) the **explosion hazard** in connection with operations identified in this policy by a classification code number which includes the symbol "x",
 (2) the **collapse hazard** in connection with operations identified in this policy by a classification code number which includes the symbol "c",
 (3) the **underground property damage hazard** in connection with operations identified in this policy by a **classification code number** which includes the symbol "u".

## II. PERSONS INSURED

Each of the following is an **insured** under this insurance to the extent set forth below:

(a) if the **named insured** is designated in the declarations as an individual, the person so designated but only with respect to the conduct of a business of which he is the sole proprietor, and the spouse of the **named insured** with respect to the conduct of such a business;

(b) if the **named insured** is designated in the **declarations** as a partnership or joint venture, the partnership or joint venture so **designated** and any partner or member thereof but only with respect to his **liability** as such;

(c) if the **named insured** is designated in the **declarations** as other than an individual, partnership or joint venture, the organization so designated and any executive officer, director or stockholder thereof while acting within the scope of his duties as such;

(d) any person (other than an **employee** of the **named insured**) or organization while acting as real estate manager for the **named insured**; and

(e) with respect to the operation, for the purpose of locomotion upon a public highway, of **mobile equipment** registered under any motor vehicle registration law,
 (i) an employee of the **named insured** while operating any such equipment in the course of his employment, and
 (ii) any other person while operating with the permission of the **named insured** any such equipment registered in the name of the **named insured** and any person or organization legally responsible for such operation, but only if there is no other valid and collectible insurance available, either on a primary or excess basis, to such person or organization;
 provided that no person or organization shall be an **insured** under this paragraph (e) with respect to:
 (1) **bodily injury** to any fellow employee of such person injured in the course of his employment, or
 (2) **property damage** to property owned by, rented to, in charge of or occupied by the **named insured** or the employer of any person described in subparagraph (ii).

This insurance does not apply to **bodily injury** or **property damage** arising out of the conduct of any partnership or joint venture of which the **insured** is a partner or member and which is not designated in this policy as a **named insured**.

## III. LIMITS OF LIABILITY

Regardless of the number of (1) **insureds** under this policy, (2) persons or organizations who sustain **bodily injury** or **property damage**, or (3) claims made or suits brought on account of **bodily injury** or **property damage**, the company's liability is limited as follows:

**Coverage A**—The total liability of the company for all damages, including damages for care and loss of services, because of **bodily injury** sustained by one or more persons as the result of any one **occurrence** shall not exceed the limit of **bodily injury** liability stated in the schedule as applicable to "each **occurrence**".

Subject to the above provision respecting "each **occurrence**", the total liability of the company for all damages because of (1) all **bodily injury** included within the **completed operations hazard** and (2) all **bodily injury** included within the **products hazard** shall not exceed the limit of **bodily injury** liability stated in the schedule as "aggregate".

**Coverage B**—The total liability of the company for all damages because of all **property damage** sustained by one or more persons or organizations as the result of any one **occurrence** shall not exceed the limit of **property damage** liability stated in the schedule as applicable to "each **occurrence**".

Subject to the above provision respecting "each **occurrence**", the total liability of the company for all damages because of all **property** damage to which this coverage applies and described in any of the numbered subparagraphs below shall not exceed the limit of **property damage** liability stated in the schedule as "aggregate":
 (1) all **property damage** arising out of premises or operations rated on a remuneration basis or contractor's equipment rated on a receipts basis, including **property damage** for which liability is assumed under any **incidental contract** relating to such premises or operations, but excluding **property** damage included in subparagraph (2) below;
 (2) all **property damage** arising out of and occurring in the course of operations performed for the **named insured** by independent contractors and general supervision thereof by the **named insured**, including any such **property damage** for which liability is assumed under any **incidental contract** relating to such operations, but this subparagraph (2) does not include **property damage** arising out of maintenance or repairs at premises owned by or rented to the **named insured** or structural alterations at such premises which do not involve changing the size of or moving buildings or other structures;
 (3) all **property damage** included within the **products hazard** and all **property damage** included within the **completed operations hazard**.

Such aggregate limit shall apply separately to the **property damage** described in subparagraphs (1), (2) and (3) above, and under subparagraphs (1) and (2) separately with respect to each project away from premises owned by or rented to the **named insured**.

**Coverages A and B**—For the purpose of determining the limit of the company's liability, all **bodily injury** and **property damage** arising out of continuous or repeated exposure to substantially the same general conditions shall be considered as arising out of one **occurrence**.

## IV. POLICY TERRITORY

This insurance applies only to **bodily injury** or **property damage** which occurs within the **policy territory**.

UNIFORM PRINTING AUTHENTIC

(The attaching clause need not be completed when this endorsement is issued subsequent to preparation of the policy).

# ENDORSEMENT

This endorsement, effective , forms a part of Policy No.

issued to , by

This endorsement modifies such insurance as is afforded by the provisions of the policy relating to the following:

COMPLETED OPERATIONS AND PRODUCTS LIABILITY INSURANCE
COMPREHENSIVE GENERAL LIABILITY INSURANCE
CONTRACTUAL LIABILITY INSURANCE
MANUFACTURERS' AND CONTRACTORS' LIABILITY INSURANCE
OWNERS', LANDLORDS' AND TENANTS' LIABILITY INSURANCE
OWNERS' AND CONTRACTORS' PROTECTIVE LIABILITY INSURANCE

## COMBINED SINGLE LIMIT OF LIABILITY ENDORSEMENT

Limit of Liability: $ 500,000.

The Limit of Liability shown above shall apply to the Coverage Parts listed below, and shall apply in lieu of the Limit of Liability otherwise set forth thereon or on such part of the declarations having reference thereto, and shall apply to "Each Person," "Each Occurrence," or "Aggregate" in the same manner as set forth in the policy. The Limit of Liability shall be the Company's combined total Limit of Liability for all coverages listed below with respect to any one Occurrence and shall also be the Company's combined total Aggregate Limit of Liability for those coverages for which an "Aggregate" Limit of Liability is specified in the policy.

It is further agreed that the limit of the company's liability for all damages shall first be the respective amounts of Bodily Injury and Property Damage liability insurance specified in the motor vehicle financial responsibility law of the state in which the automobile is principally garaged, and such amounts shall then be supplemented by any amount remaining within the single limit of liability stated above, which limit is the total limit of the company's liability for all damages.

It is further understood and agreed that the Limit of Liability as stated herein is a Combined Single Limit and applies to all damages sustained as a result of any one Occurrence for Bodily Injury and/or Property Damage combined.

The inclusion herein of more than one insured shall not operate to increase the limit of the Company's Liability.

APPLICABLE COVERAGE PARTS

X Comprehensive General Liability

___ Owners', Landlords' and Tenants' Liability

X Manufacturers' and Contractors' Liability

X Contractual Liability

X Completed Operations and Products Liability

___ Personal Injury Liability

___ Automobile Liability

___ (Other - as specified)

All other terms and conditions of this policy remain unchanged.

Authorized Representative

BWI 1004 (07/82 ed.)

(The attaching clause need not be completed when this endorsement is issued subsequent to preparation of the policy)

# ENDORSEMENT

This endorsement, effective , forms a part of Policy No.

issued to , by

This endorsement modifies such insurance as is afforded by the provisions of the policy relating to the following:

COMPLETED OPERATIONS AND PRODUCTS LIABILITY INSURANCE
COMPREHENSIVE GENERAL LIABILITY INSURANCE
CONTRACTUAL LIABILITY INSURANCE
MANUFACTURERS' AND CONTRACTORS' LIABILITY INSURANCE
OWNERS', LANDLORDS' AND TENANTS' LIABILITY INSURANCE
OWNERS' AND CONTRACTORS' PROTECTIVE LIABILITY INSURANCE

## AMENDMENT OF PREMIUM CONDITIONS

It is understood and agreed that paragraph two of the CONDITIONS, part 1, Premium, is amended to read as follows:

Premium designated in this policy as "advance premium" is a minimum and deposit premium, which shall be credited to the amount of the earned premium due at the end of the policy period. At the close of each period (or part thereof terminating with the end of the policy period) designated in the declarations as the audit period the earned premium shall be computed for such period and upon notice thereof to the Named Insured, shall become due and payable. If the total earned premium for the policy period is less than the premium designated as "advance premium", such "advance premium" is the minimum premium for the policy period indicated, and is not subject to further adjustment.

All other terms and conditions of this policy remain unchanged.

Authorized Representative

BWI 1003 (07/82 ed.)

This endorsement forms a part of the policy to which attached, effective on the inception date of the policy unless otherwise stated herein.

**(The following information is required only when this endorsement is issued subsequent to preparation of policy.)**

Endorsement effective Policy No. Endorsement No.

Named Insured

Additional Premium $ INCL

Countersigned by _____
(Authorized Representative)

This endorsement modifies such insurance as is afforded by the provisions of the policy relating to the following:

**COMPREHENSIVE GENERAL LIABILITY INSURANCE**
**MANUFACTURERS AND CONTRACTORS LIABILITY INSURANCE**
**OWNERS AND CONTRACTORS PROTECTIVE LIABILITY INSURANCE**
**OWNERS, LANDLORDS AND TENANTS LIABILITY INSURANCE**
**SMP LIABILITY INSURANCE**

## DEDUCTIBLE LIABILITY INSURANCE

It is agreed that:

1. The company's obligation under the Bodily Injury Liability and Property Damage Liability Coverages to pay **damages** on behalf of the **insured** applies only to the amount of **damages** in excess of any deductible amounts stated in the schedule below as applicable to such coverages.
2. The deductible amounts stated in the schedule apply as follows:
   (a) PER CLAIM BASIS—If the deductible is on a "per claim" basis, the deductible amount applies under the Bodily Injury Liability or Property Damage Liability Coverage, respectively, to all **damages** because of **bodily injury** sustained by one person, or to all **property damage** sustained by one person or organization, as the result of any one **occurrence**.
   (b) PER OCCURRENCE BASIS—If the deductible is on a "per **occurrence**" basis, the deductible amount applies under the Bodily Injury Liability or Property Damage Liability Coverage, respectively, to all **damages** because of all **bodily injury** or **property damage** as the result of any one **occurrence**.
3. The terms of the policy, including those with respect to (a) the company's rights and duties with respect to the defense of suits and (b) the **insured's** duties in the event of an **occurrence** apply irrespective of the application of the deductible amount.
4. The company may pay any part or all of the deductible amount to effect settlement of any claim or suit and, upon notification of the action taken, the **named insured** shall promptly reimburse the company for such part of the deductible amount as has been paid by the company.

## SCHEDULE

| Coverage | Amount and Basis of Deductible | |
|---|---|---|
| Bodily Injury Liability | $ 5,000. | per claim |
| | $ | per occurrence |
| Property Damage Liability | $ INCL | per claim |
| | $ | per occurrence |

APPLICATION OF ENDORSEMENT (Enter here any limitations on the application of this endorsement. If no limitation is entered, the deductibles apply to all loss however caused):—

(The Attaching Clause need be completed only when this endorsement is issued subsequent to preparation of the policy.)

GU 207
(Ed. 6-78)

# ENDORSEMENT #1

This endorsement, effective on at 12:01 A.M. standard time, forms a part of

Policy No. of the

(NAME OF INSURANCE COMPANY)

Issued to

By

Authorized Representative

## HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. Centaur Insurance Company, the ("Insurer"), of Chicago, Illinois, 60606 hereby certifies that it has issued liability insurance covering bodily injury and property damage to Conservation Chemical Company of Illinois, (the "insured), of 6500 Industrial Highway, Gary, Indiana in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at IND040888992 - Conservation Chemical Company of Illinois, 6500 Industrial Highway, P.O. Box 6066, Gary, Indiana 46406-0066, 8900 Front St., Kansas City, MO., 10 Breman Ave., St.Louis, MO, for "sudden accidental occurrences". The limits of liability are $500,000 combined single limit bodily injury and property damage per occurrence and aggregate, exclusive of legal defense cost. * The coverage is provided under this policy number GL1002500, issued on 1/1/84. The effective date of said policy is 1/1/84 to 1/1/85.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this insurance, whether by the Insurer or the Insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator (s) of the EPA Region(s) in which the facility(ies) is (are) located.

UNIFORM PRINTING AND SUPPLY DIVISION

(The Attaching Clause need be completed only when this endorsement is issued subsequent to preparation of the policy.)

**ENDORSEMENT** #1 CONTINUED

GU 207
(Ed. 6-78)

This endorsement, effective on at 12:01 A.M. standard time, forms a part of

Policy No. of the

(NAME OF INSURANCE COMPANY)

Issued to

By

Authorized Representative

(e) Any other termination of this insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(i) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

* A deductible of $5,000. per claim for bobily injury and property damage is applicable to this coverage and the deductible expense shall also apply towards the investigation, adjustment, legal expense settlement or payment made by the company with respect to each and every claim.

COVERAGE PART

# CONTRACTUAL LIABILITY INSURANCE
## (Designated Contracts Only)

L 9263
(Ed. 1-73)

For attachment to Policy No._____, to complete said policy.

**SCHEDULE**

| Designation of Contracts | Code No. | Premium Bases | Rates B.I. | Rates P.D. | Advance Premiums Bodily Injury | Advance Premiums Property Damage |
|---|---|---|---|---|---|---|
| | | (a) Number (b) Cost | (a) Per Contract (b) Per $100 of Cost | | | |
| CONTRACTUAL LIABILITY - 15193<br>5201 JOHNSON DRIVE<br>MISSION, KANSAS | | IF ANY | | | INCL | INCL |
| | | | | Total Advance B.I. and P.D. Premiums | $ INCL | $ INCL |

When used as a premium basis:

"**cost**" means the total cost to any indemnitee with respect to any contract which is insured of all work let or sub-let in connection with each specific project, including the cost of all labor, materials and equipment furnished, used or delivered for use in the execution of such work, whether furnished by the owner, contractor or the subcontractor, including all fees, allowances, bonuses or commissions made, paid or due.

I. **COVERAGE Y—CONTRACTUAL BODILY INJURY LIABILITY**

**COVERAGE Z— CONTRACTUAL PROPERTY DAMAGE LIABILITY**

The company will pay on behalf of the **insured** all sums which the **insured**, by reason of **contractual liability** assumed by him under a contract designated in the schedule for this insurance, shall become legally obligated to pay as damages because of

Y. **bodily injury** or

Z. **property damage**

to which this insurance applies, caused by an **occurrence**, and the company shall have the right and duty to defend any **suit** against the **insured** seeking damages on account of such **bodily injury** or **property damage**, even if any of the allegations of the **suit** are groundless, false or fraudulent, and may make such investigation and settlement of any claim or **suit** as it deems expedient, but the company shall not be obligated to pay any claim or judgment or to defend any **suit** after the applicable limit of the company's liability has been exhausted by payment of judgments or settlements.

**Exclusions**

This insurance does not apply:

(a) if the **insured** or his indemnitee is an architect, engineer or surveyor, to **bodily injury** or **property damage** arising out of the rendering of or the failure to render professional services by such **insured** or indemnitee, including

(1) the preparation or approval of maps, plans, opinions, reports, surveys, designs or specifications and

(2) supervisory, inspection or engineering services;

(over)

I-17

## CONDITIONS

1. **Premium:** All premiums for this policy shall be computed in accordance with the company's rules, rates, rating plans, premiums and minimum premiums applicable to the insurance afforded herein.

Premium designated in this policy as "advance premium" is a deposit premium only which shall be credited to the amount of the earned premium due at the end of the policy period. At the close of each period (or part thereof terminating with the end of the policy period) designated in the declarations as the audit period the earned premium shall be computed for such period and, upon notice thereof to the **named insured**, shall become due and payable. If the total earned premium for the policy period is less than the premium previously paid, the company shall return to the **named insured** the unearned portion paid by the **named insured.**

The **named insured** shall maintain records of such information as is necessary for premium computation, and shall send copies of such records to the company at the end of the policy period and at such times during the policy period as the company may direct.

2. **Inspection and Audit:** The company shall be permitted but not obligated to inspect the **named insured's** property and operations at any time. Neither the company's right to make inspections nor the making thereof nor any report thereon shall constitute an undertaking, on behalf of or for the benefit of the **named insured** or others, to determine or warrant that such property or operations are safe or healthful, or are in compliance with any law, rule or regulation.

The company may examine and audit the **named insured's** books and records at any time during the policy period and extensions thereof and within three years after the final termination of this policy, as far as they relate to the subject matter of this insurance.

3. **Financial Responsibility Laws:** When this policy is certified as proof of financial responsibility for the future under the provisions of any motor vehicle financial responsibility law, such insurance as is afforded by this policy for **bodily injury** liability or for **property damage** liability shall comply with the provisions of such law to the extent of the coverage and limits of liability required by such law. The **insured** agrees to reimburse the company for any payment made by the company which it would not have been obligated to make under the terms of this policy except for the agreement contained in this paragraph.

4. **Insured's Duties in the Event of Occurrence, Claim or Suit:**

(a) In the event of an **occurrence**, written notice containing particulars sufficient to identify the **insured** and also reasonably obtainable information with respect to the time, place and circumstances thereof, and the names and addresses of the injured and of available witnesses, shall be given by or for the **insured** to the company or any of its authorized agents as soon as practicable.

(b) If claim is made or suit is brought against the **insured**, the **insured** shall immediately forward to the company every demand, notice, summons or other process received by him or his representative.

(c) The **insured** shall cooperate with the company and, upon the company's request, assist in making settlements, in the conduct of suits and in enforcing any right of contribution or indemnity against any person or organization who may be liable to the **insured** because of injury or damage with respect to which insurance is afforded under this policy; and the **insured** shall attend hearings and trials and assist in securing and giving evidence and obtaining the attendance of witnesses. The **insured** shall not, except at his own cost, voluntarily make any payment, assume any obligation or incur any expense other than for first aid to others at the time of accident.

5. **Action Against Company:** No action shall lie against the company unless, as a condition precedent thereto, there shall have been full compliance with all of the terms of this policy, nor until the amount of the **insured's** obligation to pay shall have been finally determined either by judgment against the **insured** after actual trial or by written agreement of the **insured**, the claimant and the company.

Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this policy to the extent of the insurance afforded by this policy. No person or organization shall have any right under this policy to join the company as a party to any action against the **insured** to determine the insured's liability, nor shall the company be impleaded by the **insured** or his legal representative. Bankruptcy or insolvency of the **insured** or of the insured's estate shall not relieve the company of any of its obligations hereunder.

6. **Other Insurance:** The insurance afforded by this policy is primary insurance, except when stated to apply in excess of or contingent upon the absence of other insurance. When this insurance is primary and the **insured** has other insurance which is stated to be applicable to the loss on an excess or contingent basis, the amount of the company's liability under this policy shall not be reduced by the existence of such other insurance.

When both this insurance and other insurance apply to the loss on the same basis, whether primary, excess or contingent, the company shall not be liable under this policy for a greater proportion of the loss than that stated in the applicable contribution provision below:

(a) **Contribution by Equal Shares.** If all of such other valid and collectible insurance provides for contribution by equal shares, the company shall not be liable for a greater proportion of such loss than would be payable if each insurer contributes an equal share until the share of each insurer equals the lowest applicable limit of liability under any one policy or the full amount of the loss is paid, and with respect to any amount of loss not so paid the remaining insurers then continue to contribute equal shares of the remaining amount of the loss until each such insurer has paid its limit in full or the full amount of the loss is paid.

(b) **Contribution by Limits.** If any of such other insurance does not provide for contribution by equal shares, the company shall not be liable for a greater proportion of such loss than the applicable limit of liability under this policy for such loss bears to the total applicable limit of liability of all valid and collectible insurance against such loss.

7. **Subrogation:** In the event of any payment under this policy, the company shall be subrogated to all the **insured's** rights of recovery therefor against any person or organization and the **insured** shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights. The **insured** shall do nothing after loss to prejudice such rights.

8. **Changes:** Notice to any agent or knowledge possessed by any agent or by any other person shall not effect a waiver or a change in any part of this policy or estop the company from asserting any right under the terms of this policy; nor shall the terms of this policy be waived or changed, except by endorsement issued to form a part of this policy.

9. **Assignment:** Assignment of interest under this policy shall not bind the company until its consent is endorsed hereon; if, however, the **named insured** shall die, such insurance as is afforded by this policy shall apply (1) to the **named insured's** legal representative, as the **named insured**, but only while acting within the scope of his duties as such, and (2) with respect to the property of the **named insured**, to the person having proper temporary custody thereof, as **insured**, but only until the appointment and qualification of the legal representative.

10. **Three Year Policy:** If this policy is issued for a period of three years any limit of the company's liability stated in this policy as "aggregate" shall apply separately to each consecutive annual period thereof.

11. **Cancellation:** This policy may be cancelled by the **named insured** by surrender thereof to the company or any of its authorized agents or by mailing to the company written notice stating when thereafter the cancellation shall be effective. This policy may be cancelled by the company by mailing to the **named insured** at the address shown in this policy, written notice stating when not less than ten days thereafter such cancellation shall be effective. The mailing of notice as aforesaid shall be sufficient proof of notice. The time of surrender or the effective date and hour of cancellation stated in the notice shall become the end of the policy period. Delivery of such written notice either by the **named insured** or by the company shall be equivalent to mailing.

If the **named insured** cancels, earned premium shall be computed in accordance with the customary short rate table and procedure. If the company cancels, earned premium shall be computed pro rata. Premium adjustment may be made either at the time cancellation is effected or as soon as practicable after cancellation becomes effective, but payment or tender of unearned premium is not a condition of cancellation.

12. **Declarations:** By acceptance of this policy, the **named insured** agrees that the statements in the declarations are his agreements and representations, that this policy is issued in reliance upon the truth of such representations and that this policy embodies all agreements existing between himself and the company or any of its agents relating to this insurance.

In Witness Whereof, this Company has executed and attested these presents; but this policy shall not be valid unless countersigned by the duly authorized Agent of this Company at the agency hereinbefore mentioned.

Joseph P. Wolinsky
SECRETARY

B. Davis
PRESIDENT

umbrella liability policy

# TRANSPORT INDEMNITY COMPANY

A STOCK INSURANCE COMPANY
HOME OFFICE: LOS ANGELES, CALIF.

Renewal of
NEW

**DECLARATIONS** This policy insures:

Item 1 Named Insured, Address and Zip Code

CONSERVATION CHEMICAL COMPANY,
CONSERVATION CHEMICAL COMPANY OF ILLINOIS
5201 JOHNSON DRIVE, SUITE 400
MISSION, KANSAS 66205

Producer's Name, Address and Zip Code

Marsh & McLennan
816 221-4422
127 West 10th Street Kansas City, Missouri 64105

2. Policy Period: 12:01 A.M., STANDARD TIME AT THE ADDRESS OF THE NAMED INSURED AS STATED HEREIN.

From: 1/1/84 To: 1/1/85 Term: ONE (1) YEAR

3. The Named Insured is ☐ Individual ☐ Partnership ☒ Corporation ☐ Joint Venture ☐ _____

4. Limits of Liability:
The limit of liability shall be as stated herein, subject to all the terms of this policy having reference thereto.

$ 5,000,000.00 EACH OCCURRENCE

$ 5,000,000.00 IN THE AGGREGATE for each annual period with respect to the Products hazard, and Completed Operations hazard.

5. Retained Limit:
$ 10,000.00 EACH OCCURRENCE

6. Computation of Premium:

| NOT SUBJECT TO AUDIT | SUBJECT TO AUDIT | | |
|---|---|---|---|
| Annual Premium $ 4,000.00 FLAT | Basis of Premium | Rate per Unit of Exposure $ | Estimated Annual Advance Premium $ |
| 3 Year Premium $ | Audit Period | | Minimum Premium $ |

7. Endorsements:

This policy is subject to the following endorsements:

1. AGGREGATE LIMITS OF LIABILITY
2. POLLUTION EXCLUSION
3. PUNITIVE DAMAGE LIMITATION
4. CANCELLATION AMENDMENT ENDORSEMENT
6. ERISA EXCLUSION
7. PROPERTY DAMAGE EXCLUSION - REAL AND PERSONAL PROPERTY
8. HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE
5. and Nuclear Energy Liability Exclusions — Broad Form

If Policy Period more than one year and the premium is to be paid in installments, premium is payable: On the effective date of policy

$ N/A and on the first and second anniversaries thereof.

Date of Issue 1/10/84 Countersigned By _____ Authorized Representative
DWL/jmf

SRI-2003 /7/79

I-19

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 8 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS INC. | 1/1/84 (12:01 A.M.) |

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. TRANSPORT INDEMNITY COMPANY, THE ("INSURER"), OF LOS ANGELES, CALIFORNIA, HEREBY CERTIFIES THAT IT HAS ISSUED LIABILITY INSURANCE COVERING BODILY INJURY AND PROPERTY DAMAGE TO CONSERVATION CHEMICAL COMPANY OF ILLINOIS, (THE "INSURED"), OF 6500 INDUSTRIAL HIGHWAY, GARY, INDIANA IN CONNECTION WITH THE INSURED'S OBLIGATION TO DEMONSTRATE FINANCIAL RESPONSIBILITY UNDER 40 CFR 264.147 OR 265.147. THE COVERAGE APPLIES AT IND040888992 - CONSERVATION CHEMICAL COMPANY OF ILLINOIS, 6500 INDUSTRIAL HIGHWAY, P.O. BOX 6066, GARY, INDIANA 46406-0066 FOR "SUDDEN ACCIDENTAL OCCURRENCES". THE LIMITS OF LIABILITY ARE $5,000,000. EACH OCCURRENCE, AND $5,000,000. ANNUAL AGGREGATE EXCESS OF COVERAGE PROVIDED UNDER PRIMARY LIABILITY WRITTEN WITH COLUMBIA CASUALTY COMPANY, POLICY NUMBER TO BE DETERMINED, EXCLUSIVE OF LEGAL DEFENSE COSTS. THE EFFECTIVE DATE OF SAID POLICY IS 1/1/84 TO 1/1/85.

2. THE INSURER FURTHER CERTIFIES THE FOLLOWING WITH RESPECT TO THE INSURANCE DESCRIBED IN PARAGRAPH 1:

(a) BANKRUPTCY OR INSOLVENCY OF THE INSURED SHALL NOT RELIEVE THE INSURER OF ITS OBLIGATIONS UNDER THE POLICY.

(b) THE INSURER IS LIABLE FOR THE PAYMENT OF AMOUNTS WITHIN ANY DEDUCTIBLE APPLICABLE TO THE POLICY, WITH A RIGHT OF REIMBURSEMENT BY THE INSURED FOR ANY SUCH PAYMENT MADE BY THE INSURER. THIS PROVISION DOES NOT APPLY WITH RESPECT TO THAT AMOUNT OF ANY DEDUCTIBLE FOR WHICH COVERAGE IS DEMONSTRATED AS SPECIFIED IN 40 CFR 264.147(f) or 265.147(f).

(c) WHENEVER REQUESTED BY A REGIONAL ADMINISTRATOR OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA), THE INSURER AGREES TO FURNISH TO THE REGIONAL ADMINISTRATOR A SIGNED DUPLICATE ORIGINAL OF THE POLICY AND ALL ENDORSEMENTS.

(d) CANCELLATION OF THIS INSURANCE, WHETHER BY THE INSURER OR THE INSURED, WILL BE EFFECTIVE ONLY UPON WRITTEN NOTICE AND ONLY AFTER THE EXPIRATION OF SIXTY (60) DAYS AFTER A COPY OF SUCH WRITTEN NOTICE IS RECEIVED BY THE REGIONAL ADMINISTRATOR (d) OF THE EPA REGION(S) IN WHICH THE FACILITY(IES) IS (ARE) LOCATED.

(e) ANY OTHER TERMINATION OF THIS INSURANCE WILL BE EFFECTIVE ONLY UPON WRITTEN NOTICE AND ONLY AFTER THE EXPIRATION OF THIRTY (30) DAYS AFTER A COPY OF SUCH WRITTEN NOTICE IS RECEIVED BY THE REGIONAL ADMINISTRATOR(S) OF THE EPA REGION(S) IN WHICH THE FACILITY(IES) IS (ARE) LOCATED.



Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Rubo

DWL/jmf
1/10/84

I-20

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 8 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE
PAGE 2 OF 2

I HEREBY CERTIFY THAT THE WORDING OF THIS INSTRUMENT IS IDENTICAL TO THE WORDING SPECIFIED IN 40 CFR 264.151(i) AS SUCH REGULATION WAS CONSTITUTED ON THE DATE FIRST ABOVE WRITTEN, AND THAT THE INSURER IS LICENSED TO TRANSACT THE BUSINESS OF INSURANCE, OR ELIGIBLE TO PROVIDE INSURANCE AS AN EXCESS OR SURPLUS LINES INSURER, IN ONE OR MORE STATES.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Pondo

DWL/jmf
1/10/84

AI - 0003

I-21

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| ENG. NO. | POLICY NUMBER | INSURED | ENG. EFFECTIVE DATE |
|---|---|---|---|
| 7 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

PROPERTY DAMAGE EXCLUSION - REAL AND PERSONAL PROPERTY

IT IS UNDERSTOOD AND AGREED THAT THIS POLICY SHALL NOT APPLY TO ANY LIABILITY FOR PROPERTY DAMAGE TO REAL AND PERSONAL PROPERTY

(1) OWNED OR OCCUPIED BY OR RENTED TO THE INSURED,

(2) USED BY THE INSURED, OR

(3) IN THE CARE, CUSTODY OR CONTROL OF THE INSURED OR AS TO WHICH THE INSURED IS FOR ANY PURPOSE EXERCISING PHYSICAL CONTROL.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

DWL/jmf
1/10/84

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Ponko

I-22

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 6 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

## ERISA EXCLUSION

IT IS UNDERSTOOD AND AGREED THAT THIS POLICY SHALL NOT APPLY TO ANY LIABILITY ARISING OUT OF ANY VIOLATION(S) OF ANY PROVISIONS OF THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, PUBLIC LAW 93-406 (COMMONLY REFERRED TO AS THE PENSION REFORM ACT OF 1974), OR ANY AMENDMENTS THERETO.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

[X] TRANSPORT INDEMNITY COMPANY
[ ] COMPAC INSURANCE COMPANY

BY: Joseph M. Ponko

DWL/jmf
1/10/84

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I-23

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 5 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

## NUCLEAR ENERGY LIABILITY EXCLUSION ENDORSEMENT — BROAD FORM

It is agreed that:

I. The policy does not apply:

A. Under any Liability Coverage, to personal injury or property damage

(1) with respect to which an insured under the policy is also an insured under a nuclear energy liability policy issued by Nuclear Energy Liability Insurance Association, Mutual Atomic Energy Liability Underwriters or Nuclear Insurance Association of Canada, or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or

(2) resulting from the hazardous properties of nuclear material and with respect to which (a) any person or organization is required to maintain financial protection pursuant to the Atomic Energy Act of 1954, or any law amendatory thereof, or (b) the insured is, or had this policy not been issued would be, entitled to indemnity from the United States of America, or any agency thereof, under any agreement entered into by the United States of America, or any agency thereof, with any person or organization.

B. Under any Liability Coverage, to personal injury or property damage resulting from the hazardous properties of nuclear material, if

(1) the nuclear material (a) is at any nuclear facility owned by, or operated by or on behalf of, an insured or (b) has been discharged or dispersed therefrom;

(2) the nuclear material is contained in spent fuel or waste at any time possessed, handled, used, processed stored, transported or disposed of by or on behalf of an insured; or

(3) the personal injury or property damage arises out of the furnishing by an insured of services, materials, parts or equipment in connection with the planning, construction, maintenance, operation or use of any nuclear facility, but if such facility is located within the United States of America, its territories or possessions or Canada, this exclusion (3) applies only to property damage to such nuclear facility and any property thereat.

II. As used in this endorsement:

"hazardous properties" include radioactive, toxic or explosive properties;

"nuclear material" means source material, special nuclear material or byproduct material;

"source material", "special nuclear material", and "byproduct material" have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof;

"spent fuel" means any fuel element or fuel component, solid or liquid, which has been used or exposed to radiation in a nuclear reactor;

"waste" means any waste material (1) containing byproduct material and (2) resulting from the operation by any person or organization of any nuclear facility included within the definition of nuclear facility under paragraph (a) or (b) thereof;

"nuclear facility" means

(a) any nuclear reactor,

(b) any equipment or device designed or used for (1) separating the isotopes of uranium or plutonium, (2) processing or utilizing spent fuel, or (3) handling, processing or packaging waste,

(c) any equipment or device used for the processing, fabricating or alloying of special nuclear material if at any time the total amount of such material in the custody of the insured at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 or any combination thereof, or more than 250 grams of uranium 235,

(d) any structure, basin, excavation, premises or place prepared or used for the storage or disposal of waste,

and includes the site on which any of the foregoing is located, all operations conducted on such site and all premises used for such operations;

"nuclear reactor" means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material;

"property damage" for the purposes of this endorsement, means property damage as defined in the policy and also includes all forms of radioactive contamination of property.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Forbes

DWL/jmf
1/10/84

I-29

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| ENG. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 4 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

CANCELLATION AMENDMENT ENDORSEMENT

(NON-PAYMENT OF PREMIUM)

IT IS UNDERSTOOD AND AGREED THAT THE FOLLOWING SHALL BE ADDED TO CONDITIONS, ITEM P, CANCELLATION, OF THE UMBRELLA FORM ATTACHED TO THIS POLICY:

IT IS FURTHER UNDERSTOOD AND AGREED THAT IN THE EVENT OF NON-PAYMENT OF PREMIUM, THE CANCELLATION CLAUSE IS AMENDED TO READ: TEN (10) DAYS.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Ponko

DWL/jmf
1/10/84

I-25

ENDORSEMENT

TRANSPORT INDEMNITY COMPANY

COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 3 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

## PUNITIVE DAMAGE LIMITATION

IT IS UNDERSTOOD AND AGREED THAT THIS POLICY DOES NOT APPLY TO LIABILITY FOR PUNITIVE OR EXEMPLARY DAMAGES UNLESS SUCH LIABILITY IS COVERED BY VALID AND COLLECTIBLE UNDERLYING INSURANCE AS LISTED IN THE SCHEDULE OF UNDERLYING INSURANCE FOR THE FULL LIMIT SHOWN THEREIN, AND THEN ONLY FOR SUCH HAZARDS FOR WHICH COVERAGE IS AFFORDED UNDER SAID UNDERLYING INSURANCE.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY

☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Barbo

DWL/jmf

1/10/84

I-26

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 2 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

## POLLUTION EXCLUSION

IT IS AGREED THAT THIS POLICY SHALL NOT APPLY TO ANY LIABILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE ARISING OUT OF THE DISCHARGE, DISPERSAL, RELEASE OR ESCAPE OF SMOKE, VAPORS, SOOT, FUMES, ACID, ALKALIS, TOXIC CHEMICALS, LIQUIDS OR GASSES, WASTE MATERIALS, OR OTHER IRRITANTS, CONTAMINANTS OR POLLUTANTS INTO OR UPON LAND, THE ATMOSPHERE, OR ANY WATERCOURSE OR BODY OF WATER; BUT THIS EXCLUSION DOES NOT APPLY IF SUCH DISCHARGE, DISPERSAL, RELEASE OR ESCAPE IS SUDDEN AND ACCIDENTAL.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY: Joseph M. Forbes

DWL/jmf
1/10/84
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I-27

ENDORSEMENT
TRANSPORT INDEMNITY COMPANY
COMPAC INSURANCE COMPANY

| END. NO. | POLICY NUMBER | INSURED | END. EFFECTIVE DATE |
|---|---|---|---|
| 1 | TUL 00773C | CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS | 1/1/84 (12:01 A.M.) |

## AGGREGATE LIMITS OF LIABILITY

IT IS UNDERSTOOD AND AGREED THAT INSURING AGREEMENT (II), LIMITS OF LIABILITY, IS AMENDED TO ADD THE FOLLOWING PROVISION AS RESPECTS THE APPLICATION OF THE AGGREGATE LIMIT STATED IN THE DECLARATIONS:

IN THE EVENT THE UNDERLYING INSURANCE PROVIDES COVERAGE(S) WHICH ARE SUBJECT TO AN AGGREGATE LIMIT OF LIABILITY FOR ALL INSURED DAMAGES, THE COMPANY'S LIABILITY HEREUNDER SHALL LIKEWISE BE LIMITED TO THE AMOUNT STATED IN THE DECLARATIONS AS THE AGGREGATE LIMIT FOR ALL ULTIMATE NET LOSS ARISING OUT OF ONE OR MORE OCCURRENCES DURING EACH ANNUAL PERIOD WHILE THIS POLICY IS IN FORCE, COMMENCING FROM ITS EFFECTIVE DATE. THE AGGREGATE LIMIT HEREUNDER SHALL APPLY SEPARATELY TO EACH COVERAGE FOR WHICH THE UNDERLYING INSURANCE PROVIDES AN AGGREGATE LIMIT.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, conditions, or limitations of the policy to which this endorsement is attached other than as above stated.

This endorsement when countersigned by a duly authorized representative of the Company shall be valid and form part of the above mentioned policy.

☒ TRANSPORT INDEMNITY COMPANY
☐ COMPAC INSURANCE COMPANY

BY:

DWL/jmf
1/10/84

F-28

TUL 00773C

CONSERVATION CHEMICAL COMPANY, CONSERVATION CHEMICAL COMPANY OF ILLINOIS

EFFECTIVE JANUARY 1, 1984

## SCHEDULE OF UNDERLYING INSURANCE

| Company and Policy Number | Coverage | Limits |
|---|---|---|
| A. TBD | Statutory Workmen's Compensation Employers' Liability | Coverage B - Employers' Liability<br>$100,000.00 Each Person<br>Each Accident |
| B. INTEGRITY INSURANCE COMPANY | Comprehensive Automobile Liability | BODILY INJURY LIABILITY AND/ OR PROPERTY DAMAGE LIABILITY COMBINED SINGLE LIMIT $500,000.00 EACH OCCURRENCE |
| C. COLUMBIA CASUALTY COMPANY | Comprehensive General Liability Including Products - Completed Operations Liability | BODILY INJURY LIABILITY AND/ OR PROPERTY DAMAGE LIABILITY COMBINED SINGLE LIMIT $500,000.00 EACH OCCURRENCE $500,000.00 AGGREGATE WHERE APPLICABLE |
| D. | | |
| E. | | |

DWL/jmf
1/10/84

I-29

# TRANSPORT INDEMNITY COMPANY

A STOCK COMPANY

HOME OFFICE

LOS ANGELES, CALIFORNIA

**In consideration of the payment of the premium, in reliance upon the statements in the declarations made a part hereof and subject to all terms of this policy, the Company agrees with the insured named in the declarations as follows:**

## INSURING AGREEMENTS

I. **Coverage.** The company will indemnify the Insured for all sums which the Insured shall be legally obligated to pay as damages (all as more fully defined by the term "ultimate net loss") on account of:

1. Personal Injuries
2. Property Damage
3. Advertising Liability

to which this policy applies, caused by or arising out of an occurrence happening anywhere in the world.

II. **Limit of Liability — Retained Limits.** Regardless of the number of (1) Insureds under this Policy, (2) persons or organizations who sustain injury or damage, or (3) claims made or suits brought on account of personal injury, property damage, or advertising liability, the Company's liability is limited as follows:

Each Occurrence — With respect to personal injury, property damage, or advertising liability, or any combination thereof, the Company's liability shall be only for the ultimate net loss in excess of the Insured's retained limits defined as the greater of:

(a) an amount equal to the limits of liability indicated beside the underlying insurance listed in the Schedule of Underlying Insurance hereof, plus applicable limits of any other underlying insurance collectible by the Insured; or

(b) the amount specified in Item 5 of the Declarations as the result of any one occurrence not covered by the said insurance.

and then for an amount not exceeding the amount specified in Item 4 of the Declarations the result of any one occurrence.

Aggregate — Subject to the above provision respecting "each occurrence" the total liability of the Company for all ultimate net loss and loss to which this policy applies and described in any of the numbered subparagraphs below shall not exceed the "aggregate" limit of liability stated in Item 4 of the Declarations:

(a) all personal injury and property damage included within the products hazard and all personal injury and property damage included within the completed operations hazard;

(b) all occupational disease sustained by all employees of insureds arising out of and in the course of their employment.

If this policy is issued for more than one year, this "aggregate" limit of liability applies separately to each consecutive annual period of this policy or, if the last consecutive period is less than twelve months, to such period of less than twelve months.

In the event of reduction or exhaustion of the aggregate limits of liability applicable to the underlying insurance (listed in the Schedule of Underlying Insurance hereof) by reason of losses paid thereunder, this Policy shall, subject to the terms and conditions of the underlying insurance,

(a) in the event of reduction pay the excess of the reduced underlying limit;

(b) in the event of exhaustion continue in force as underlying insurance.

For the purpose of determining the limit of the Company's liability, all damages arising out of continuous or repeated exposure to substantially the same general conditions shall be considered as arising out of one occurrence; and with respect to advertising liability and act or series of acts in which the same or similar advertising material is used, regardless of the number or kind of media used, committed during this policy period which causes such advertising injury. All damages involving the same injurious material or act, regardless of the frequency of repetition thereof, the number or kind of media used, or the number of claimants shall be deemed to arise out of one occurrence.

III. **Persons or Entities Insured.** Each of the following is an insured under this Policy to the extent set forth below:

(a) The Named Insured;

(b) with respect to the ownership, maintenance or use, including loading or unloading thereof, of an automobile, or watercraft

(1) any partner or executive officer of the named insured, but with respect to a non-owned automobile, or watercraft only while such automobile, or watercraft is being used in the business of the named insured;

(2) any other person while using an owned automobile, or watercraft or a hired automobile, or watercraft with the permission of the named insured, his actual operation or (if he is not operating) his other actual use thereof is within the scope of such permission, but with respect to personal injury or property damage arising out of the loading or unloading thereof, such other person shall be an insured only if he is:

(i) a lessee or borrower of the automobile, or watercraft or

(ii) an employee of the named insured or such lessee or borrower;

(3) except with respect to watercraft, any other person or organization but only with respect to his or its liability because of acts or omissions of the named insured or an insured under (1) or (2) above.

(c) with respect to any aircraft chartered with pilot by or on behalf of the named insured, any person using such aircraft and any person legally responsible for the use thereof, except

(1) the owner, pilot or aircrew thereof or any person operating the aircraft;

(2) any manufacturer of aircraft, engines, or aviation accessories, or any aviation sales or service or repair organization or airport or hangar operator or their respective employees or agents with respect to any occurrence arising out of the operation thereof;

(d) except with respect to ownership, maintenace or use, including the loading or unloading thereof, of an automobile, aircraft or watercraft

(1) any executive officer, other employee, director or stockholder of the named insured while acting within the scope of his duties as such, and

(2) if the named insured is designated in the declarations as a partnership or joint venture, the partnership or joint venture so designated and any member thereof but only with respect to his liability as such, and

(3) any person or organization while acting as real estate manager for the named insured;

(e) any person or organization to whom the named insured is obligated by virtue of a written contract to provide insurance such as is afforded by this policy, but only with respcet to operations by or on behalf of the named insured or to facilities of or used by the named insured;

None of the following is an insured under sub-paragraphs (b), (c), or (d)

(i) any person while engaged in the business of his employer with respect to personal injury to any fellow employee of such person injured in the course of his employment or property damage to property owned by the name insured;

(ii) any owner or lessee (of whom the named insured is a sub-lessee) of a hired automobile, aircraft, or watercraft, or any agent or employee of such owner or lessee;

(iii) any person or organization, other than the named insured, with respect to

(1) a motor vehicle while used with any trailer owned or hired by such person or organization and not covered by like insurance in the company (except a trailer designed for use with a private passenger type automobile and not being used for business purposes with another type motor vehicle), or

(2) a trailer while used with any motor vehicle not covered by like insurance in the company;

(iv) any person or organization while employed in or otherwise engaged in duties in connection with an automobile or watercraft business (other than such a business operated by the named insured).

If the named insured is designated in the Declarations as an individual, the person so designated shall be an insured in accordance with sub-paragraphs (b), (c), or (d), but only with respect to the conduct of a business of which he is the sole proprietor.

The term "insured" shall include any additional insured (not being the Named Insured hereunder) named in the underlying insurance listed in Schedule of Underlying Insurance hereof, but not for broader coverage than is available to such additional insured thereunder.

This policy does not apply to personal injury, property damage, or advertising liability arising out of the conduct of any partnership or joint venture of which the insured is a partner as member and which is not named in Item 1 of the Declarations.

The insurance afforded applies separately to each insured against whom claim is made or suit is brought, but the inclusion herein of more than one insured shall not operate to increase the limits of the Company's liability. The "named insured" means the person or organization named in the Declarations and includes any subsidiary thereof and any other organization coming under the named insured's control of which it assumes active management.

IV. **Policy Period, Territory.** This Policy applies to personal injury, property damage or advertising liability which occurs anywhere during the policy period.

## CONDITIONS

A. PREMIUM. Unless otherwise provided for the premium for this Policy is a flat premium and is not subject to adjustment except as provided in Conditions B and P.

B. ADDITIONAL INSUREDS. In the event of additional insureds being added to the coverage under the Underlying Insurance prompt notice shall be given to the Company and if an additional premium has been charged for such addition on the Underlying Insurance, the Company shall be entitled to charge an appropriate additional premium hereon.

C. ARBITRATION. Except with respect to liability assumed by the Insured under a lease of premises, easement agreement, agreement required by municipal ordinance, sidetrack agreement or elevator or escalator maintenance agreement, the Company shall not be liable under this Policy for damages awarded in arbitration other than an arbitration proceeding wherein an indemnity under a written contract or agreement seeks damages against the Insured on account thereof and wherein the Company is entitled to exercise the Insured's rights in the choice of arbitrators and in the conduct of such arbitration proceedings.

D. SPECIAL CONDITIONS APPLICABLE TO OCCUPATIONAL DISEASE. As regards personal injury by occupational disease sustained by any employee of the Insured, this Policy is subject to the same warranties, terms and conditions (except as regards the premium, the amount and limits of liability and the renewal agreement, if any) as are contained in or as may be added to the Underlying Insurance prior to the happening of an occurrence for which claim is made hereunder.

E. INSPECTION AND AUDIT. The Company shall be permitted but not obligated to inspect the Named Insured's property and operations at any time. Neither the Company's right to make inspections nor the making thereof nor any report thereon shall constitute an undertaking, on behalf of or for the benefit of the Named Insured or others, to determine or warrant that such property or operations are safe.

F. CROSS LIABILITY. Except with respect to liability assumed by the Insured under Contract, the term "Insured" is used severally and not collectively, but the inclusion in this Policy of more than one Insured shall not operate to increase the limits of the Company's liability.

G. NOTICE OF OCCURRENCE. Whenever the Insured has information from which the Insured may reasonably conclude that an occurrence covered hereunder involves injuries or damages which in the event that the Insured should be liable, are likely to involve this Policy, notice shall be sent to the Company as soon as practicable, provided, however, that failure to give notice of any occurrence which at the time of its happening did not appear to involve this Policy but which, at a later date, would appear to give rise to claims hereunder, shall not prejudice such claims.

H. ASSISTANCE AND COOPERATION. Except as provided in Insuring Agreement H with respect to the exhaustion of the aggregate limits of underlying policies listed in the Schedule of Underlying Insurance, the Company shall not be called upon to assume charge of the settlement or defense of any claim made or suit brought or proceeding instituted against the Insured but the Company shall have the right and shall be given the opportunity to associate with the Insured or the Insured's underlying insurers, or both, in the defense and control of any claim, suit or proceeding relative to any occurrence where the claim or suit involves, or appears reasonably likely to involve the Company, in which event the Insured and the Company shall cooperate in all things in the defense of such claim, suit or proceeding.

I. APPEALS. In the event the Insured or the Insured's underlying insurers elect not to appeal a judgment in excess of the Underlying Limits, the Company may elect to make such appeal at its cost and expense, and shall be liable for the taxable costs and disbursements and interest incidental thereto, but in no event shall the liability of the Company for ultimate net loss exceed the amount set forth in Insuring Agreement II for any one occurrence and in addition the cost and expense of such appeal.

J. LOSS PAYABLE. Liability under this Policy with respect to any occurrence shall not attach unless and until the Insured, or the Insured's underlying insurer, shall have paid the amount of the Underlying Limits on account of such occurrence. The Insured shall make a definite claim for any loss for which the Company may be liable under the Policy within twelve (12) months after the Insured shall have paid an amount of ultimate net loss in excess of the amount carried by the Insured or after the Insured's liability shall have been fixed and rendered certain either by final judgment against the Insured after actual trial or by written agreement of the Insured, the claimant, and the Company. If any subsequent payments shall be made by the Insured on account of the same occurrence, additional claims shall be made similarly from time to time. Such losses shall be due and payable within thirty (30) days after they are respectively claimed and proven in conformity with this Policy.

K. BANKRUPTCY AND INSOLVENCY. In the event of the bankruptcy or insolvency of the Insured or any entity compromising the Insured, the Company shall not be relieved thereby of the payment of any claims hereunder because of such bankruptcy or insolvency.

L. OTHER INSURANCE. If other valid and collectible insurance with any other insurer is available to the Insured covering a loss also covered by this Policy, other than insurance that is in excess of the insurance afforded by this Policy, the insurance afforded by this Policy shall be in excess of and shall not contribute with such other insurance. Nothing herein shall be construed to make this Policy subject to the terms, conditions and limitations of other insurance.

M. SUBROGATION. Inasmuch as this Policy is "Excess Coverage" the Insured's right of recovery against any person or other entity cannot be exclusively subrogated to the Company. It is, therefore, understood and agreed that in case of any payment hereunder, the Company will act in concert with all other interests (including the Insured) concerned, in the exercise of such rights of recovery. The apportioning of any amounts which may be so recovered shall follow the principle that any interests (including the Insured) that shall have paid an amount over and above any payment hereunder, shall first be reimbursed up to the amount paid by them; the Company is then to be reimbursed out of any balance then remaining up to the amount paid hereunder; lastly, the interests (including the Insured) of whom this coverage is in excess are entitled to claim the residue, if any, expenses necessary to the recovery of any such amounts shall be apportioned between the interests (including the Insured) concerned, in the ratio of their respective recoveries as finally settled.

N. CHANGES. Notice to or knowledge possessed by any person shall not effect a waiver or change in any part of this Policy nor stop the Company from asserting any right under the terms of this Policy; nor shall the terms of this Policy be waived or changed, except by endorsement issued to form a part hereof, signed by the Company.

O. ASSIGNMENT. Assignment of interest under this Policy shall not bind the Company unless and until its consent is endorsed hereon.

P. CANCELLATION. This Policy may be cancelled by the Named Insured by mailing to the Company written notice stating when thereafter such cancellation shall be effective. This Policy may be cancelled by the Company by mailing to the Named Insured at the address shown in this Policy written notice stating when, not less than thirty (30) days thereafter, such cancellation shall be effective. The mailing of notice as aforesaid shall be sufficient notice and the effective date of cancellation stated in the notice shall become the end of the Policy period. Delivery of such written notice either by the Named Insured or by the Company shall be equivalent to mailing. If the Named Insured cancels, earned premium shall be computed in accordance with the customary short rate table and procedure. If the Company cancels, earned premium shall be computed pro rata.

Premium adjustment may be made at the time cancellation is effected or as soon as practicable thereafter. The check of the Company or its representative, mailed or delivered, shall be sufficient tender of any refund due the Named Insured.

If this Policy insures more than one Named Insured, cancellation may be effected by the first of such Named Insureds as set forth in the Declarations for the account of all Insureds; and notice of cancellation by the Company to such first Named Insured shall be notice to all Insureds. Payment of any unearned premium to such first Named Insured shall be for the account of all interests therein.

Q. MAINTENANCE OF UNDERLYING INSURANCE. It is warranted by the Insured that the Schedule of Underlying Insurance or renewals or replacements thereof not more restricted, shall be maintained in force as collectible insurance during the currency of this Policy, except for any reduction of the aggregate limits contained therein solely by payment of claims in respect of occurrences happening during the period of this Policy. In the event of failure by the Insured so to maintain such policies or to meet all conditions and warranties subsequent to loss under such policies, the insurance afforded by this Policy shall apply in the same manner it would have applied had such policies been so maintained in force.

R. UNDERLYING INSURANCE — CHANGES OR ADDITIONAL COVERAGES DURING THIS POLICY PERIOD. The Insured shall immediately report to the company any change in coverage in the underlying insurance or the purchase of insurance for perils previously uninsured by underlying insurance. Such report shall include a description of the coverage afforded and a complete description of the limits of liability thereunder and such insurance shall be deemed a part of the schedule of underlying insurance. The insured shall upon request furnish the Company with exact copies of such change or such additional insurance. Any material change in the premium for the underlying insurance shall be promptly reported to the Company and the premium for this policy may be adjusted in accordance with the manuals of the Company then in effect.

S. EMPLOYERS' LIABILITY — COMMON LAW DEFENSES. As a condition to the recovery of any loss under this Policy, with respect to personal injury to or the death of any employee arising out of and in the course of employment by the Named Insured, the Named Insured warrants that it has not and will not abrogate its Common Law Defenses under any Workmen's Compensation Law. In the event the Named Insured should, at any time during the Policy period, abrogate such defenses, such insurance as is afforded by Coverage (I) (1) with respect to such employees shall automatically terminate at the same time.

T. ACTION AGAINST COMPANY. No action shall lie against the company unless, as a condition precedent thereto, the insured shall have fully complied with all the terms of this policy, nor until the amount of the insured's obligation to pay shall have been finally determined either by judgment against the insured after actual trial or by written agreement of the insured, the claimant and the company.

Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this policy to the extent of the insurance afforded by this policy. Nothing contained in this policy shall give any person or organization any right to join the company as a co-defendant in any action against the insured to determine the insured's liability.

U. DECLARATIONS. By acceptance of this policy the named insured agrees that the statements in the application and the declarations, and in any subsequent notice relating to underlying insurance are its agreements and representations, that this policy is issued and continued in reliance upon the truth of such representations and that this policy embodies all agreements existing between the named insured and the company or any of its agents relating to this insurance.

**IN WITNESS WHEREOF**, the company has caused this policy to be signed by its President and Secretary but this policy shall not be valid unless completed by the attachment hereto of a Declarations page designated as Part Two and Coverage Part(s) and countersigned on the aforesaid Declarations page by a duly licensed resident agent or authorized representative of the Company.

John M Layer
President

Secretary
Patrick W. O'Grady

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OFFICER - ROSELLA HOGLUND

70 00270 00

THE MISSION BANK
TRUST DEPARTMENT

CONSERVATION CHEMICAL CO. OF ILLINOIS
5201 JOHNSON DRIVE, SUITE 400
MISSION, KANSAS 66205
ATTENTION: LLOYD KAISER

STATEMENT OF

CONSERVATION CHEMICAL CO. OF ILLINOIS

01-01-84 THROUGH 03-31-84

STATEMENT

01-01-84 THROUGH 03-31-84

THE MISSION BANK
CORPORATE TRUST

CONSERVATION CHEMICAL CO. OF ILLINOIS 70 00270 00 PAGE 1

| DATE | DESCRIPTION | INCOME CASH | PRINCIPAL CASH | INVESTMENTS |
|---|---|---|---|---|
| | BALANCE AT BEGINNING OF PERIOD | .00 | 138.14 | 22,900.76 |
| 01-09-84 | INTEREST ON MONEY MARKET INVESTMENT ACCOUNT | 180.41 | | |
| 01-12-84 | PURCHASED 180.41 MONEY MARKET INVESTMENT ACCOUNT AS OF 01-05-84 | | 180.41- | 180.41 |
| 01-12-84 | TRANSFER INCOME TO PRINCIPAL | 180.41- | 180.41 | |
| 02-06-84 | INTEREST ON MONEY MARKET INVESTMENT ACCOUNT | 184.64 | | |
| 02-08-84 | PURCHASED 184.64 MONEY MARKET INVESTMENT ACCOUNT AS OF 02-03-84 | | 184.64- | 184.64 |
| 02-08-84 | TRANSFER INCOME TO PRINCIPAL | 184.64- | 184.64 | |
| 03-06-84 | INTEREST ON MONEY MARKET INVESTMENT ACCOUNT | 173.61 | | |
| 03-07-84 | PURCHASED 173.61 MONEY MARKET INVESTMENT ACCOUNT AS OF 03-02-84 | | 173.61- | 173.61 |
| 03-07-84 | TRANSFER INCOME TO PRINCIPAL | 173.61- | 173.61 | |
| | ENDING BALANCE | .00 | 138.14 | 23,439.42 |

LIST OF ASSETS 03-31-84

| SHARES/PAR | DESCRIPTION | COST | MARKET PRICE | AS OF | MARKET VALUE |
|---|---|---|---|---|---|
| | CORPORATE BONDS | | | | |
| 23,439.42 | MONEY MARKET INVESTMENT ACCOUNT | 23,439.42 | | | 23,439.42 |
| | TOTAL CORPORATE BONDS | 23,439.42 * | | | 23,439.42 * |
| | TOTAL INVESTMENTS | 23,439.42 * | | | 23,439.42 * |

MARKET VALUES FOR BONDS AND REAL ESTATE ARE ESTIMATED

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TRUST AGREEMENT

Trust Agreement, the "Agreement," entered into as of April 27, 1983 by and between Conservation Chemical Company of Illinois, a Missouri corporation, the "Grantor," and The Mission Bank, incorporated in the State of Kansas, the "Trustee."

Whereas, the Indiana Environmental Management Board, "EMB," an agency of the State of Indiana , has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EMB. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EMB.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the EMB Technical Secretary shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EMB Technical Secretary from the Fund for closure and post-closure expenditures in such amounts as the EMB Technical Secretary shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EMB Technical Secretary specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the



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Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.



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Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EMB Technical Secretary a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EMB Technical Secretary shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EMB Technical Secretary and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and

instructions. All orders, requests, and instructions by the EMB Technical Secretary to the Trustee shall be in writing, signed by the EMB Technical Secretary , or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EMB hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EMB, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the appropriate EMB Technical Secretary by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EMB Technical Secretary , or by the Trustee and the appropriate EMB Technical Secretary if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EMB Technical Secretary , or by the Trustee and the EMB Technical Secretary , if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EMB Technical Secretary issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity , including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Kansas.



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Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in

Conservation Chemical Company of Illinois
Grantor

By _____ President

Attest:

_____
E. Dimer Void, Secretary

The Mission Bank,
Trustee

By _____
Terry L. Rees, Vice-President
Trust Officer

Attest:

_____ Secretary



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CERTIFICATION OF ACKNOWLEDGEMENT

State of MISSOURI

County of JACKSON

On this 27th day of April, 1983, before me personally came Norman B. Hjersted to me known, who, being by me duly sworn, did depose and say that he resides at 4512 Mercier, Kansas City, Missouri, that he is President of Conservation Chemical Company of Illinois, the corporation described in and which executed the above instrument.

Lloyd T. Kaiser, Sr.
Notary Public

My commission expires:
LLOYD T. KAISER, SR.
Notary Public - State of Missouri
Commissioned in Jackson County
My Commission Expires November 5, 1985

CERTIFICATION OF ACKNOWLEDGEMENT

STATE OF KANSAS )
) ss
COUNTY OF JOHNSON )

BE IT REMEMBERED that on this 6th day of May, 1983, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Terry L. Rees, Vice President and Trust Officer of The Mission Bank and Donna Jean Amis, Assistant Secretary of said corporation, who are personally known to me to be the same persons who executed the foregoing instrument of writing as such officers, and said Terry L. Rees, as Vice President and Trust Officer of said corporation, duly acknowledged the execution of the same to be the act of the corporation; and Donna Jean Amis, Assistant Secretary of said corporation duly acknowledged the attestation of the same for and on behalf of said corporation, and she affixed thereto the seal of the corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, the day and year last above written.

BARBARA J. WARMAN
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Expires 10/5/86

Barbara J. Warman
Notary

My Commission Expires:

10/5/86

June 20, 1984

EPA Region V
Office of the Director
Waste Management Branch
Waste Management Division
Federal Building
230 South Dearborn
Chicago, Illinois 60604

Dear Sir:

I am a register Professional Engineer in state of Missouri. I am certifying that all the drawings, data and calculations are correct in my judgement. I personally look over all the data, drawing, and calculations.

Very truly your,

Mahesh Desai

Mahesh ~~Desai~~

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CONSERVATION CHEMICAL COMPANY
OF ILLINOIS
5201 Johnson Drive
Suite 400
Mission, Ks. 66205
913-262-3649

June 15, 1984

RCRA Activities
Part B Permit Application
U.S. EPA, Region V
P.O. Box A3587
Chicago, IL 60690-3587

Dear Sir:

We are submitting herewith Conservation Chemical Company of Illinois' Part B of the Resource Conservation and Recovery Act (RCRA) permit application for its facility located at 6500 Industrial Highway, Gary, Indiana 46406 IND 040888992.

We are submitting an original and three copies of the documents which make up the application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

We hope that the enclosed documents represent a complete application and that you will be able to issue us a RCRA permit based on their contents. If you need additional information, please advise us accordingly.

Very truly yours,

CONSERVATION CHEMICAL COMPANY OF ILLINOIS

Norman B. Hjersted
President

NBH/dr

SECTION HR

## Waste Heat Recovery Unit

Conservation Chemical Company of Illinois is classified as a Hazardous Waste Management Facility. Currently, we have about 90,000 gallons of solvents and about 400,000 gallons of No. 5 fuel oil in our storage tanks. We would like to utilize this material by evaporating pickle liquor and recovery the Cl or S valves in the hydrocarbon thur incineration. We are applying for a new permit to combust this material.

The waste we are proposing to burn is hazardous not solely due to their ignitable, corrosive or reactive properties. The unit is not in service yet so we are not classified for interim status. We are applying for a new waste heat recovery unit permit.

The waste we have is in our storage tanks from company's prior years' operation. Their analysis is shown in Table 1.

Tank 19 has about 191,000 gallons of material in it. Only about 25,000 gallons of that is No. 5 fuel oil; rest is water. This oil has AROCLOR 1254, 108 ppm.

Tank 22 has about 470,850 gallons of No. 5 fuel oil-asphalt mixture. This oil has also PCBs in it. The analysis is on the next page.

We would like to get a permit to burn other kind of waste ultimately. Presently, we do no have any other waste, but as we are apply for a permit to burn our waste which is stored in our storage tank, we are asking for a permit to burn similar kind of waste.

At present, we are not accepting any organic hazardous waste. All our wastes from company's prior years' operation are in storage tanks and their analysis is in Table 1. As we are applying for an permit, we are thinking to expand our operating and bring hazardous waste to burn after we get the permit after present inventory is reduced.

If we will bring the hazardous waste for incineration, we will analyze the load first before we will unload the truckload into our stage tank. The hazardous waste we may accept will be similar in nature and components as the waste we presently have in our storage tanks. The hazardous waste will accept will have a heating valve of at least 0.11 Kcal/gram and we will check this analysis for every waste.

We will have scrubber and we will check for waste water generated from the scrubber before disposing of by selling it as HCl acid solution or we may neutralize the HCl acid with caustic solution. We will also continuously monitor the stack gas for CO, $O_2$, POHCS, HCl and particulate matter.

We will analyze each load if we received, according to the agency's recommended analytical methods for waste analysis in its document. (Test Methods (SW-846, Second Edition, July, 1982). Sampling and analysis of stack gases and other incineration residues will be analyzed according to the EPA document. (Sampling and Analysis Methods for Hazardous Waste Combustion (Arthur D. Little, Inc., February, 1983).

The incinerator we are proposing to install is a solvent incinerator manufactured by Combustion Control, Inc., 1401 Fairfax Traffic Way, Kansas City, Kansas 66115.

Incinerator overall length is 26'6". With the quenching section, the length is 45"1-1/8". We are planning to install this incinerator on 50'0" length concrete pad.

Incinerator details and quench chamber details is on the attached drawings.

Burner Data:

12,600,000 BTU per hour maximum output.
Maximum firing rate: 12,600 cu.ft. gas per hour using 1,000 BTU per cu.ft. gas.
Chemicals to be consumed: 1,000 gallons per hour maximum.
Burner safety controls are FJA and FM approved.
Blower Motor: 10 HP, 3400 RPM, 440vA/C, 3-phase.
Chemicals will be atomized via a self-contained air compressor driven by a 3 HP-1725 RPM motor, 440vA/C, 3-phase.
Flame safeguard system powered by 110vA/C. The drawings of burner assembly is also attached.

Norton cyclonaire vertical packaged flame scrubber as shown in incinerator assembly layout drawings will be used as scrubber. It is 60" diam, 9500 CFM designed to remove chlorides to 10ppm. Fan on the scrubber is powered by a 15 HP electric motor. Water will be supplied to the quenching duct via Model #03A3 Gorman-Rupp self-priming pump powered by a 15 HP motor.

Drawings of incinerator pneumatic control system, pad plan, piping plan, elevation and electric plan details are also attached.

The main purpose of the waste heat recovery unit is to recover CI and S values in the waste hydrocarbonatious solvents without polluting the environment and evaporate pickle liquor. Other waste may also be utilized in this unit, provided that the temperature requirement in the waste heat recovery unit has been attained prior to injection.

Solvent wastes from the tank will be pumped in a pressure loop to the waste heat recovery unit, through a relief valve, and back to the tank. Material entering the waste heat recovery unit is measured by a meter. The flow of the solvent will be controlled by an adjustable port valve actuated by a modulating motor. A piston-type pump operated with compressed air will supply the required solvent pressure. The tank will be blanketed with nitrogen gas for added safety.

Pickle liquor will be pumped to the quencher and scrubber. To assure the liquid is being supplied, a mercoid switch on the quencher header will be set to shut down the waste heat recovery unit if the quencher liquid pressure drops below 30 psi. Strainer will be installed in the pump discharge line, protecting the quench nozzles from fouling.

Compressed air will be used to atomize the waste solvent and miscellaneous waste chemicals utilized in the waste heat recovery unit. This same air supply is used to pump the waste solvent to the waste heat recovery unit.

A second stage scrubber will be used, downstram of the first stage scrubber to remove any acid vapor or mist. It will be operated with a neutral buffer solution.

Start-up procedure:

We will start after the installation of the waste heat recovery unit this way. The procedure may vary after the installation but this is the rough draft of the start-up procedure:

1. Be sure that all breakers on the electrical control panel are in the"ON" position.

2. Turn the waste heating recovery unit control panel switch to the "ON" position.

3. Start the waste supply pump and the induced draft fan.

4. Observe the pump water pressure and the induced fan to be sure both are operating.

5. Adjust the pickle liquor pressure to the quencher by opening the supply valve full open. Throttle the scrubber liquid supply control valve until the pressure gauge on the quencher water line reads 40 psi.

6. Open the solvent supply and return line valves at the incinerator. Turn on the air supply to the air-actuated pump. Observe the pressure gauges at the incinerator. Supply pressure should be 50psi and fluctuating regulated pressure should be approximately 42psi.

7. Open the atomizing air valve and adjust the regulator to 15psi.

8. Turn the "POWER" switch on the incinerator to the "ON" position.

9. Turn the "FUEL" switch to the "ON" position and the MANUAL-AUTOMATIC" switch to the "MANUAL". The forced draft fan should start now and the fire-eye unit should begin its prepurge cycle. The following sequence of control functions should automatically take place:

   a. Forced draft fan starts.
   b. Mod. motor opens and close damper to complete the prepurge cycle.
   c. Pilot solenoid opens. Igniter lights the pilot.
   d. Fire-eye "proves" pilot and opens main fuel valves.
   e. Fire-eye "proves" main flame and shuts off pilot fuel.
   f. The unit is now firing in the "Low Fire" condition.

10. Warm up: Allow the unit to warm up in the low fire condition for approximately (3) three hours. Some city gas may be needed during this time to maintain a steady fire. This is obtained by opening the three inch plug valve adjacent to the main burner and watching the fire through the observation port.

11. High Fire Condition:

   a. After 3 hours of warm up, turn the fuel increase-decrease knob to the full "INCREASE" position. The modulating motor should open the control valves on the solvent and city gas lines and should open the forced draft fan damper.
   b. After the city gas has stabilized its flame on high fire, shut off the city gas plug valve adjacent to the main burner.
   c. Observe the instruments on the east side of the incinerator. These instruments from south

to north have the following functions:

| Instrument | Set Point(s) | Function |
|---|---|---|
| South | 2000 | Monitors scrubber inlet maximum temperature |
| Middle | Adjustable, set at 1850° | Controls firebox temperature on "automatic" (temporarily out of service.) |
| North | 1850° (firebox set point) | Monitors firebox maximum temperature and misc. waste minimum temperatures. |

*Misc. Waste Minimum Temp. =
.81 x firebox maximum temperature.

d. Close the solvent return valve at the incinerator; pressure will increase to 50psi regulated pressure, 70psi supply pressure. Adjust supply pressure at the solvent pump compressed air regulator.

e. Check the solvent flow meter. Flow should be approximately 1.7GPM.

12. Operational Checks

12.1 Check the water pressure on the quencher header and adjust per Item 5.

12.2 The firebox has an automatic pressure control system consisting of a sensor, controller and butterfly valve positioner. This system is set to hold a slightly negative pressure (½" water column) in the firebox. It should be checked by unlocking the firebox access door on the west side. If the pressure control system is functioning properly, the door should be sucked closed, but not continuously. A slight chattering of the door should be observed.

12.3 The breeching at the entrance to the scrubber is supplied with a high temperature cut-off to shut off the incinerator if a temperature in excess of 200°F is reached. This temperature should be checked on the instrument on the east side of the firebox.

13. Shut-Down

13.1 Shut-down should be accomplished only when the waste solvent tank level is reduced to 12-inch or less.

13.2 Turn the unit to the low fire position and hold on low fire for one hour.

13.2 Shut the main fuel supply off by turning the "FUEL" switch to the "OFF" position. The fire eye unit will not "post purge" the incinerator and the forced draft fan should shut off.

13.3 Shut off the solvent pump.

13.4 Shut off control power by turning the "POWER" switch to the "OFF" position.

13.5 The pump and induced draft fans should be allowed to continue to run for a minimum of one hour. After that period, shut these units down by actuating the "OFF" pushbutton at the sump breaker.

13.6 Shut off the atomizing air to the solvent burner. Do not shut off the air supply to the pressure control system.

14. Maintenance

14.1 On a quarterly schedule the brickwork in the firebox should be inspected and repairs made as necessary.

14.2 If the unit shuts down erratically due to flame failure, clean the fire eye lens of soot and dust. If this does not solve the problem, an electrician should be called.

14.3 After burning approximately 12,000 gallons of solvent (one run), pull a nozzle from the quencher and check for plugging. Clean all nozzles if necessary.

14.4 For electrical maintenance, use drawings and information supplied by the incinerator manufacturer.

## WASTE HEAT RECOVERY SECTION

### TRIAL BURN PLAN:

We will first incinerate the waste we have in storage tanks. Their analysis is in Table 1. We will collect all the data for performance evaluation.

We will check combustion zone temperature, waste and fuel feed rates, combustion gas velocity, carbon monoxide, POHCs, Oxygen, HCl and particulate in stack gas. We will measure the volumetric flowrate of stack gases, temperature, water content and metals also in stack gases. We will also continuously monitor the scrubber efficiency.

We would like also to burn other waste which will be similar in nature and in analysis as in Table 1. Heating value of this waste will be higher than 0.11kcal/gram. We will make artificial mixture of carbon tetrachloride, trichloromonofluoromethane, trichloroethane, and perchloroethylene and use this waste to show the complete compliance with all the regulations.

If we get the permit, we would like to start the trial burn after about 6-12 months.

### PERFORMANCE DATA:

Our performance data will include:

* results of the waste analysis
* results of the analyses of the scrubber solution and other residues
* computations of the destruction and removal efficiency
* particulate omissions and HCl emissions
* identification of any fugitive emissions
* average, maximum and minimum temperatures and combustion gas flowrates, and
* result of continuous monitoring

We will monitor:

* combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the permit on a continuous basis

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* CO will be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere
* the incinerator and associated equipment (pumps, valves, pipes, etc.) will be visually inspected everyday for leaks, spills, fugitive emissions and signs of tampering
* the emergency waste feed cutoff system and associated alarms will be tested monthly unless the Regional Administrator wants us to test weekly
* the monitoring and inspection data will be recorded and the records must be placed in the operating log as required by 264.73.

We will keep the record of all the waste we burn into the incinerator. If the waste feed is different, we will analyze the feed first. We will keep the record of stack gas analysis, scrubber efficiency, temperature and pressure and feed rate.

CHLORINATED SOLVENTS

TABLE 1

| ITEMS | TANK 1-S | TANK 2-S | TANK D-1 | TANK 2 | CONL CDU-1 | TANK F-11 | SUMP S-1 | TANK 19 | TANK 22 | CONTAINER |
|---|---|---|---|---|---|---|---|---|---|---|
| Physical State | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid | Viscous Liquid | Viscous Liquid | Solid |
| Solubility in water | Missible | Missible | Insol. | Insol. | Soluble | Insol. | Insol. | Insol. | Insol. | Insol. Dirt |
| Amount Gallons | 18,200 | 15,100 | 9,300 | 41,100 | 8,000 | 5,000 | 1,000 | 191,000 | 470,850 | 24 |
| Specific Gravity | 1.0 | 0.956 | 1.238 | 0.02 | 1.0 | 1.0 | 1.0 | 0.92 | 0.92 | - |
| pH | 5.3 | 8.2 | 5.2 | 7.2 | 5.6 | 7.0 | 5.2 | 5.6 | 5.6 | - |
| Viscosity ZAHN/sec. at 80°F | 7.2 | 6.7 | 6.4 | 8.3 | 7.2 | 6.8 | - | 9.2 @ 110°F | 8.7 @ 105°F | - |
| Flash Point °F | No flash below 220°F | 100°F | No flash Boils at 136°F | 200°F | No flash below 220°F | No Flash below 220°F | NONE | No flash below 220°F | No flash below 220°F | - |
| Methylene Chloride microgram | 4865 | Has Volatile | 50% | Has Petr. | 6770 | 3285 | Has Chlorinated solvents in it | | | We had spill of solvents and we cleaned that spill and picked up dirt in spill which is in containers. |
| Kcal/gram Heat Value liter | 1.70 | | 1.70 | | 1.70 | 1.70 | | | | |
| 1,1 Dichloro microgram | 29 | Solvents Maybe | | Distillate | 3086 | 54 | | | | |
| Kcal/gram Heat Value liter | 3.0 | | | | 3.0 | 3.0 | | | | |
| Chloroform microgram | 116 | Acetone or Alcohol | | | 114 | 153 | | | | |
| Kcal/gram Heat Value liter | 0.75 | | | | 0.75 | 0.75 | | | | |
| Trichloroethylene microgram | 255 | | 65% | | 1517 | 1116 | | | | |
| Kcal/gram Heat Value liter | 1.74 | | 1.74 | | 1.74 | 1.74 | | | | |
| 1,1,2 Trichloroethane microgram | | | | | 3554 | 356 | | | | |
| Kcal/gram Heat Value liter | | | | | 1.99 | 1.99 | | | | |
| 1,1,1 Trichloroethane microgram | 420 | | 13% | | 2224 | 3347 | | | | |
| Kcal/gram Heat Value liter | 1.99 | | 1.99 | | 1.99 | 1.99 | | | | |
| Toluene microgram | | | | | 175 | 20 | | | | |
| Kcal/gram Heat Value liter | | | | | 10.14 | 10.14 | | | | |

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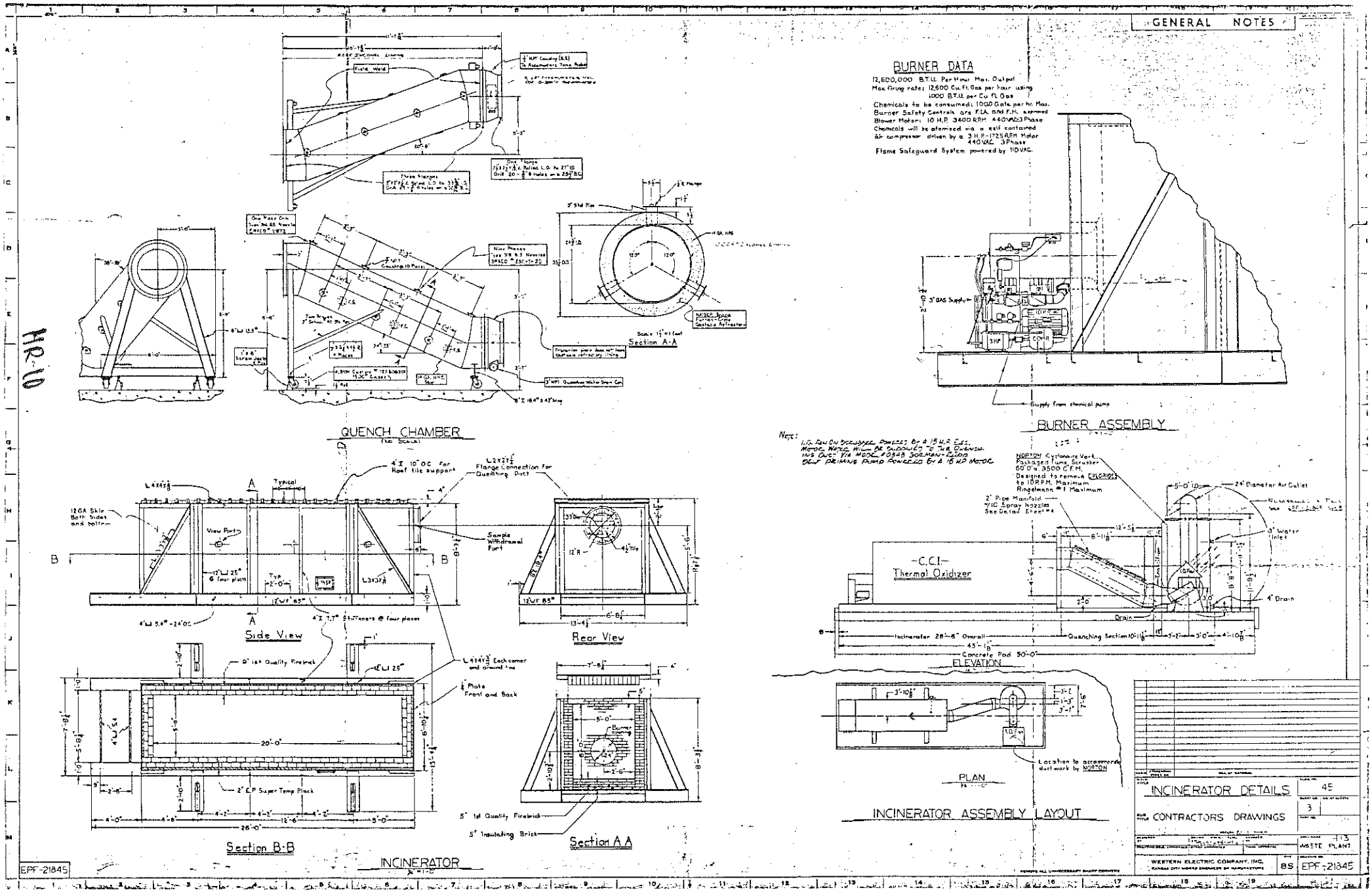
GENERAL NOTES
BURNER DATA
12,600,000 B.T.U. Per Hour Max. Output
Max. firing rate: 12,600 Cu. ft. Gas per hour using 1000 B.T.U. per Cu. ft. Gas
Chemicals to be consumed: 1000 Gals. per hr. Max.
Burner Safety Controls are F.I.A. and F.M. approved
Blower Motor: 10 H.P. 3400 RPM 440VAC 3 Phase
Chemicals will be atomized via a self contained air compressor driven by a 3 H.P.-1725 RPM Motor 440VAC 3 Phase
Flame Safeguard System powered by 110VAC.
QUENCH CHAMBER
Section A-A
BURNER ASSEMBLY
Supply from chemical pump
Note:
Side View
Rear View
Section B-B
Section A A
INCINERATOR
-C.C.I.-
Thermal Oxidizer
ELEVATION
PLAN
INCINERATOR ASSEMBLY LAYOUT
INCINERATOR DETAILS
CONTRACTORS DRAWINGS
WESTERN ELECTRIC COMPANY, INC.
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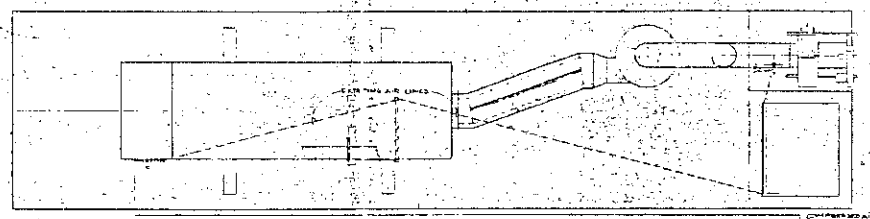
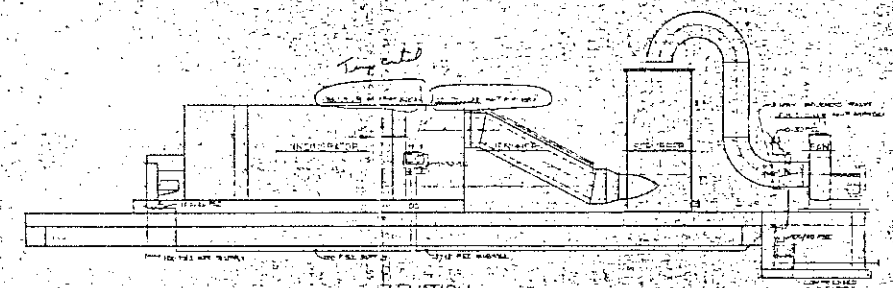
3
WASTE PLANT
EPF-21845



PLAN



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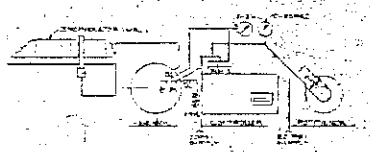

TUBE SCHEMATIC

GENERAL

SOLVENT INCINERATOR

PNEUMATIC CONTROL SYSTEM

YARD

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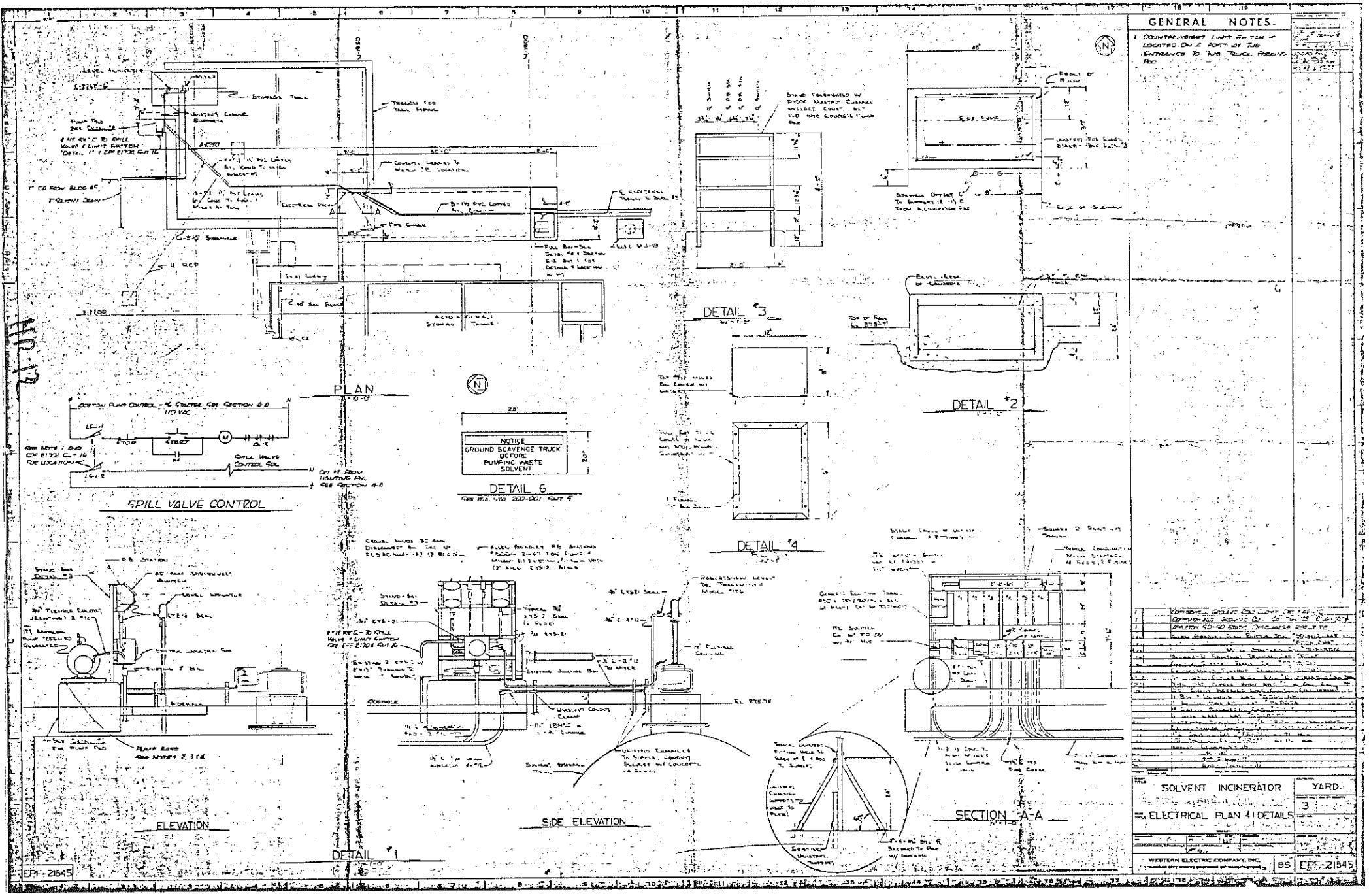
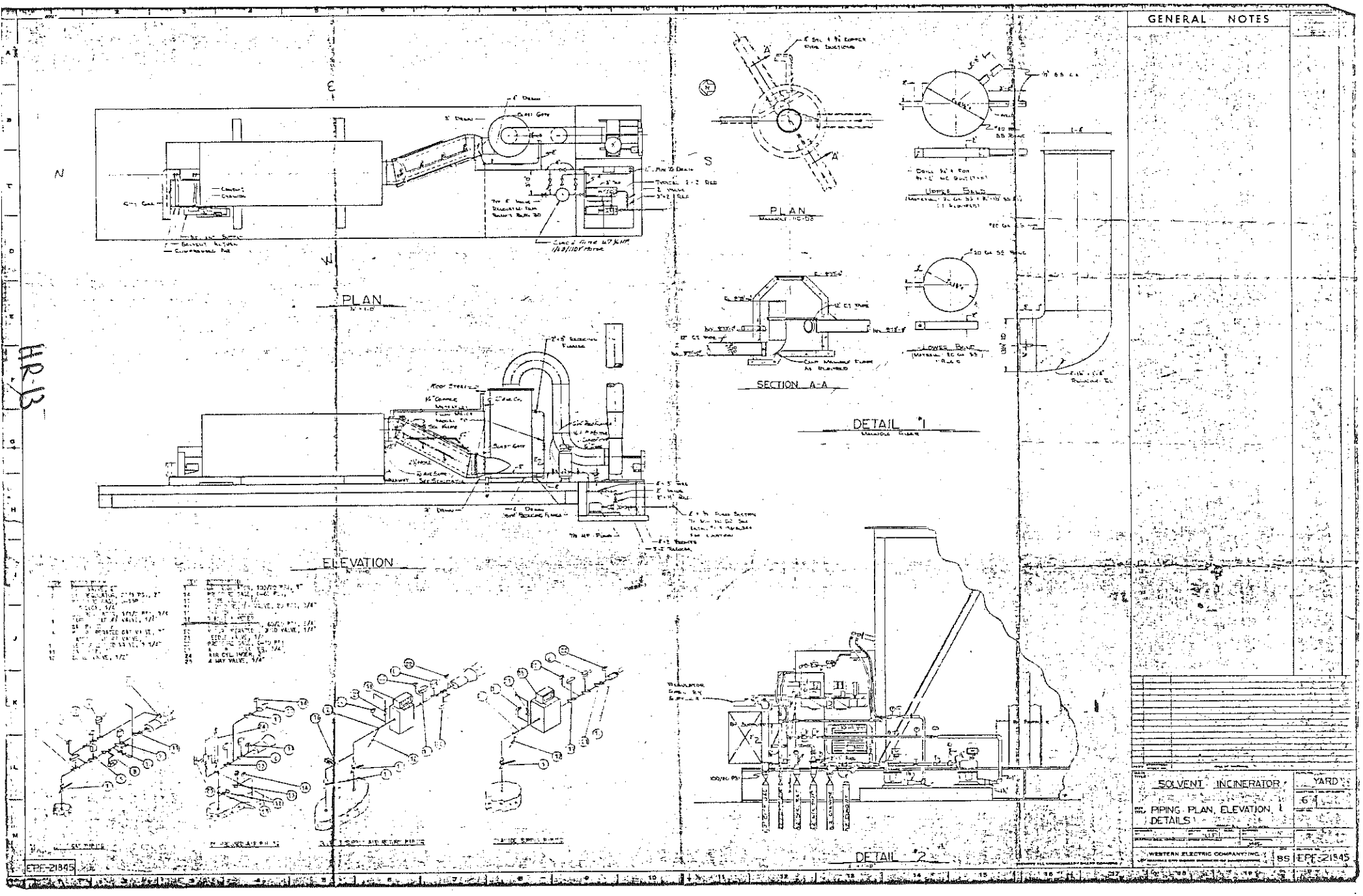
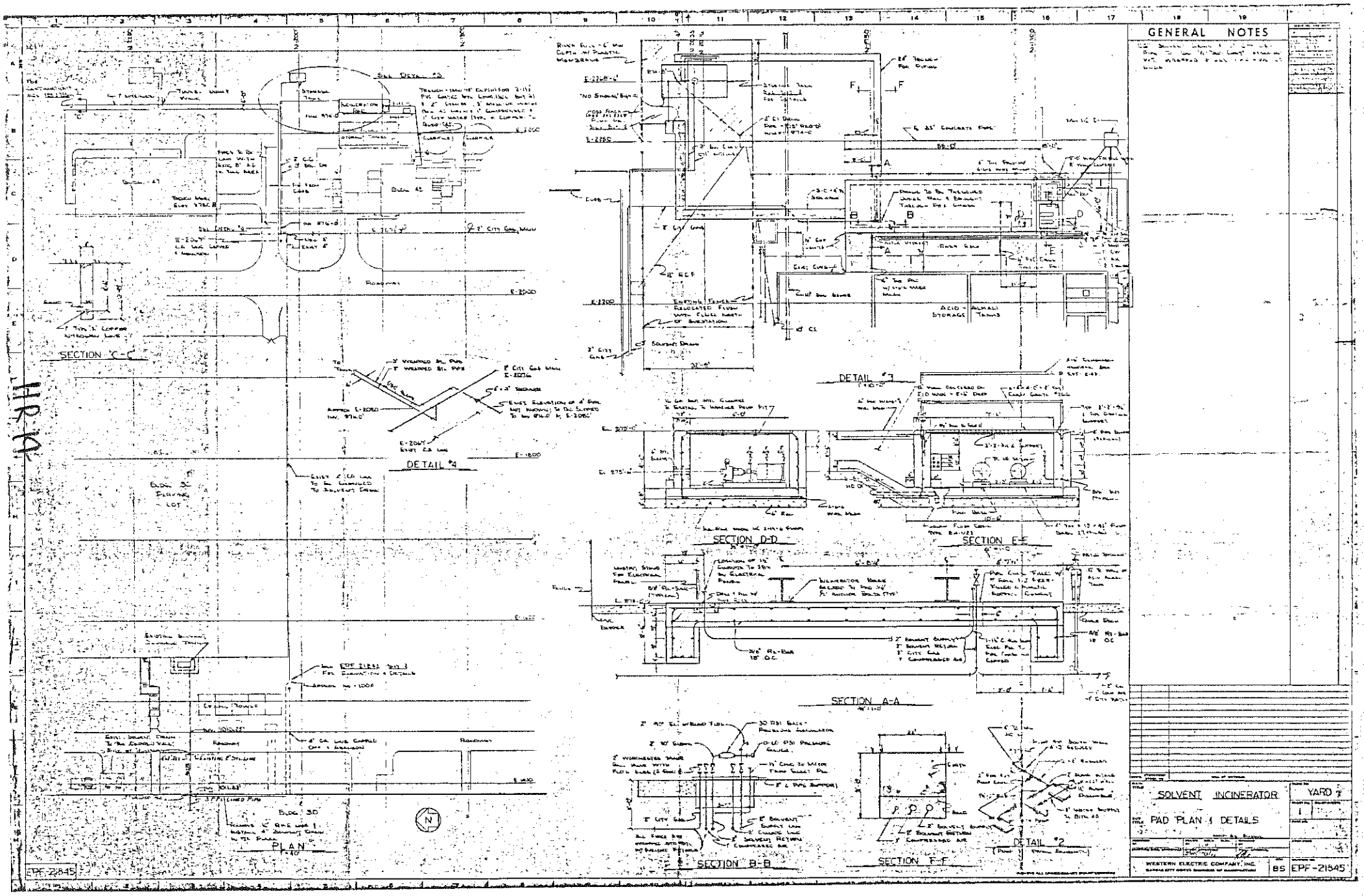
WESTERN ELECTRIC COMPANY, INC.

BS EPF-215


GENERAL NOTES
PLAN
DETAIL #1
DETAIL #2
DETAIL #3
DETAIL #4
DETAIL #6
NOTICE
GROUND SCAVENGE TRUCK BEFORE PUMPING WASTE SOLVENT
SPILL VALVE CONTROL
ELEVATION
SIDE ELEVATION
SECTION A-A
SOLVENT INCINERATOR
YARD
ELECTRICAL PLAN & DETAILS
WESTERN ELECTRIC COMPANY, INC.
EPF-21845


GENERAL NOTES
PLAN
PLAN
SECTION A-A
DETAIL 1
ELEVATION
DETAIL 2
SOLVENT INCINERATOR
PIPING PLAN, ELEVATION, & DETAILS
YARD
WESTERN ELECTRIC COMPANY, INC.
EPE-21845
HR-B


GENERAL NOTES
SOLVENT INCINERATOR
YARD
PAD PLAN & DETAILS
WESTERN ELECTRIC COMPANY, INC.
BS
EPF-21845
PLAN
SECTION C-C
DETAIL #4
DETAIL #7
SECTION D-D
SECTION E-E
SECTION A-A
SECTION B-B
SECTION F-F
DETAIL #2
ACID - ALKALI STORAGE TANKS
EPF-2845