



# eDocument Workflow Data Ingestion Form

DERR - Hazardous Waste Permitting

**Note:** All HW Permitting Documents fall under "Permit-Intermediate" doc type.

## Keyword Summary:

<b>Secondary ID:</b>	OHD 980 587 364	<b>Stamped date on doc:</b>	4/17/2020
<b>Facility Name:</b>	Clean Harbors Recycling Services of Ohio, LLC		
<b>County:</b>	Licking	<b>CBI/Trade Secret Info (see protocol below)</b>	
<b>Program:</b>	RCRA C – Hazardous Waste	<b>Request contains CBI/TS claim?</b>	No
<b>Permit Type:</b>	Permit to Install & Operate	<b>Was a "public" copy included?</b>	NA
<b>Permit Subtype:</b>	Application & Support	<b>Financial Assurance Info (see protocol below)</b>	
<b>Permit Classification:</b>	Permit Application	<b>Request contains FA policy/account # info?</b>	No
<b>Permit Purpose:</b>	Class 2 Mod	<b>Contingency Plan Info (see protocol below)</b>	
<b>Confidentiality Status:</b>	Public Record for Publication	<b>Request contains facility staff pers/home phone #'s?</b>	No

### CBI/Trade Secret Protocol

Applications or requests that contain a claim of Confidential Business Information (CBI) or "trade secret" **are not be ingested** into the Agency's eDoc system. However, any claims must be made at the time of application submission, as required by both OAC rule 3745-49-03 and OAC rule 3745-50-30. Permittees must comply with the complete requirements of the above-cited rules, which include, among other things, submission of a corresponding "public" copy of the application or request which should be ingested into eDocs.

### Financial Assurance Info Protocol

If the application contains "original signature" financial assurance documents, these documents **must be forwarded** to CO FA staff (Shawn Sellers or Melissa Cheung) as these types of documents must be secured in CO's fireproof file cabinet. Also, even if the FA information included in a mod application is not "original signature", if it includes information like insurance policy, bank account, letter of credit or bond numbers, these impacted pages should simply be physically removed and not scanned/included as a part of the ingested application. In place of the removed page, a page can be inserted which states: "Pages of this application which contain financial assurance mechanism details specific to policy or account numbers have been removed from this web-available version of the document."

Regarding review of FA components of mods, ERAS has set up a [tracking/request system](#) on SharePoint where DO staff can make a review request the HW FA Review Request list which can be accessed from the DMWM's Financial Assurance site.

### Contingency Plan Info Protocol

If the application contains facility staff personal/home phone number information, the impacted pages should simply be physically removed and not scanned/included as a part of the ingested application. In place of the removed page, a page can be inserted which states: "Pages of this application which contain facility staff personal/home phone number information have been removed from this web-available version of the document."

**Form Completed by:** Halee Smith

4/17/2020

### Comments



Clean Harbors Recycling Services Of Ohio, LLC  
581 Milliken Drive SE  
Hebron, OH 43025

740-929-3532  
www.cleanharbors.com

Via Federal Express

April 14, 2020

Jeremy Carroll  
Ohio EPA-DHWM  
Regulatory and Information Services Section  
Lazarus Government Center  
50 West Town Street, Suite 700  
Columbus, OH 43216-1049  
(614) 644-3020

*RE: Clean Harbors Recycling Services of Ohio, LLC  
OHD 980 587 364  
Part B Permit, Class 2 Modification  
Additional Container Storage/Less Frequent Fire Extinguisher Inspection*

Dear Mr. Carroll:

Clean Harbors Recycling Services of Ohio, LLC (hereinafter, Clean Harbors) is submitting this RCRA Class 2 Permit Modification to increase hazardous waste container storage by less than 25 percent and decrease fire extinguisher inspections from weekly to monthly. These modifications are necessary to provide operational flexibility to the facility and to reduce unnecessary work required by employees.

Also pursuant to OAC 3745-50-51, Appendix, Clean Harbors has determined these changes are a Class 2 Modification. Enclosed you will find the information required by rules 3745-50-43, 3745-50-44, and 3745-50-62 of the Administrative Code.

Clean Harbors is submitting notification of the proposed modification and publication as required in OAC 3745-50-51 (D)(2)(b) except that in place of a public meeting, a virtual meeting will be held. .

Should you have any questions or comments regarding this matter, please contact me at (630) 854-2549, or at [laubstedj@cleanharbors.com](mailto:laubstedj@cleanharbors.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "James R. Laubsted".

James R Laubsted  
Sr. Environmental Compliance Manager

Enclosures  
cc: Melissa Storch, OEPA, CDO  
Facility files





## **Part B Class 2 Permit Modification**

**The following explains and describes changes to be made to the original application and Part B Permit.**

The Clean Harbors facility requests the following changes be made to facility description for maximum gallons allowed to be stored in containers and locations identified in Module C of the Part B Permit.

Currently, the maximum of 199,024 gallons of hazardous waste may be stored in the container storage areas identified in Module C:

*The Permittee operates five (5) storage areas for the storage of hazardous waste in containers (S01). The maximum amount of container storage allowed in Container Storage Area No. 1 is 158,400 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2B is 6,150 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2E is 8,070 gallons. The maximum amount of container storage allowed in Truck Station No. 1 is 13,200 gallons and the maximum amount of container storage allowed in Truck Station No. 2 is 13,200 gallons.*

Clean Harbors is requesting to increase the capacity of Container Storage Area 2B to 13,200 gallons and to allow hazardous waste in Container Storage Area 2D with a capacity of 19,360 gallons. This would increase the maximum of hazardous waste that may be stored in the container storage areas identified in Module C to 225,430 gallons:

*The Permittee operates six (6) storage areas for the storage of hazardous waste in containers (S01). The maximum amount of container storage allowed in Container Storage Area No. 1 is 158,400 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2B is 13,200 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2D is 19,360 gallons. The maximum amount of container storage allowed in Container Storage Area No. 2E is 8,070 gallons. The maximum amount of container storage allowed in Truck Station No. 1 is 13,200 gallons and the maximum amount of container storage allowed in Truck Station No. 2 is 13,200 gallons.*

In order to meet the containment capacity requirements for Container Storage Areas 2B and 2D, this would also result in changes to the following two current paragraphs:

*Container Storage Area No. 2 is constructed of reinforced concrete and is divided into areas 2B, 2C, 2D and 2E. These areas are within an enclosed building, and there is a concrete berm to keep precipitation run-on away from the building. Areas 2C and 2D are to be used for container staging only, and are not permitted for hazardous waste storage. Containers may be staged in areas 2C and 2D for up to 24 hours before they must be moved to a permitted storage area. Area 2B has a secondary containment capacity of 705 gallons, while Area 2E has a secondary containment capacity of 808 gallons.*

*The waste codes listed in Permit Condition C.3(a) may be stored in containers. Ignitable waste is only permitted to be stored in Container Storage Areas No. 1, No. 2B, and No. 2E. The types and sizes of containers are described in Section 4 of the permit application.*



An additional sump will be added to both Container Storage Area 2B and 2D resulting in the following changes:

*Container Storage Area No. 2 is constructed of reinforced concrete and is divided into areas 2B, 2C, 2D and 2E. These areas are within an enclosed building, and there is a concrete berm to keep precipitation run-on away from the building. Area 2C is to be used for container staging only, and is not permitted for hazardous waste storage. Containers may be staged in area 2C for up to 24 hours before they must be moved to a permitted storage area. Area 2B has a secondary containment capacity of 1,426 gallons, Area 2D has a secondary containment capacity of 1,995 gallons and Area 2E has a secondary containment capacity of 808 gallons.*

*The waste codes listed in Permit Condition C.3(a) may be stored in containers. Ignitable waste is only permitted to be stored in Container Storage Areas No. 1, No. 2B, No. 2D, and No. 2E. The types and sizes of containers are described in Section 4 of the permit application.*

Section C.1(a) lists the following Container Storage/Quantity Limitation:

*The Permittee is authorized to store 199,020 gallons of hazardous waste at any given time in the Permitted Container Storage Areas No. 1, No. 2B, No. 2E, Truck Station No.1 and Truck Station No. 2.*

With the above modifications, Clean Harbors requests this be modified to:

*The Permittee is authorized to store 225,430 gallons of hazardous waste at any given time in the Permitted Container Storage Areas No. 1, No. 2B, No. 2D, No. 2E, Truck Station No.1 and Truck Station No. 2.*

Additionally, Clean Harbors is requesting to change the container arrangement in Container Storage Areas Nos. 1, 2B and 2E. There is no increase in volume stored for Container Storage Areas Nos. 1 and 2E. The requested container arrangements are shown in Exhibit 23C (Revision A) and Exhibit 24C (Revision 7).

Lastly, Clean Harbors is requesting to change the frequency of the fire extinguisher inspections from weekly to monthly. This modification would not result in any change to the Part B permit.

The following information is required by rules 3745-50-43, 3745-50-44, and 3745-50-62 of the Administrative Code.

Part A: Section 1 Attachment 1-1 The Part A has been modified to reflect additional hazardous waste container storage increasing the volume from 199,024 gallons to 225,430 gallons. The modified Part A is included.

General Description: Section 2 This modification does not affect any changes to the facility general description.





**Chemical and Physical Analyses: Section 3** This modification does not make any changes to the facility Waste Analysis Plan. No new wastes will be managed, no hazardous waste codes added and no changes in analysis requirements will be made with this modification.

**Process Information: Section 4** This modification includes changes to the process information. This includes an increase in hazardous waste container storage capacity to 225,430 gallons by increasing the storage capacity in Container Storage Area No. 2B to 13,200 gallons and adding Container Storage Area No. 2D with a storage capacity of 19,360 gallons. Container Storage Area No. 2D will become a storage area from its current use as a staging area only. The additional storage capacity results in a need for increased containment capacity. This will be accomplished by the addition of a new sump in each of Container Storage Areas No. 2B and No. 2D. Additionally, container arrangements are being modified in Container Storage Areas No.1, No. 2B and No. 2E. The modification does not affect the hazardous waste container storage capacity in Container Storage Areas No.1 and No. 2E. The additional sumps for containment capacity and container arrangements are shown in Exhibit 23C (Revision A) and Exhibit 24C (Revision 7).

Table 4-1 has been modified for additional storage capacity for Container Storage Areas No. 2B and No. 2D. Table 4-3 has been modified for additional containment capacity for Container Storage Areas No. 2B and No. 2D.

There are no changes to stormwater management since the container storage is in existing buildings. Tanks and other units are not impacted by this modification.

**Groundwater Monitoring: Section 5** This modification makes no changes to the existing groundwater monitoring requirements.

**Procedures to Prevent Hazards: Section 6** This modification will decrease the fire extinguisher inspection from weekly to monthly. This change is shown in Table 6-2. This fire extinguisher inspection is required monthly by OSHA and fire codes. Clean Harbors has been doing the inspection weekly, but the inspection data does not indicate a need for weekly inspections. This results in substantial man hours for no increase in safety. Security procedures are not impacted by this modification. There are no changes in equipment used or unloading/loading procedures. Employee personal protective equipment requirements are not affected by this modification.

**Contingency Plan: Section 7** This modification makes a minor change to the Contingency Plan by increasing the hazardous waste container storage capacity to 225,430 gallons. The increase in container storage is offset with additional containment capacity to prevent run-off, flooding or contamination of water supplies. Power outages or equipment failure will not be affected by increased container storage capacity. No new wastes will be handled due to this modification. Ignitable wastes are included with the additional hazardous waste storage capacity, but ignitable wastes can be in these areas already. No changes are required.

**Training: Section 8** This modification will make minor changes to employee training involving container storage capacities and arrangements.



Closure Plan: Section 9 This modification increases the maximum amount of hazardous waste that can be stored in containers at the facility. Table 9-2 has been modified to show the increased maximum amounts of hazardous waste in containers that could be stored at the facility. This modification increases the closure funding requirement. Attachment 9-1A and Attachment 9-1 CCE Tables have been modified to increase the closure cost estimate.

Corrective Action for Solid Waste Management Units: Section 10 This modification makes no changes to the existing corrective action for solid waste management unit requirements.

Other State and Federal Laws: Section 11 This modification makes no changes to requirements for other State and Federal laws.

Certification: Section 12 A new certification is included with this submittal.

Organic Air Emissions from Process Vents: Section 13 This modification makes no changes to requirements for air emissions from process vents.

Air Emission Standards for Equipment Leaks: Section 14 This modification makes no changes to requirements for air emission standards for equipment leaks.

Air Emission Standards for Tanks, Surface Impoundments and Containers: Section 15 This modification makes no changes to requirements for air emission standards for tanks or surface impoundments. The additional containers proposed must meet the requirements for containers, but there are no changes to this section.

The only change to recordkeeping and recording from this modification is the change in frequency from weekly to monthly for the fire extinguisher inspection.

Clean Harbors believes this modification will present the same minimal level of potential exposure to humans and the environment as other operations at the facility since these activities are already handled at the facility and that the active portion of the facility remains continuously monitored and entry onto controlled.



## RCRA PART A

United States Environmental Protection Agency  
HAZARDOUS WASTE PERMIT PART A FORM

## 1. Facility Permit Contact

First Name	James	MI	R	Last Name	Laubsted
Title	Sr. Environmental Compliance Mgr.				
Email	laubstedj@cleanharbors.com				
Phone	630-854-2549	Ext		Fax	

## 2. Facility Permit Contact Mailing Address

Street Address	581 Milliken Drive, SE				
City, Town, or Village	Hebron				
State	OH	Country	USA	Zip Code	43025

## 3. Facility Existence Date (mm/dd/yyyy)

3/21/2008

## 4. Other Environmental Permits

A. Permit Type	B. Permit Number												C. Description
E	P	0	0	8	3	7	3	7					Title V Air Operating Permit
P	7	4	2	5	6								Emergency Fire Water Pump General Air <sup>+</sup>
P	7	4	2	5	7								Emergency Foam Generator General Air <sup>+</sup>
E	D	S	P	-	O	H	-	1	5	0	1	2	Alcohol Distillers Permit - Dept of Treasur <sup>+</sup>
N	2	0	1	6	0	3							POTW Discharge Permit - Village of Hebr <sup>+</sup>
N	4	G	R	0	0	4	9	4	*	E	G		NPDES Stormwater Permit

## 5. Nature of Business

Solvent recycling and fuel blending for off-site energy recovery. Storage of hazardous waste in tanks and containers in support of recycling/recovery/reclamation and waste transfer operations. Other recycling for non-RCRA wastes.



## 6. Process Codes and Design Capacities

[illegible]

**7. Description of Hazardous Wastes** (Enter codes for Items 7.A, 7.C and 7.D(1) )

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes											
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))			
0	1	D	0	0	1	162,129	T	S	0	1	S	0	2	T	0	1			
0	2	D	0	0	2	162,129	T	S	0	1	S	0	2	T	0	1			
0	3	D	0	0	4	162,129	T	S	0	1	S	0	2	T	0	1			
0	4	D	0	0	5	162,129	T	S	0	1	S	0	2	T	0	1			
0	5	D	0	0	6	162,129	T	S	0	1	S	0	2	T	0	1			
0	6	D	0	0	7	162,129	T	S	0	1	S	0	2	T	0	1			
0	7	D	0	0	8	162,129	T	S	0	1	S	0	2	T	0	1			
0	8	D	0	0	9	162,129	T	S	0	1	S	0	2	T	0	1			
0	9	D	0	1	0	162,129	T	S	0	1	S	0	2	T	0	1			
1	0	D	0	1	1	162,129	T	S	0	1	S	0	2	T	0	1			
1	1	D	0	1	8	162,129	T	S	0	1	S	0	2	T	0	1			

## 8. Map

Attach to this application a topographical map, or other equivalent 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 intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

## 9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

## 10. 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.

## 11. Comments

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**6. Process Codes and Design Capacities**

Line Number		A. Process Code			B. Process Design Capacity		C. Process Total Number of Units	D. Unit Name
					(1) Amount	(2) Unit of Measure		
0	1	S	0	1	225,430	G	6	1, 2B, 2D, 2E, TS1, TS2
0	2	S	0	2	1,237,500	G	75	TF1, TF2, TF4, TF6
0	3	T	0	1	220,000	U	14	TF1, TF2, TF4, TF6

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								(1) Process Codes						(2) Process Description (if code is not entered in 7.D1))					
1	2	D	0	1	9	162,129	T	S	0	1	S	0	2	T	0	1			
1	3	D	0	2	1	162,129	T	S	0	1	S	0	2	T	0	1			
1	4	D	0	2	2	162,129	T	S	0	1	S	0	2	T	0	1			
1	5	D	0	2	3	162,129	T	S	0	1	S	0	2	T	0	1			
1	6	D	0	2	4	162,129	T	S	0	1	S	0	2	T	0	1			
1	7	D	0	2	5	162,129	T	S	0	1	S	0	2	T	0	1			
1	8	D	0	2	6	162,129	T	S	0	1	S	0	2	T	0	1			
1	9	D	0	2	7	162,129	T	S	0	1	S	0	2	T	0	1			
2	0	D	0	2	8	162,129	T	S	0	1	S	0	2	T	0	1			
2	1	D	0	2	9	162,129	T	S	0	1	S	0	2	T	0	1			
2	2	D	0	3	0	162,129	T	S	0	1	S	0	2	T	0	1			

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[illegible]

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								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1)	
2	3	D	0	3	2	162,129	T	S	0	1	S	0	2	T	0	1	
2	4	D	0	3	3	162,129	T	S	0	1	S	0	2	T	0	1	
2	5	D	0	3	4	162,129	T	S	0	1	S	0	2	T	0	1	
2	6	D	0	3	5	162,129	T	S	0	1	S	0	2	T	0	1	
2	7	D	0	3	6	162,129	T	S	0	1	S	0	2	T	0	1	
2	8	D	0	3	7	162,129	T	S	0	1	S	0	2	T	0	1	
2	9	D	0	3	8	162,129	T	S	0	1	S	0	2	T	0	1	
3	0	D	0	3	9	162,129	T	S	0	1	S	0	2	T	0	1	
3	1	D	0	4	0	162,129	T	S	0	1	S	0	2	T	0	1	
3	2	D	0	4	1	162,129	T	S	0	1	S	0	2	T	0	1	
3	3	D	0	4	2	162,129	T	S	0	1	S	0	2	T	0	1	

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3	4	D	0	4	3	162,129	T	S	0	1	S	0	2	T	0	1	
3	5	F	0	0	1	162,129	T	S	0	1	S	0	2	T	0	1	
3	6	F	0	0	2	162,129	T	S	0	1	S	0	2	T	0	1	
3	7	F	0	0	3	162,129	T	S	0	1	S	0	2	T	0	1	
3	8	F	0	0	4	162,129	T	S	0	1	S	0	2	T	0	1	
3	9	F	0	0	5	162,129	T	S	0	1	S	0	2	T	0	1	
4	0	F	0	0	6	162,129	T	S	0	1	S	0	2	T	0	1	
4	1	K	0	0	6	162,129	T	S	0	1	S	0	2	T	0	1	
4	2	K	0	1	6	162,129	T	S	0	1	S	0	2	T	0	1	
4	3	K	0	2	2	162,129	T	S	0	1	S	0	2	T	0	1	
4	4	K	0	3	0	162,129	T	S	0	1	S	0	2	T	0	1	

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[illegible]

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								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))	
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4	6	K	0	4	9	162,129	T	S	0	1	S	0	2	T	0	1	
4	7	K	0	5	0	162,129	T	S	0	1	S	0	2	T	0	1	
4	8	K	0	5	1	162,129	T	S	0	1	S	0	2	T	0	1	
4	9	K	0	5	2	162,129	T	S	0	1	S	0	2	T	0	1	
5	0	K	0	6	0	162,129	T	S	0	1	S	0	2	T	0	1	
5	1	K	0	8	5	162,129	T	S	0	1	S	0	2	T	0	1	
5	2	K	0	8	6	162,129	T	S	0	1	S	0	2	T	0	1	
5	3	K	0	8	7	162,129	T	S	0	1	S	0	2	T	0	1	
5	4	K	0	9	5	162,129	T	S	0	1	S	0	2	T	0	1	
5	5	K	0	9	6	162,129	T	S	0	1	S	0	2	T	0	1	

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## 11. Comments

\_\_\_\_\_

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[illegible]

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5	6	K	1	0	5	162,129	T	S	0	1	S	0	2	T	0	1	
5	7	K	1	4	1	162,129	T	S	0	1	S	0	2	T	0	1	
5	8	K	1	4	2	162,129	T	S	0	1	S	0	2	T	0	1	
5	9	K	1	4	3	162,129	T	S	0	1	S	0	2	T	0	1	
6	0	K	1	4	4	162,129	T	S	0	1	S	0	2	T	0	1	
6	1	K	1	4	5	162,129	T	S	0	1	S	0	2	T	0	1	
6	2	K	1	4	7	162,129	T	S	0	1	S	0	2	T	0	1	
6	3	K	1	4	8	162,129	T	S	0	1	S	0	2	T	0	1	
6	4	U	0	0	2	162,129	T	S	0	1	S	0	2	T	0	1	
6	5	U	0	0	3	162,129	T	S	0	1	S	0	2	T	0	1	
6	6	U	0	1	9	162,129	T	S	0	1	S	0	2	T	0	1	

## 8. Map

Attach to this application a topographical map, or other equivalent 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 intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

## 9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

## 10. 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.

## 11. Comments

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## 6. Process Codes and Design Capacities

[illegible]

**7. Description of Hazardous Wastes** (Enter codes for Items 7.A, 7.C and 7.D(1) )

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes											
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1)			
6	7	U	0	3	1	162,129	T	S	0	1	S	0	2	T	0	1			
6	8	U	0	3	7	162,129	T	S	0	1	S	0	2	T	0	1			
6	9	U	0	4	4	162,129	T	S	0	1	S	0	2	T	0	1			
7	0	U	0	5	1	162,129	T	S	0	1	S	0	2	T	0	1			
7	1	U	0	5	2	162,129	T	S	0	1	S	0	2	T	0	1			
7	2	U	0	5	5	162,129	T	S	0	1	S	0	2	T	0	1			
7	3	U	0	5	6	162,129	T	S	0	1	S	0	2	T	0	1			
7	4	U	0	5	7	162,129	T	S	0	1	S	0	2	T	0	1			
7	5	U	0	6	8	162,129	T	S	0	1	S	0	2	T	0	1			
7	6	U	0	6	9	162,129	T	S	0	1	S	0	2	T	0	1			
7	7	U	0	7	0	162,129	T	S	0	1	S	0	2	T	0	1			

## 8. Map

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## 11. Comments

\_\_\_\_\_

## 6. Process Codes and Design Capacities

[illegible]

**7. Description of Hazardous Wastes** (Enter codes for Items 7.A, 7.C and 7.D(1) )

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes											
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))			
7	8	U	0	7	1	162,129	T	S	0	1	S	0	2	T	0	1			
7	9	U	0	7	2	162,129	T	S	0	1	S	0	2	T	0	1			
8	0	U	0	7	5	162,129	T	S	0	1	S	0	2	T	0	1			
8	1	U	0	7	7	162,129	T	S	0	1	S	0	2	T	0	1			
8	2	U	0	7	8	162,129	T	S	0	1	S	0	2	T	0	1			
8	3	U	0	7	9	162,129	T	S	0	1	S	0	2	T	0	1			
8	4	U	0	8	0	162,129	T	S	0	1	S	0	2	T	0	1			
8	5	U	0	8	3	162,129	T	S	0	1	S	0	2	T	0	1			
8	6	U	0	8	4	162,129	T	S	0	1	S	0	2	T	0	1			
8	7	U	1	0	8	162,129	T	S	0	1	S	0	2	T	0	1			
8	8	U	1	1	0	162,129	T	S	0	1	S	0	2	T	0	1			

## 8. Map

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## 11. Comments

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## 6. Process Codes and Design Capacities

[illegible]

**7. Description of Hazardous Wastes** (Enter codes for Items 7.A, 7.C and 7.D(1) )

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes									
								(1) Process Codes								(2) Process Description (If code is not entered in 7.D1))	
8	9	U	1	1	3	162,129	T	S	0	1	S	0	2	T	0	1	
9	0	U	1	1	7	162,129	T	S	0	1	S	0	2	T	0	1	
9	1	U	1	1	8	162,129	T	S	0	1	S	0	2	T	0	1	
9	2	U	1	2	1	162,129	T	S	0	1	S	0	2	T	0	1	
9	3	U	1	2	4	162,129	T	S	0	1	S	0	2	T	0	1	
9	4	U	1	4	0	162,129	T	S	0	1	S	0	2	T	0	1	
9	5	U	1	5	4	162,129	T	S	0	1	S	0	2	T	0	1	
9	6	U	1	5	9	162,129	T	S	0	1	S	0	2	T	0	1	
9	7	U	1	6	1	162,129	T	S	0	1	S	0	2	T	0	1	
9	8	U	1	6	2	162,129	T	S	0	1	S	0	2	T	0	1	
9	9	U	1	6	5	162,129	T	S	0	1	S	0	2	T	0	1	

## 8. Map

Attach to this application a topographical map, or other equivalent 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 intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

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## 11. Comments

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[illegible]

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes											
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))			
0	0	U	1	6	9	162,129	T	S	0	1	S	0	2	T	0	1			
0	1	U	1	7	1	162,129	T	S	0	1	S	0	2	T	0	1			
0	2	U	1	8	8	162,129	T	S	0	1	S	0	2	T	0	1			
0	3	U	1	9	1	162,129	T	S	0	1	S	0	2	T	0	1			
0	4	U	1	9	6	162,129	T	S	0	1	S	0	2	T	0	1			
0	5	U	2	1	0	162,129	T	S	0	1	S	0	2	T	0	1			
0	6	U	2	1	1	162,129	T	S	0	1	S	0	2	T	0	1			
0	7	U	2	1	3	162,129	T	S	0	1	S	0	2	T	0	1			
0	8	U	2	2	0	162,129	T	S	0	1	S	0	2	T	0	1			
0	9	U	2	2	6	162,129	T	S	0	1	S	0	2	T	0	1			
1	0	U	2	2	7	162,129	T	S	0	1	S	0	2	T	0	1			

Attach to this application a topographical map, or other equivalent 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 intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

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[illegible][illegible]

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\_\_\_\_\_

United States Environmental Protection Agency  
RCRA SUBTITLE C SITE IDENTIFICATION FORM



## 1. Reason for Submittal (Select only one.)

<input type="checkbox"/>	Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)
<input type="checkbox"/>	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
<input type="checkbox"/>	Site was a TSD facility and/or generator of $\geq 1,000$ kg of non-acute hazardous waste, $> 1$ kg of acute hazardous waste, or $> 100$ kg of acute hazardous waste spill cleanup in <b>one or more months of the reporting year</b> (or State equivalent LQG regulations)
<input type="checkbox"/>	Notifying that regulated activity is no longer occurring at this Site
<input type="checkbox"/>	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
<input checked="" type="checkbox"/>	Submitting a new or revised Part A Form

## 2. Site EPA ID Number

O	H	D	9	8	0	5	8	7	3	6	4
---	---	---	---	---	---	---	---	---	---	---	---

## 3. Site Name

Clean Harbors Recycling Services of Ohio, LLC

## 4. Site Location Address

Street Address		581 Milliken Drive, SE	
City, Town, or Village		Hebron	County Licking
State	OH	Country	USA
		Zip Code	43025

## 5. Site Mailing Address

☒ Same as Location Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

## 6. Site Land Type

<input checked="" type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
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## 7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary)	562920	C.	
B.		D.	

## 8. Site Contact Information

☒ Same as Location Address

First Name <b>James</b>	MI <b>R</b>	Last Name <b>Laubsted</b>
Title <b>Sr. Environmental Compliance Mgr.</b>		
Street Address		
City, Town, or Village		
State	Country	Zip Code
Email <b>laubstedj@cleanharbors.com</b>		
Phone <b>630-854-2549</b>	Ext	Fax

## 9. Legal Owner and Operator of the Site

## A. Name of Site's Legal Owner

☐ Same as Location Address

Full Name <b>Clean Harbors Recycling Services of Ohio, LLC</b>	Date Became Owner (mm/dd/yyyy) <b>3/21/2008</b>
Owner Type <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other	
Street Address <b>42 Longwater Drive</b>	
City, Town, or Village <b>Norwell</b>	
State <b>MA</b>	Country <b>USA</b> Zip Code <b>02061</b>
Email	
Phone <b>781-792-5000</b>	Ext Fax
Comments	

## B. Name of Site's Legal Operator

☒ Same as Location Address

Full Name <b>Clean Harbors Recycling Services of Chicago, LLC</b>	Date Became Operator (mm/dd/yyyy) <b>3/21/2008</b>
Operator Type <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other	
Street Address	
City, Town, or Village	
State	Country Zip Code
Email	
Phone <b>740-929-3532</b>	Ext Fax
Comments	

**10. Type of Regulated Waste Activity (at your site)**

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

**A. Hazardous Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input checked="" type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. <i>Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.</i>	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Receives Hazardous Waste from Off-site	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	5 Recycler of Hazardous Waste	
<input checked="" type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

**B. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D002	D004	D005	D006	D007	D008
D009	D010	D011	D018	D019	D021	D022
D023	D024	D025	D026	D027	D028	D029
D030	D032	D033	D034	D035	D036	D037
D038	D039	D040	D041	D042	D043	F001

**C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes.** Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.




**10. Type of Regulated Waste Activity (at your site)**

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

**A. Hazardous Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input checked="" type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. <i>Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.</i>	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Receives Hazardous Waste from Off-site	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	5 Recycler of Hazardous Waste	
<input checked="" type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

**B. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

F002	F003	F004	F005	F006	K006	K016
K022	K030	K048	K049	K050	K051	K052
K060	K085	K086	K087	K095	K096	K105
K141	K142	K143	K144	K145	K147	K148
U002	U003	U019	U031	U037	U044	U051

**C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes.** Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.


**10. Type of Regulated Waste Activity (at your site)**

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

**A. Hazardous Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input checked="" type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. <i>Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.</i>	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Receives Hazardous Waste from Off-site	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	5 Recycler of Hazardous Waste	
<input checked="" type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

**B. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

U052	U055	U056	U057	U068	U069	U070
U071	U072	U075	U077	U078	U079	U080
U083	U084	U108	U110	U113	U117	U118
U121	U124	U140	U154	U159	U161	U162
U165	U169	U171	U188	U191	U196	U210

**C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes.** Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.


**10. Type of Regulated Waste Activity (at your site)**

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

**A. Hazardous Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input checked="" type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. <i>Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.</i>	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Receives Hazardous Waste from Off-site	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	5 Recycler of Hazardous Waste	
<input checked="" type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

**B. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

U211	U213	U220	U226	U227	U228	U239

**C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes.** Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.


**11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)****A. Other Waste Activities**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1. Transporter of Hazardous Waste—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Underground Injection Control
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	3. United States Importer of Hazardous Waste
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	4. Recognized Trader—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter

**B. Universal Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If “Yes” mark all that apply. Note: Refer to your State regulations to determine what is regulated.
<input checked="" type="checkbox"/>	a. Batteries
<input checked="" type="checkbox"/>	b. Pesticides
<input checked="" type="checkbox"/>	c. Mercury containing equipment
<input checked="" type="checkbox"/>	d. Lamps
<input type="checkbox"/>	e. Other (specify) _____
<input type="checkbox"/>	f. Other (specify) _____
<input type="checkbox"/>	g. Other (specify) _____
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

**C. Used Oil Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Used Oil Transporter—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input checked="" type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Used Oil Processor and/or Re-refiner—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Processor
<input type="checkbox"/>	b. Re-refiner
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	3. Off-Specification Used Oil Burner
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Used Oil Fuel Marketer—If “Yes”, mark all that apply.
<input checked="" type="checkbox"/>	a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
<input checked="" type="checkbox"/>	b. Marketer Who First Claims the Used Oil Meets the Specifications



**D. Pharmaceutical Activities**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1. Operating under 40 CFR 266 Subpart P for the management of hazardous waste pharmaceuticals—if “Yes”, mark only one. Note: See the item-by-item instructions for definitions of healthcare facility and reverse distributor.
<input type="checkbox"/>	a. Healthcare Facility
<input type="checkbox"/>	b. Reverse Distributor
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Withdrawing from operating under 40 CFR 266 Subpart P for the management of hazardous waste pharmaceuticals. Note: You may only withdraw if you are a healthcare facility that is no longer an LQG or SQG.

**12. Eligible Academic Entities with Laboratories**—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR 262 Subpart K.

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	A. Opting into or currently operating under 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories— If “Yes”, mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
<input type="checkbox"/>	1. College or University
<input type="checkbox"/>	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/>	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	B. Withdrawing from 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories.

**13. Episodic Generation**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If “Yes”, you must fill out the Addendum for Episodic Generator?
--	---

**14. LQG Consolidation of VSQG Hazardous Waste**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If “Yes”, you must fill out the Addendum for LQG Consolidation of VSQGs hazardous waste.
--	--

**15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
A. <input type="checkbox"/> Central Accumulation Area (CAA) or <input type="checkbox"/> Entire Facility	
B. Expected closure date: _____ mm/dd/yyyy	
C. Requesting new closure date: _____ mm/dd/yyyy	
D. Date closed : _____ mm/dd/yyyy	
<input type="checkbox"/>	1. In compliance with the closure performance standards 40 CFR 262.17(a)(8)
<input type="checkbox"/>	2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)

**16. Notification of Hazardous Secondary Material (HSM) Activity**☐ Y ☒ N

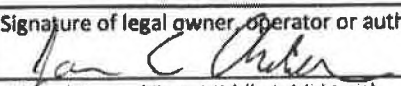
Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), (25), or (27)? If "Yes", you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.

**17. Electronic Manifest Broker**☐ Y ☒ N

Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?

**18. Comments** (include item number for each comment)

**19. Certification** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. **Note: For the RCRA Hazardous Waste Part A permit Application, all owners and operators must sign (see 40 CFR 270.10(b) and 270.11).**

Signature of legal owner, operator or authorized representative 	Date (mm/dd/yyyy) 4/13/2020
Printed Name (First, Middle Initial Last) James C. Childress	Title VP Environmental Compliance
Email childress.james@cleanharbors.com	
Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
Printed Name (First, Middle Initial Last)	Title
Email	

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## SECTION 4

### PROCESS INFORMATION

The information provided in this section is submitted in accordance with the requirements of OAC 3745-66-70 through 992. This section contains information about storage in tanks and in container storage areas, truck station areas, and processing. Process units used for waste recycling and reclamation operations at the Hebron Recycle Center are not subject to RCRA regulation, in accordance with OAC 3745-51-06.

#### 4.1 GENERAL DESCRIPTION OF STORAGE AREAS AND ON-SITE OPERATIONS

##### 4.1.1 Storage Areas and Truck Stations

Storage and processing operations at the Hebron facility take place in container storage areas and tank farms. Loading and unloading operations are performed at the truck stations. Exhibit 2 shows the location of the different units at the facility. This exhibit demonstrates the 50 foot set back requirements for these units. The following is a general description of those units.

##### Container Storage Areas

The Hebron facility has capacity to store 225,430 gallons of containerized hazardous wastes in Container Storage Areas No. 1, 2B, 2D and 2E and Truck Stations 1 and 2. The capacity of Container Storage Area No. 1 is 158,400 gallons of hazardous wastes. Container Storage Area No. 2 has a total storage capacity of 40,630 gallons of hazardous wastes. Truck Stations Nos. 1 and 2 have alternate use as container storage areas with a storage capacity of 13,200 gallons of hazardous wastes each. The truck stations will still be used as truck stations, but sections can be segregated with booms or other devices for container storage. Table 4-1 in Attachment 4-6 summarizes the storage capacities for the different container storage areas.

##### Tank Farms

There are five tank farms at the Hebron facility, four of which (Tank Farms Nos. 1, 2, 4 and 6) are used for storage of hazardous wastes. The total capacity for storage of hazardous wastes is 1,237,500 gallons in 74 tanks and Solids Storage Bin #2. The tank schedule is presented in Tables 4-2 in Attachment 4-7.

Tank Farm No. 1, typically used for NFPA flammable waste solvents, has a storage capacity of 595,000 gallons of hazardous wastes in 30 tanks. Tank Farm No. 2, typically used for chlorinated waste solvents (NFPA combustible waste solvents), has a storage capacity of 525,000 gallons of hazardous wastes in 37 tanks. Tank Farm No. 3, typically used for chlorinated product storage, does not contain any permitted hazardous waste storage tanks and is not used for storage of hazardous wastes. Tank Farm No. 4, used for NFPA Combustible waste storage, has a storage capacity of 60,000 gallons in 4 tanks. Finally, Tank Farm No. 6, used to store still bottoms oil and waste solvents (NFPA flammable and combustible) for fuels blending, has a storage capacity of 57,500 gallons of hazardous wastes in 3 tanks and Solids Storage Bin #2. See Exhibits 26 through 35 and 57 for construction plans and details

used for industrial solvent waste materials are 55-gallon containers. All waste is compatible with the containers in which it is stored.

All containers used for storage of hazardous wastes at the Clean Harbors Hebron facility meet DOT regulations in accordance with 49 CFR 178 and RCRA regulations for marking and labeling. All containers used to store hazardous waste at the facility, including any containers that are reused for on-site generated materials, will be inspected to ensure that they are in good condition (e.g., no severe rusting or apparent structural defects). If any container is not in good condition or begins to leak, the contents will be transferred to a container that is in good condition in accordance with OAC 3745-55-71.

#### **4.2.2 Container Management Practices [OAC 3745-55-70 to 74 and 3745-54-35]**

Container management generally falls into one of three categories: unloading, storage, and emptying. When a shipment of containers is received at the facility, it is unloaded from the truck trailer using a lift truck fitted with drum handling or pallet handling attachments. Containers are spread out in the drum staging area, areas 2D and 2C as shown on Exhibit 24C, so that individual drums are accessible for inspection and sampling. Containers are counted to ensure agreement with the manifest or shipping papers and inspected to ensure that the containers are structurally sound and are labeled in compliance with RCRA and other applicable regulations. The containers will be sampled and/or inspected using the procedures outlined in the Waste Analysis Plan (Appendix 3-1 of Section 3 of this permit application), to confirm that the wastes are suited for storage and processing at the Hebron Recycle Center. Containers may be staged in area 2C for up to 24 hours before they must be moved to a permitted storage area. Area 2C is ONLY used as a staging area .

After the waste analyses have been completed, containers are moved to a permitted container storage area designated by the facility management. Containers of waste are stored to await subsequent emptying to the process units or to a storage or blending tank. Containers are transported within the facility by trained personnel using lift trucks with drum handling or pallet handling attachments.

Containers in storage are kept closed with all head bungs secure, preventing evaporation of volatile materials from the containers (the solvents received at the facility are valuable product, and therefore, Clean Harbors minimizes opportunities for loss). Containers are stored upright, generally on pallets, but may be stored directly on the concrete pad, depending upon how they are received. Exhibits 23C, 24C, 40C, and 41D present arrangements of drums in Container Storage Areas No. 1 and 2 and in Truck Stations No. 1 and 2, respectively.

Containers in Storage Area 1 currently are stored on pallets and are stacked up to 12'0". In order to ensure compliance with this standard, a mark has been placed on building columns or walls in Storage Area 1 at the 12'0" elevation. Containers in storage areas 2B, 2D and 2E are stored on pallets and are stacked up to a maximum height of two 55-gallon drums. The minimum aisle space between rows of drums in the container storage areas is typically two feet. Containers are stored at least three feet from the edge of any dike not protected by a side wall. Additionally, clearance of at least three feet is maintained around all columns in the container storage areas. This arrangement allows unobstructed movement of personnel to ensure that all drums can be visually inspected. Two feet of aisle space will be maintained from the wall to the first pallet. The aisle space maintained ensures unobstructed movement of personnel for fire fighting purposes. The types of materials stored in each row are identified in the operations log maintained at the facility. Labels on the containers identify the contents, the accumulation date, and the contained wastes, associated hazards. Ignitable wastes may be stored in container storage areas 1, 2B, 2D and 2E ONLY. Smoking is prohibited in the facility, which is posted with "No



Previous knowledge of the waste streams indicates that the core waste streams are compatible. However, certain proposed industrial waste streams waste codes may be deemed incompatible according to USEPA guidance (A Method for Determining the Compatibility of Hazardous Wastes, EPA-600 2-80-076, April 1980). Therefore, based on discussions with Ohio EPA, Clean Harbors will assume that the following waste codes are incompatible with other waste streams unless there is knowledge which demonstrates otherwise. Demonstrated knowledge will include: determination by the above mentioned guidance document, or receipt of the waste which is already commingled, or testing the waste stream. Testing of the waste stream will be conducted and documented, for each material profile evaluation statement (refer to example in Attachment 3 in Appendix 3-1), for each waste stream which can be stored without segregation.

Segregation of these waste streams will include, but is not limited to:

1. Separation, dike, berm,
2. Isolation of the waste with portable dike, berm. Isolation will follow the guidelines in section 6 for two foot aisle space, etc.

Container Storage Area No. 1 (see Exhibits 23A through 23C) is constructed of a reinforced concrete pad with twelve inch high curbs at the east and west ends, and variable height curbs along the north and south ends (six inch minimum in the middle and increasing as the elevation of the pad decreases). The concrete pad is reinforced with 6 x 6 No. 4 rods with a one sixteenth-inch per foot slope to direct the flow of any leakage or spillage to sumps located at the east and west ends of Container Storage Area No. 1. Each sump is twenty-four inches in diameter by two feet deep and has a capacity of 47 gallons.

Container Storage Area No. 2 (see Exhibits 24A through 24C) is constructed of reinforced concrete. Secondary containment capacity calculation for Storage Areas 2B and 2D was determined by flooding the areas with water. Clean Harbors temporarily removed all containers and non-fixed equipment from Container Storage Areas No. 2B and 2D. The containment area was flooded with water using a hose connected to a meter. Water was added until it overflowed the containment area. Clean Harbors decided to use this procedure to determine the secondary containment capacity for Storage Areas 2B and 2D because the floor surface in that area is irregular and calculations based on concrete details from the drawings are difficult.

The concrete floor in Container Storage Area 2E slopes to four floor sumps located throughout the storage area. The floor sumps are constructed of stainless steel with dimensions of 3'0" square by 3'0" deep. Therefore, each has a total capacity of 202 gallons, or a total capacity in storage area 2E of 808 gallons. Table 4-3 in Attachment 4-8 lists the storage capacity for Container Storage Area No. 2. Exhibit 9 shows the drainage and sewer systems at the facility and indicates the material of construction of the pipes in the system.

Truck Station 1 and 2 (see exhibits 40A through 41D) are constructed of reinforced concrete with an average curb height of 4 ½ inches. They are covered buildings. the floor slopes to a 43 cubic foot catch basin located in the center of the building. A 16 foot by 1 foot trench runs across each bay to the sump. The average depth of the trench is 4 inches.

The concrete pads are maintained in good condition, free of any gaps, holes or cracks. The structural integrity of the concrete pads will be maintained through daily inspections, and any necessary corrective action. Since the material used to fill cracks found in secondary containment areas can not be applied in cold weather, any cracks found when the weather is not conducive to repair will be filled once the weather is deemed acceptable (this will be noted on

the daily inspection sheets). Design details and materials of construction are presented in Exhibits 23A, 23B, 24A, and 24B as well as in the report included in Attachment 4-11. The concrete is compatible with the wastes stored on it.

#### **4.2.4 Control of Run-on [OAC 3745-50-44(C)(1) and 3745-55-75(B)(4)]**

Run-on is prevented from entering the Container Storage Area No. 1 by the presence of a concrete dike wall at the perimeter of the storage area, as shown on Exhibit 23A. This dike is higher than the surrounding grade, which slopes away from the dike to encourage drainage away from the area. Additionally, the floor elevation in Container Storage Area No. 1 is higher than the surrounding Grade. The area is covered by a roof.

Run-on into Container Storage Areas Nos. 2B, **2D** and 2E is not probable since there is a concrete berm to keep the run-on away from the building, as shown on Exhibit 24A, Section A-A. These areas are within an enclosed building.

Run-on into truck station 1 and 2 is not probable since the driveway into and out of the buildings slopes upward to keep the run-on away from the building. These areas are within an enclosed building.

The loading bays have roof overhangs to keep the rainwater out of the warehouses.

#### **4.2.5 Removal of Liquids from Containment System [OAC 3745-55-75(B)(5) and 3745-50-44(C)(1)]**

Detection of liquids in the containment system is visual. A daily inspection is made of the containment systems and any accumulated liquids are noted. If any accumulation of solvent or waste liquids is detected, the liquids will be pumped into containers, within 24 hours when possible, using equipment such as a portable pump for eventual recycling or disposal.

A visual determination of the nature of the spilled liquid (e.g., oily sheen or two-phase layering which would indicate solvents) will initially be made. Spilled liquid of uncertain nature will be chemically analyzed prior to recycling or disposal. Methods described in Appendix 3-1 will be used for the analysis.

#### **4.2.6 Test for Free Liquids [OAC 3745-50-44(C)(1)(b)(i)]**

A paint filter test is performed, if necessary, to establish if free liquids are present. The test method used is EPA Method 9095, as indicated in Appendix 3-1.

### **4.3 TANK SYSTEMS**

The storage tanks at the Hebron Recycle Center are used for a variety of purposes, including product storage, fuel blending, in-process materials storage and hazardous waste storage. Of these uses, the storage of hazardous wastes and fuel blending are the only uses that are regulated under RCRA.

The facility has capacity to store 1,237,500 gallons of hazardous wastes in 74 tanks and Solids Storage Bin #2. Management of bulk wastes generally involves storage of wastes as well as transfers to and from the truck stations and container storage areas. When a tanker loaded with waste is accepted at the facility, the manifest or shipping papers are examined to ensure that the waste matches the pre-shipment documentation and the contents are sampled, using the procedures discussed in the Waste Analysis Plan (Appendix 3-1 of this permit application), to confirm that the wastes are suited for storage and processing at the Hebron Recycle Center. Bulk

**ATTACHMENT 4-4**

**(TABLE 4-1)**

**CAPACITY OF CONTAINER STORAGE AREAS  
FOR THE CLEAN HARBORS HEBRON, OHIO FACILITY**

**TABLE 4-1****CAPACITY OF CONTAINER STORAGE AREAS**

<b>STORAGE AREA</b>	<b>STORAGE CAPACITY</b>	
	<b>GALLONS</b>	<b>INDIVIDUAL UNIT CAPACITY (EQUIVALENT 55-GALLON DRUMS)</b>
<b>No. 1</b>	<b>158,400</b>	<b>2,880</b>
<b>No. 2 Total</b>	<b>40,630</b>	<b>738</b>
B	13,200	240
D	19,360	352
E	8,070	146
<b>Truck Station No. 1</b>	<b>13,200</b>	<b>240</b>
<b>Truck Station No. 2</b>	<b>13,200</b>	<b>240</b>
<b>TOTAL</b>	<b>225,430</b>	<b>4,098</b>

NOTE: Secondary containment calculations are presented in Attachment 4-8

**ATTACHMENT 4-8**

**SECONDARY CONTAINMENT CAPACITIES**

**AT THE CLEAN HARBORS HEBRON, OHIO FACILITY**

**(TABLE 4-3 AND CALCULATIONS)**



**TABLE 4-3**

**SUMMARY OF SECONDARY CONTAINMENT CAPACITY CALCULATIONS**

<b>UNIT/AREA</b>	<b>SECONDARY CONTAINMENT NET CAPACITY (GALLONS)*</b>	<b>FOR CALCULATIONS SEE EXHIBIT NO.</b>
Container Storage Area No. 1	33,690	23C
Container Storage Area No. 2B	1,426	24D
Container Storage Area No. 2D	1,972	24D
Container Storage Area No. 2E	808	24D
Truck Station No. 1	5,382	40C
Truck Station No. 2	5,382	41D
Tank Farm No. 1E	62,588	**
Tank Farm No. 1W	73,958	**
Tank Farm No. 2	133,067	**
Tank Farm No. 3	121,768	**
Tank Farm No. 4	31,335	**
Tank Farm No. 6	23,952	**

All secondary containment net capacities are based upon containers being stored directly on the floor instead of on pallets since this results in a more conservative net volume. Area 2C is a processing area and not used for storage of hazardous wastes.

\* Net Capacity = Total Capacity - Displacements

\*\* The secondary containment calculations for the Tank Farms are presented in pages 4-8-2 through 4-8-8.

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Clean Harbors conducts regular inspections of the facility for equipment malfunctions, structural deterioration, operator errors and discharges that could cause or lead to the release of hazardous waste constituents and adversely affect the environment or threaten human health.

Plant personnel are responsible for conducting the inspections of all hazardous waste management areas. Clean Harbors will conduct inspections to detect the following problems:

- Structural deterioration;
- Damaged or missing parts on safety, emergency and monitoring equipment;
- Defects of security devices; and
- Any release of hazardous wastes.

Table 6-2 lists the various inspections and the frequency they are conducted:

<b>Table 6-2</b>	
<b>Inspection</b>	<b>Frequency</b>
Container Storage Areas	Daily
Tank Farms	Daily
Facility (Security, Lighting, Warnings)	Daily
Spill Boxes	Weekly
Emergency Generator	Weekly
Fire Equipment (Fire Pump, Hydrants/Valves, Sprinklers)	Weekly
Communications	Weekly
Monitoring Equipment (LEL Monitors)	Weekly
Emergency Eyewash/Shower	Weekly
Emergency Respiratory Equipment (Oxygen Bottles)	Weekly
Fire Extinguishers	Monthly
Emergency Exit Signs/Lights	Monthly
Facility Doors	Monthly
Facility Firewater Sprinkler System	Monthly
Tank High Level Alarms	Monthly
SCBA's	Monthly

All daily, weekly, and monthly results of inspections are entered on inspection forms. Any irregularities are forwarded to the Operations Manager for action on the day of the detection. Remedial actions will be taken according to the following:

- Remedy any deterioration or malfunction of equipment or structure which the inspection reveals; and
- Carry out the remedial action on schedule which insures that the problem does not lead to an environmental or human health hazard.

Inspections and any actions taken are logged on the appropriate form and are kept for at least three years.

#### **6.2.2 Container Inspection [OAC 3745-55-74]**

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Spent solvents consisting of primarily chlorinated solvents are received in 55-gallon containers from industrial users for storage and recycling at this facility. Spent solvent wastes from industries such as the chemical or pharmaceutical process industries received at the facility are classified as characteristic wastes (D-waste codes), non-specific source wastes (F-waste codes), listed wastes from specific sources (K-waste codes), and commercial chemical products, manufacturing intermediates, or off-specification commercial chemical products (U-waste codes). Most of the time, a waste stream will be some combination of specific components, and be categorized as a D- or F- waste.

The Hebron Recycle Center uses gravity separation, distillation, fractionation, and blending to recover or recycle organic solvents and similar materials. Solids, such as still bottoms and sludges received from customers or other Clean Harbors facilities will be blended for use in the industrial fuel program. Certain components separated by processing, residuals from recycling, and some wastes received at the facility for storage that are not amenable to processing at the facility are sent off-site for additional processing, reuse, burning for energy recovery, incineration, or disposal.

Clean Harbors stores hazardous waste prior to processing in the following areas: tank farm and container storage areas. The wastes received from the customers are stored in the facility with a total capacity as follows:

- Clean Harbors is permitted to store 1,237,500 gallons of hazardous wastes in 74 tanks and Solids Bin #2.
- The facility's maximum existing container storage capacity for hazardous wastes is 225,430 gallons.

The facility's public address system can be heard at any location throughout the plant, including process areas, container storage areas, truck stations, the locker room, and the lunch room. Therefore, all plant employees would be notified in the event of an emergency.

A site plan layout, Exhibit 5, is provided as Attachment 7-5.

## **7.2 EMERGENCY COORDINATORS [OAC 3745-54-52(D) and 3745-54-55]**

If an emergency situation develops at the facility, the discoverer will contact an Emergency Coordinator as listed in Attachment 7-1, OAC 3745-54-52(D) and 3745-54-55. The emergency coordinators should be called in the order they are listed. The site Compliance Manager will be contacted regardless of whether or not he or she needs to act as an emergency coordinator, to offer and address specific potential environmental concerns resulting from the incident. All persons listed as Emergency Coordinators have authority to commit resources of the company to deal with emergencies for the hazardous waste management activities of the facility.

In the event that none of the listed emergency coordinators can be reached, the most senior employee of the facility should be contacted. Although he or she does not have authority to commit company resources, he or she will serve as interim Emergency Coordinator until such time as he or she can locate the proper listed coordinator and be relieved.

The job descriptions for the primary Emergency Coordinator, the General Manager, as well as the Alternate Emergency Coordinator, the *Facility Operations Supervisor and Plant Engineer and Facility Maintenance Supervisor*, are provided in Section 8, Attachment 8-1.



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**TABLE 9-2  
CONTAINER STORAGE AREAS TO BE CLOSED**

STORAGE AREA	MAXIMUM STORAGE CAPACITY	
	GALLONS	INDIVIDUAL UNIT CAPACITY (EQUIVALENT 55-GALLON DRUMS)
<b>No. 1</b>	<b>158,400</b>	<b>2,880</b>
<b>No. 2 Total</b>	<b>40,630</b>	<b>738</b>
B	13,200	240
D	19,360	352
E	8,070	146
<b>Truck Station No. 1</b>	<b>13,200</b>	<b>240</b>
<b>Truck Station No. 2</b>	<b>13,200</b>	<b>240</b>
<b>TOTAL</b>	<b>225,430</b>	<b>4,098</b>

NOTE: All container storage areas are concrete, design information can be found in Section 4

**Attachment 9-1A**

**Closure Cost Estimate**

## **CLOSURE COST ESTIMATE**

This attachment contains the Closure Cost Estimate for closure of the existing Clean Harbors Hebron Recycle Center as required by OAC 3745-50-44(A)(15). All estimates are based upon the cost to a third party to perform the closure activities described in the associated Closure Plan presented in Section 9 of this permit application. The unit costs used to derive cost estimates are presented as a side note to each individual calculation.

OAC 3745-55-42(A)(12) requires the owner or operator of hazardous waste management units to base closure and post-closure cost estimates on "third party" costs. Third party has been defined in the regulations as a party other than the parent or the subsidiary of the owner or operator. In this Closure Cost Estimate, Clean Harbors has used third party costs in determining the total closure costs, assuming that a third-party will process or dispose of all inventory and residuals off-site and decontaminate all permitted units at the time of closure.

Third party costs are used in this Closure Cost Estimate for the purpose of generating a worst-case estimate for Financial Assurance. Actual closure activities will probably involve use of Clean Harbor's personnel, on-site recycling and reclamation as well as fuel blending, and subsequent sale of the products generated. However, this Closure Cost Estimate does not incorporate salvage values or any other credit that will exist if closure activities are performed by Clean Harbors.

The estimated closure cost corresponds to the complete final closure of the facility as it currently exists, accounting for all existing regulated units and the existing maximum hazardous waste inventory. As indicated in the associated Closure Plan, closure of the facility will involve off-site processing of the waste. All other on-site processed materials will be shipped off-site for use as fuels. The closure cost estimate assumes that normal decontamination procedures will yield clean closure.

Clean Harbors currently utilizes closure insurance as the financial assurance mechanism which includes the costs for performing closure of all hazardous waste management units.

This Closure Cost Estimate incorporates administrative costs, which accurately represent administrative expenses, including supervision, project management, and other direct costs, that will be required during the closure period.<sup>1</sup>

The Closure Cost Estimate shall be adjusted annually for inflation and revised whenever a change in the Closure Plan increases or decreases the cost of closure. The Closure Cost Estimate will be revised as new units are brought into operation, and will be submitted no later than 30 days after the Ohio EPA has approved the revised Closure Plan. Financial assurance will also be revised at least 60 days prior to starting hazardous waste operations in the new units. Copies of the original Closure Cost Estimate, proposed Cost Estimate, any revisions, and the latest adjusted estimate shall be kept at the facility during the facility's operating life.

### **Facility Closure Cost**

As summarized in Table 6, the estimated cost for closing the facility is \$1,877,651. The calculations performed to arrive at this total are found in Tables 1 through 5 of this Closure Cost Estimate (the unit costs and assumptions have been included).

**TABLE 1**

**INVENTORY REMOVAL AND OFF-SITE PROCESSING**

<b>Item and Assumption</b>		<b>Cost</b>
1	Removal and Processing of Container Inventory	
	a. Transport of containerized wastes inventory (4,417 drums, 80 drums/truck @ \$5.00/loaded mile, 150 miles)	41,409
	b. Off-site processing of containerized wastes (4,417 drums \$66/drum)	291,522
2	Removal and Processing of Tank Inventory	
	a. Bulk transportation of tank inventory (1,237,500 gal. @ 7,000 gal/truck, \$645/truck, 120 miles)	114,165
	b. Off-site disposal tank inventory (1,237,500 gal @ \$0.50/gal)	\$618,750
<b>TOTAL INVENTORY REMOVAL AND OFF-SITE PROCESSING COST</b>		<hr/> <b>\$1,065,846</b>



**TABLE 3**

**DECONTAMINATION OF SECONDARY CONTAINMENT AREAS**

	<b>Item and Assumption</b>	<b>Cost</b>
1	Rental/Purchase of Decontamination Equipment	
	a. Vacuum truck (Included in Table 2 cost summary)	
	b. High pressure/low volume cleaner (20 areas @ 1 day/area, \$120/day)	\$2,400
2	Labor for Decontamination (68,209 ft <sup>2</sup> ; 2 person-hours/1,000 ft <sup>2</sup> , @ \$38/hour)	\$5,184
3	Handling of Decontamination Wash/Rinsewaters	
	a. Transport of miscellaneous residues (68,209 ft <sup>2</sup> @ 1 drum/5,000 ft <sup>2</sup> , 80 drums/load, \$5.00/loaded mile/truck, 125 miles.)	\$625
	b. Off-site treatment/disposal of miscellaneous residues (16 drums, @ \$ 98/drum)	\$1,568
	c. Off-site processing of rinseates from all secondary containment areas* (68,209 gal. @ \$0.47/gal)	\$32,058
	d. Bulk transportation of rinseate (68,209 gallons @ 7,000 gallons/truck, \$640/truckload)	\$6,420
4	Decontamination Sampling and Analysis (68,209 ft <sup>2</sup> @ 1 sample/2,500 ft <sup>2</sup> , \$359/sample)	\$9,795
<b>TOTAL SECONDARY CONTAINMENT AREAS DECONTAMINATION</b>		<b>\$58,050</b>

\* The secondary containment areas include the tank farms, container storage and handling areas, and truck stations.

**Facility:** Tank Farms: 16,699 ft<sup>2</sup>; Container Storage Areas (including truck stations 1, 2, and 7) 38,337 ft<sup>2</sup>; and Truck Stations (excluding No. 1, 2, and 7) 13,173 ft<sup>2</sup>

**TABLE 4**

**MISCELLANEOUS FACILITY CLOSURE COSTS**

	<b>Item and Assumption</b>	<b>Cost</b>
1	Treatment of Contaminated Stormwater from Uncovered Secondary Containment Areas*	
	a. Off-site treatment of contaminated stormwater (22,057 gal. @ \$.47/gal)	\$10,367
	b. Bulk transportation of stormwater (22,057 gallons @ 7,000 gallons/truck, \$642/truckload)	\$2,022
2	Utilities (180 days @ \$158/day)	\$28,440
3	Personal Protective Equipment Cost	
	a. Tyvek suits, gloves, boots, etc (723 person-hours; /8 hours/day, @ \$44/day)	\$3,977
	b. Respiratory protective equipment (Lump sum)	\$3,059
	<b>TOTAL MISCELLANEOUS FACILITY CLOSURE COST</b>	<hr/> <b>\$47,865</b>

\* Assuming that rainfall over 180 day closure period will be approximately 15 inches (half of mean annual rainfall), and that 10% of this rainfall/stormwater, that is 1.5 inches, becomes contaminated.

**TABLE 5**

**CLOSURE ADMINISTRATION AND CERTIFICATION**

	<b>Item and Assumption</b>	<b>Cost</b>
1	Administration (including project management, supervision)	\$57,950
2	Closure Certification	
	a. Certification by Independent Professional Engineer (2 4-hour visits/week, 26 weeks @ \$168.50/hour)	\$35,772
	<b>TOTAL CLOSURE ADMINISTRATION COSTS</b>	<hr/> <b>\$93,722</b>

**TABLE 6**

**TOTAL CLOSURE COSTS**

<b>Item and Assumption</b>		<b>Cost</b>
1	Inventory Processing and Removal	1,065,846
2	Decontamination of Tanks and Associated Equipment	\$199,939
3	Secondary Containment Areas Decontamination	\$58,050
4	Miscellaneous Facility Closure Costs	\$47,865
5	Administration and Certification	\$93,722
		<hr/>
SUBTOTAL CLOSURE COST		\$1,465,422
15% Contingency		\$219,813
		<hr/>
<b>TOTAL CLOSURE COST</b>		<b>\$1,685,235</b>
<b>Inflation Cost 2013 1.017</b>		<b>\$1,713,884</b>
<b>Inflation Cost 2014 1.015</b>		<b>\$1,739,592</b>
<b>Inflation Cost 2015 1.014</b>		<b>\$1,763,946</b>
<b>Inflation Cost 2016 1.010</b>		<b>\$1,781,586</b>
<b>Inflation Cost 2017 1.013</b>		<b>\$1,804,746</b>
<b>Inflation Cost 2018 1.018</b>		<b>\$1,837,232</b>
<b>Inflation Cost 2019 1.022</b>		<b>\$1,877,651</b>
<b>Inflation Cost 2020 1.017</b>		<b>\$1,909,571</b>
<b>TOTAL CLOSURE COST</b>		<b>\$1,909,571.00</b>

RCRA PART B Application  
Section 12 Modified Page



## SECTION 12

### CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

  
James Childress

Vice President Environmental Compliance – East  
Clean Harbors Environmental Services, Inc.

4/13/2020  
Date

RCRA PART B Application

Exhibit 23C Revision A

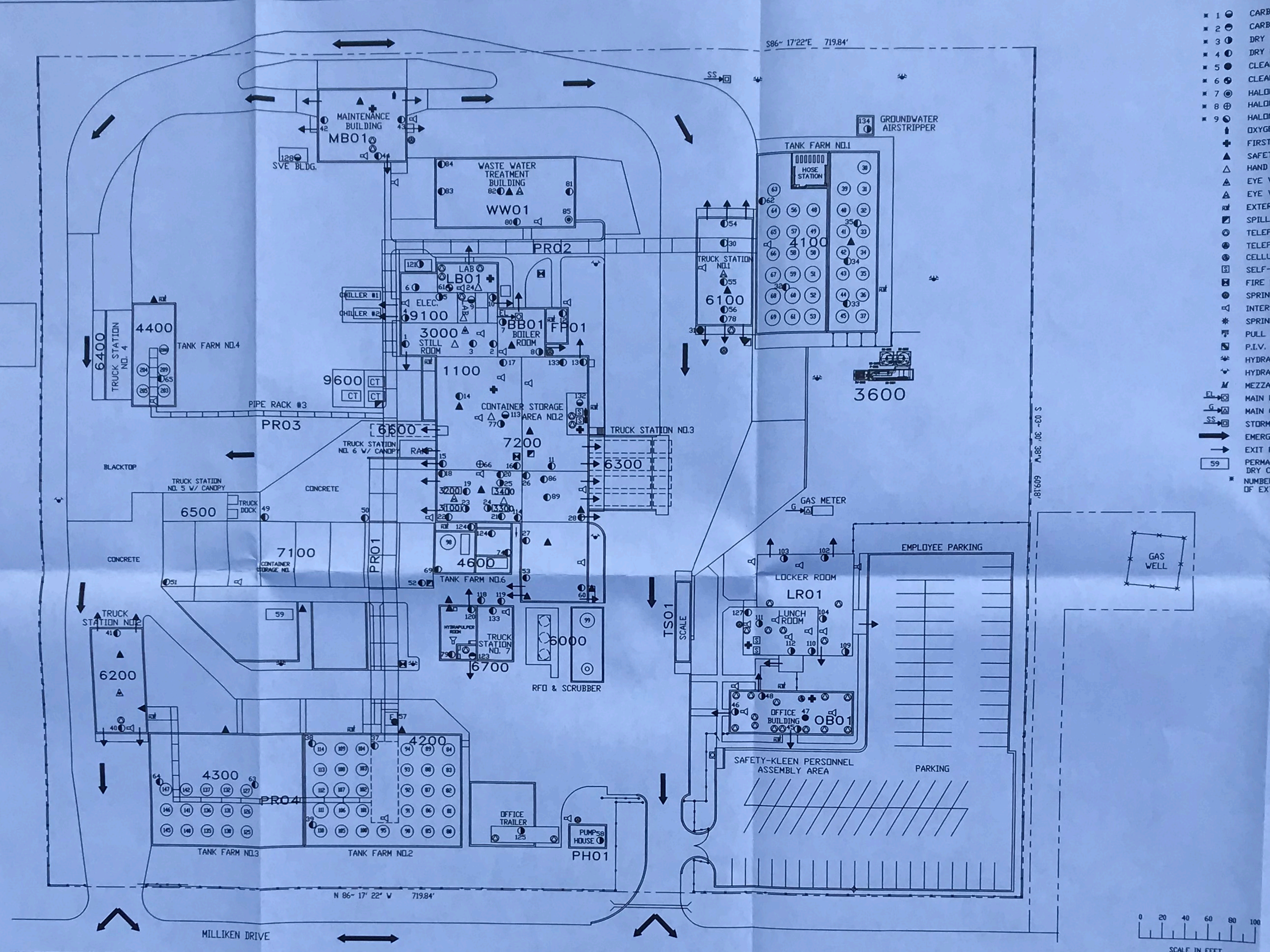
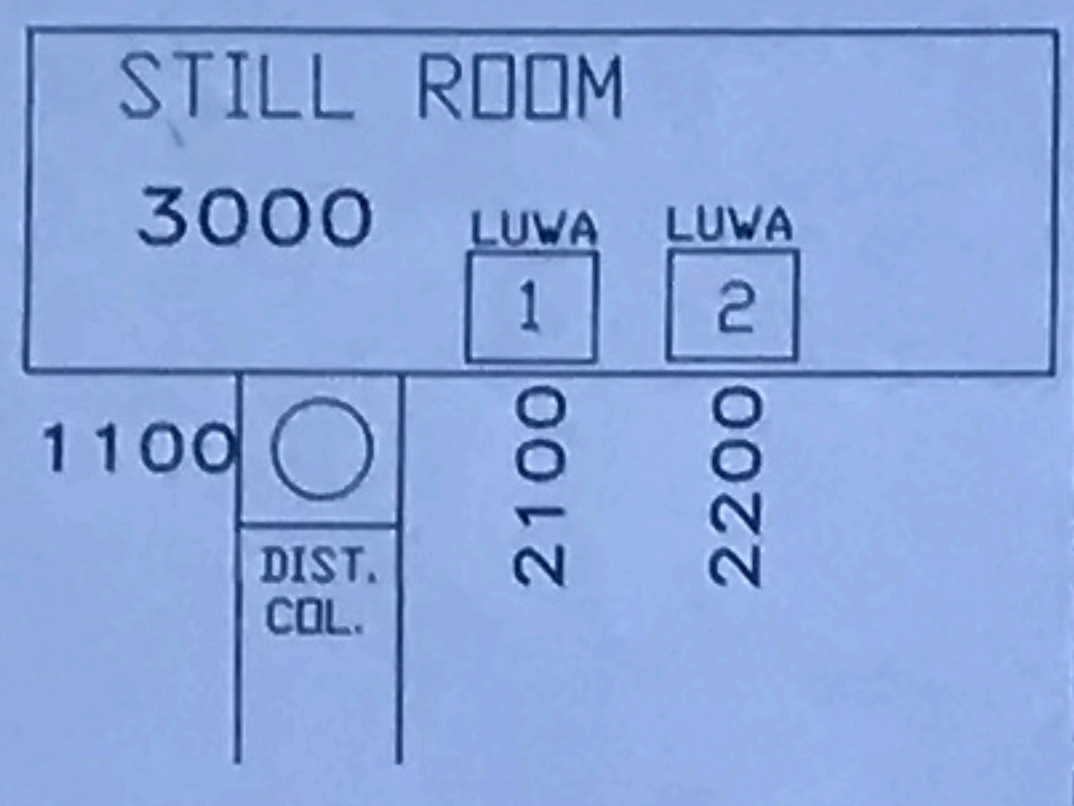


RCRA PART B Application

Exhibit 24C Revision 7



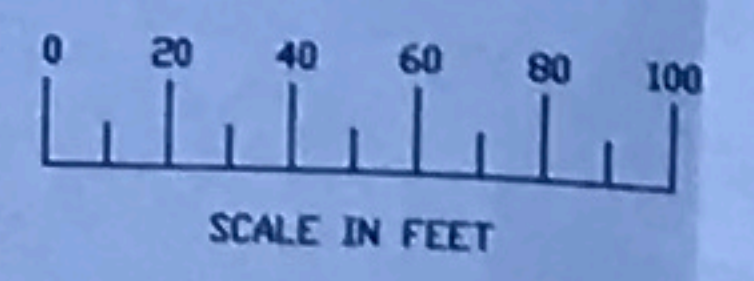




- ### LEGEND
- 1. CARBON DIOXIDE FIRE EXTINGUISHER - HAND HELD TYPE (10 # BC)
  - 2. CARBON DIOXIDE FIRE EXTINGUISHER - HAND HELD TYPE (15 # BC)
  - 3. DRY CHEMICAL FIRE EXTINGUISHER - HAND HELD TYPE (10 # ABC)
  - 4. DRY CHEMICAL FIRE EXTINGUISHER - HAND HELD TYPE (20 # ABC)
  - 5. CLEAN GUARD FIRE EXTINGUISHER - HAND HELD (9.5 #)
  - 6. CLEAN GUARD FIRE EXTINGUISHER - HAND HELD (4.75 #)
  - 7. HALON FIRE EXTINGUISHER (5 #)
  - 8. HALON FIRE EXTINGUISHER (9 #)
  - 9. HALON FIRE EXTINGUISHER (13 #)
  - 10. OXYGEN BOTTLE
  - 11. FIRST-AID KIT
  - 12. SAFETY SHOWER WITH EYE WASH FOUNTAIN
  - 13. HAND SPRAY ONLY
  - 14. EYE WASH WITH HAND SPRAY
  - 15. EYE WASH ONLY
  - 16. EXTERIOR HOSE BIBB
  - 17. SPILL BOX
  - 18. TELEPHONE
  - 19. TELEPHONE W/INTERCOM
  - 20. CELLULAR PHONE
  - 21. SELF-CONTAINED BREATHING APPARATUS (S.C.B.A.)
  - 22. FIRE HOSE
  - 23. SPRINKLER ALARM
  - 24. INTERCOM/ALERT (HORN)
  - 25. SPRINKLER RISER FOR A.F.F. (AQUEOUS FILM FORMING FOAM)
  - 26. PULL STATION
  - 27. P.I.V. (POST INDICATOR VALVE)
  - 28. HYDRANT - F.O.M. MONITOR
  - 29. HYDRANT - WATER
  - 30. MEZZANINE
  - 31. MAIN ELECTRIC SWITCH
  - 32. MAIN GAS VALVE
  - 33. STORM SEWER CUTOFF
  - 34. EMERGENCY EVACUATION ROUTES
  - 35. EXIT ROUTES FOR BUILDINGS
  - 36. PERMANENTLY INSTALLED 50# FIXED DRY CHEMICAL SYSTEM
  - 37. NUMBERS GIVEN NEXT TO EXTINGUISHERS ARE FOR MAINTENANCE REMOVAL AND RETURN OF EXTINGUISHERS LOCATED THROUGH-OUT SITE.

### NOTES

PROCESS NUMBERING SYSTEM	
1100	DISTILL. COLUMN NO.1
2100	LUVA NO. 1
2200	LUVA NO. 2
3000	STILL ROOM
3100	SAFETY-THERM NO. 1
3200	SAFETY-THERM NO. 2
3300	SAFETY-THERM NO. 3
3400	SAFETY-THERM NO. 4
3600	DEHYDRATION UNIT
4100	TANK FARM NO. 1
4200	TANK FARM NO. 2
4300	TANK FARM NO. 3
4400	TANK FARM NO. 4
4600	TANK FARM NO. 6
6100	TRUCK STATION NO. 1
6200	TRUCK STATION NO. 2
6300	TRUCK STATION NO. 3
6400	TRUCK STATION NO. 4
6500	TRUCK STATION NO. 5
6600	TRUCK STATION NO. 6
6700	TRUCK STATION NO. 7
7100	CONTAINER STORAGE AREA NO. 1
7200	CONTAINER STORAGE AREA NO. 2
9100	ELECTRICAL ROOM
9600	COOLING WATER
FACILITY SUPPORT UNIT/AREA LETTERING SYSTEM	
BB01	BOILER BUILDING
FP01	FIRE PROTECTION BUILDING
LR01	LABORATORY BUILDING
LR01	LOCKER ROOM
MB01	MAINTENANCE BUILDING
OB01	OFFICE BUILDING
PH01	PUMP HOUSE
PR01	PIPERACK
PR02	PIPERACK
PR03	PIPERACK
PR04	PIPERACK
TS01	TRUCK SCALE
WW01	WASTE WATER TREATMENT BUILDING



### ATTACHMENT 7-10 EXHIBIT NO. 5

EXISTING FACILITY TRAFFIC FLOW,  
EMERGENCY EQUIPMENT LOCATIONS  
AND EVACUATION ROUTES

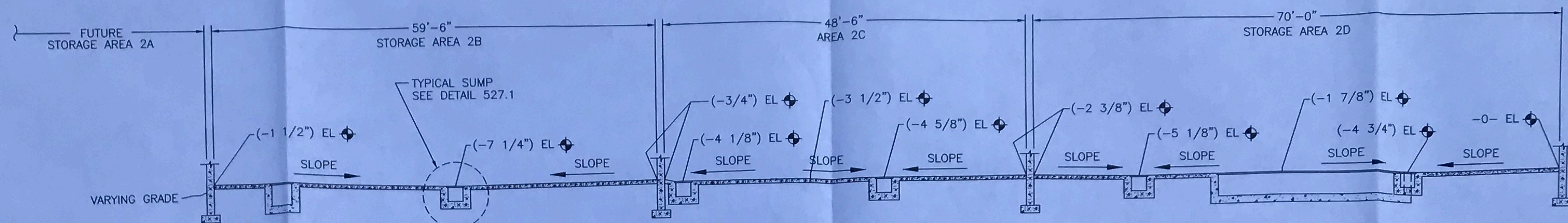


581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3532  
 SCALE 1"=40' DRAWN BY KJM CHECKED BY KJM DATE 10/18/94  
 HEBRON, OH  
 RECYCLE CENTER 90-64200-004 18

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO CLEAN HARBORS  
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 CLEAN HARBORS MAY AGREE IN WRITING.

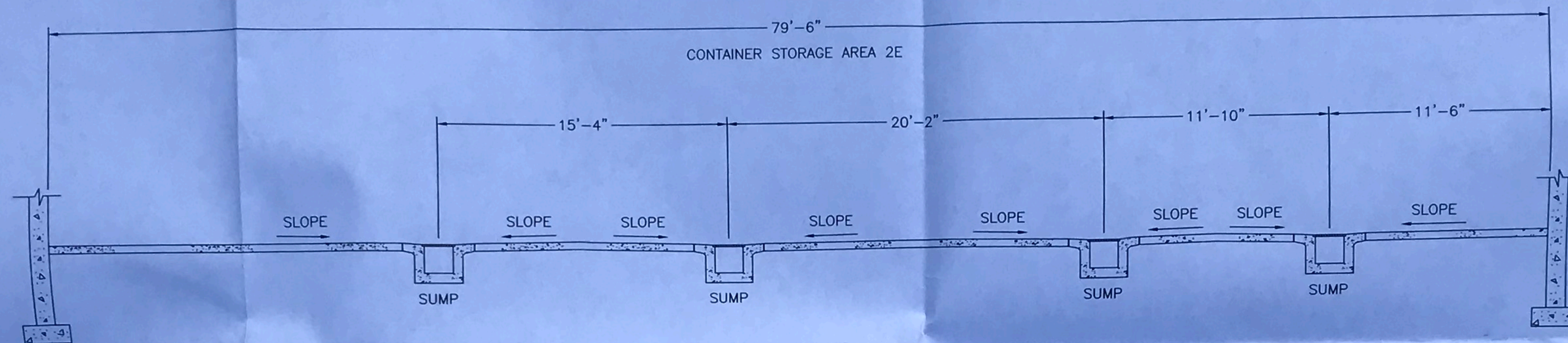
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17	RCRA PERMIT RENEWAL UPDATE	KMC			12/12/14	11	ADDED EXT. No. 132	GK		5/7/99	
16	UPDATED FIRE EXTINGUISHERS	GK			03/31/96	10	ADD EXT.#128	GK		2/11/99	
15	ADDED EXT. No. 134	GK			11/30/95	9	ADD EXT.#127	GK		12/1/98	
14	ADDED S/S & EYEWASH T/T #2	GK			9/15/90	8	ADD PAGING SPKRS & EXT.#126	GK		5/12/98	
13	RFO, HYDRAP, & TRAILER MOD'S	GK			3/28/90	7	OFFICE TRLR & PHONE MOD'S	GK		11/7/97	
NO.	DESCRIPTION	BY	CK	APPR		NO.	DESCRIPTION	BY	CK	APPR	DATE
REVISIONS						REVISIONS					





### SECTION A - A

REFERENCE DWG 90-64200-527  
SCALE: 1/8" = 1'-0"



### SECTION B - B

REFERENCE DWG 90-64200-527  
SCALE: 1/4" = 1'-0"

## CONTAINMENT CALCULATION FOR CONTAINER STORAGE NO.2 (WITHOUT USE OF PALLETS)

**CONTAINER STORAGE AREA NO.2B**  
FLOODED FLOOR VOLUME = 1336 GALLONS

**AREA NO.2C**  
NO STORAGE

**CONTAINER STORAGE AREA NO.2D**  
FLOODED FLOOR VOLUME = 970 GAL.

**CONTAINER STORAGE AREA NO.2E**  
(4) SUMPS FOR CONTAINMENT  
(3') x (3') x (3') x 7.48 gal./cu.ft = 202 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
30 PALLETS x 4 DRUMS = 120 DRUMS  
120 DRUMS x 2 HIGH STACKING = 240 DRUMS  
240 DRUMS x 55 gal./DRUM = 13,200 GALLONS  
13,200 GALLONS x (0.10) = 1,320 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
44 PALLETS x 4 DRUMS = 176 DRUMS  
176 DRUMS x 2 HIGH STACKING = 352 DRUMS  
352 DRUMS x 55 gal./DRUM = 19,360 GALLONS  
19,360 GALLONS x (0.10) = 1,936 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
112 DRUMS  
112 DRUMS x 55 gal./DRUM = 6160 GALLONS  
6160 GALLONS x (0.10) = 616 GALLONS  
808 GALLONS - 616 GALLONS = 192 GAL. EXCESS

**DISPLACEMENTS**  
30 PALLETS x 2.0 cu.ft./PALLET = 60 cu.ft.  
60 cu.ft. x 7.48 gal./cu.ft. = 448 GALLONS  
NET CONTAINMENT = 888 GALLONS

**DISPLACEMENTS**  
44 PALLETS x 2.0 cu.ft./PALLET = 88 cu.ft.  
88 cu.ft. x 7.48 gal./cu.ft. = 658 GALLONS  
NET CONTAINMENT = 312 GALLONS

**NEW SUMP**  
3' x 8' x 3' DEEP = 72 cu.ft.  
72 cu.ft. x 7.48 gal./cu.ft. = 538 GALLONS  
1,426 GALLONS - 1,320 GALLONS = 106 GALLONS EXCESS

**NEW SUMP**  
3' x 25' x 3' DEEP = 225 cu.ft.  
225 cu.ft. x 7.48 gal./cu.ft. = 1,683 GALLONS  
1,995 GALLONS - 1,936 GALLONS = 59 GALLONS EXCESS

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REFERENCE DWG. NO'S: 90-64200-527 EXHIBIT 24A  
90-64200-538 EXHIBIT 44B  
90-64200-203 EXHIBIT 24C

DF-Exhibit 24D Rev. 5

## EXHIBIT NO. 24D

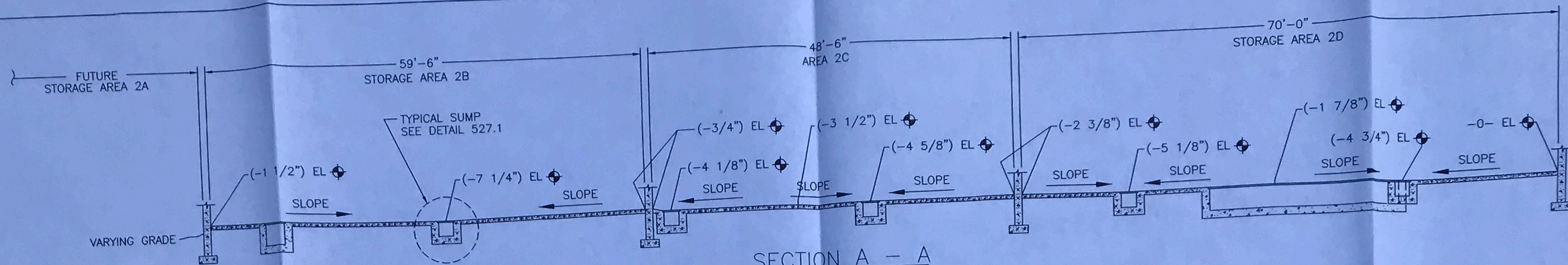
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4	RCRA PERMIT RENEWAL UPDATE	KMC		12/12/14
3	REVISED FOR PART 'B' PERMIT RENEWAL	SWL		7/3/02
2	REVISED PER NOD 1995 REMOVED "CURB ADDED" STATEMENT	RDJ/KJM		5/31/95
1	REVISED PER NOD 1994	M.O'C/KJM		10/18/94
0	ISSUED FOR PART 'B' PERMIT NOD	M.O'C/KJM	TS	3/02/92
NO.	DESCRIPTION	BY	CK	APPR DATE
REVISIONS				

FLOOR ELEVATIONS FOR  
CONTAINER STORAGE AREAS NO.  
2B, 2D & 2E  
CONTAINMENT CALCULATION

**CleanHarbors**

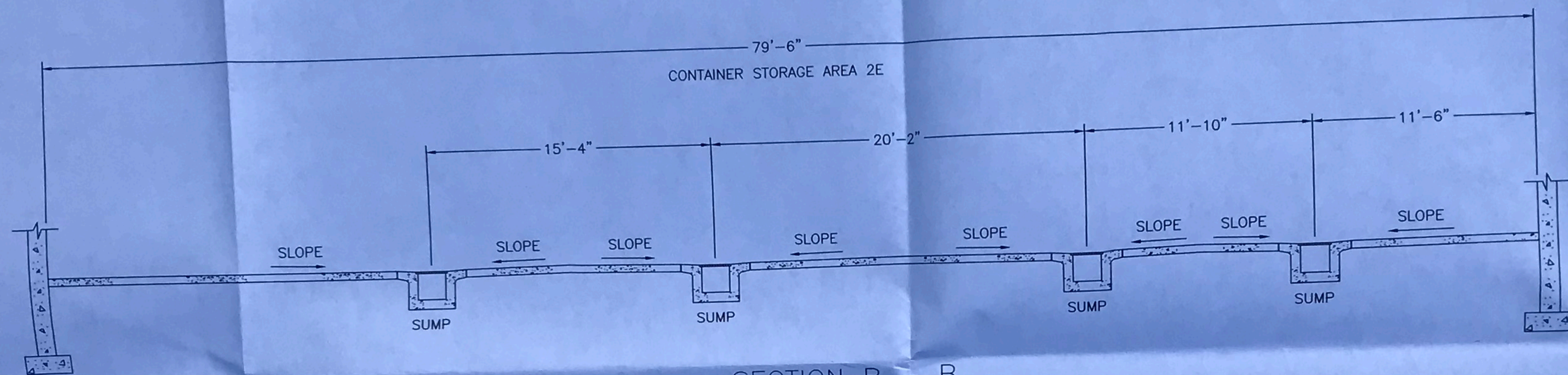
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NOTED: M.O'C/KJM TS  
HEBRON, OHIO RECYCLE CENTER  
DRAWING NO. 90-64200-541 5





### SECTION A - A

REFERENCE DWG 90-64200-527  
SCALE: 1/8" = 1'-0"



### SECTION B - B

REFERENCE DWG 90-64200-527  
SCALE: 1/4" = 1'-0"

## CONTAINMENT CALCULATION FOR CONTAINER STORAGE NO.2 (WITHOUT USE OF PALLETS)

**CONTAINER STORAGE AREA NO.2B**  
FLOODED FLOOR VOLUME = 1336 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
30 PALLETS x 4 DRUMS = 120 DRUMS  
120 DRUMS x 2 HIGH STACKING = 240 DRUMS  
240 DRUMS x 55 gal./DRUM = 13,200 GALLONS  
13,200 GALLONS x (0.10) = 1,320 GALLONS

**DISPLACEMENTS**  
30 PALLETS x 2.0 cu.ft./PALLET = 60 cu.ft.  
60 cu.ft. x 7.48 gal./cu.ft. = 448 GALLONS

NET CONTAINMENT = 888 GALLONS

**NEW SUMP**  
3' x 8' x 3' DEEP = 72 cu.ft.  
72 cu.ft. x 7.48 gal./cu.ft. = 538 GALLONS

1,426 GALLONS - 1,320 GALLONS = 106 GALLONS EXCESS

**AREA NO.2C**  
NO STORAGE

**CONTAINER STORAGE AREA NO.2D**  
FLOODED FLOOR VOLUME = 970 GAL.

**CONTAINMENT VOLUME REQUIRED**  
44 PALLETS x 4 DRUMS = 176 DRUMS  
176 DRUMS x 2 HIGH STACKING = 352 DRUMS  
352 DRUMS x 55 gal./DRUM = 19,360 GALLONS  
19,360 GALLONS x (0.10) = 1,936 GALLONS

**DISPLACEMENTS**  
44 PALLETS x 2.0 cu.ft./PALLET = 88 cu.ft.  
88 cu.ft. x 7.48 gal./cu.ft. = 658 GALLONS

NET CONTAINMENT = 312 GALLONS

**NEW SUMP**  
3' x 25' x 3' DEEP = 225 cu.ft.  
225 cu.ft. x 7.48 gal./cu.ft. = 1,683 GALLONS  
1,995 GALLONS - 1,936 GALLONS = 59 GALLONS EXCESS

**CONTAINER STORAGE AREA NO.2E**  
(4) SUMPS FOR CONTAINMENT  
(3') x (3') x (3') x 7.48 gal./cu.ft. = 202 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
112 DRUMS  
112 DRUMS x 55 gal./DRUM = 6160 GALLONS  
6160 GALLONS x (0.10) = 616 GALLONS  
808 GALLONS - 616 GALLONS = 192 GAL. EXCESS

REFERENCE DWG. NO'S: 90-64200-527 EXHIBIT 24A  
90-64200-538 EXHIBIT 44B  
90-64200-203 EXHIBIT 24C

DF-Exhibit 24D Rev. 5

## EXHIBIT NO. 24D

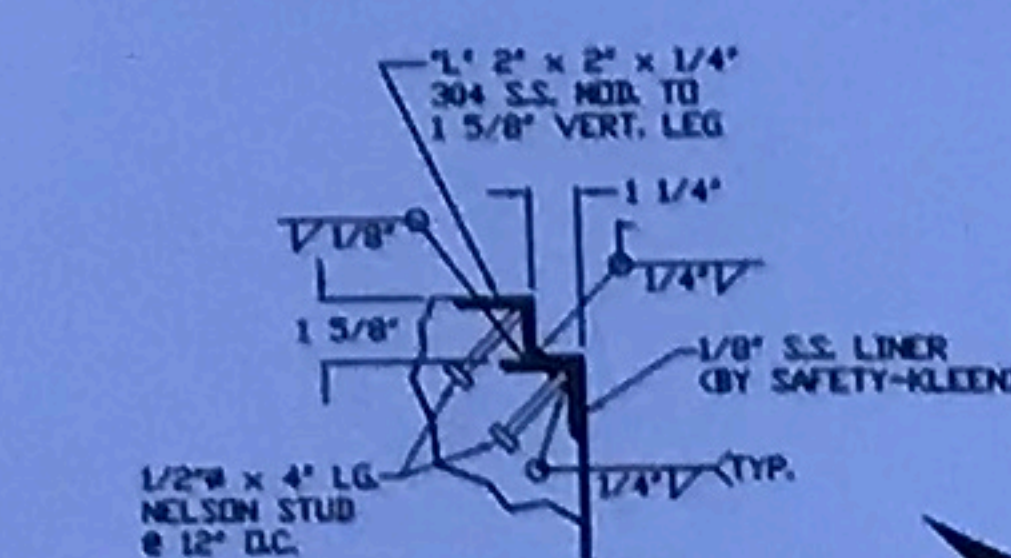
FLOOR ELEVATIONS FOR CONTAINER STORAGE AREAS NO. 2B, 2D & 2E CONTAINMENT CALCULATION				
<div>CleanHarbors</div> 581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-2532				
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4	RCRA PERMIT RENEWAL UPDATE	KMC		12/12/14
3	REVISED FOR PART 'B' PERMIT RENEWAL	SWL		7/3/02
2	REVISED PER NOD 1995 REMOVED "CURB ADDED" STATEMENT	RDK	KJM	5/31/95
1	REVISED PER NOD 1994	M.O'C	KJM	10/18/94
0	ISSUED FOR PART 'B' PERMIT NOD	M.O'C	KJM	3/02/92
NO.	DESCRIPTION	BY	CK	APPR DATE
REVISIONS				
<div>HEBRON, OHIO RECYCLE CENTER</div> 90-64200-541 5				

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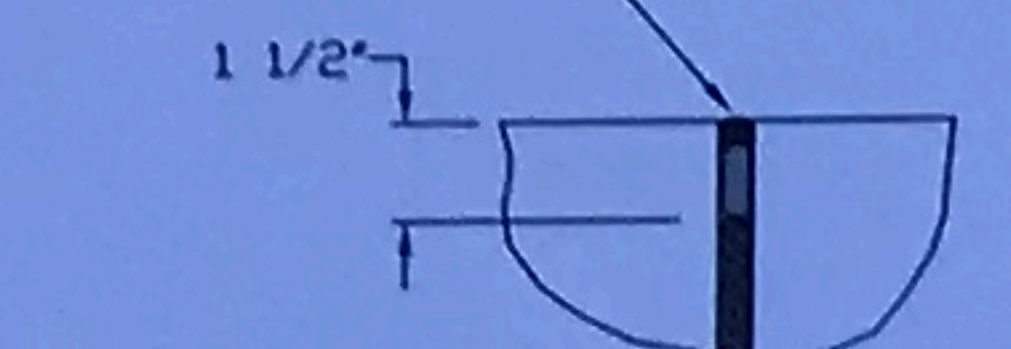




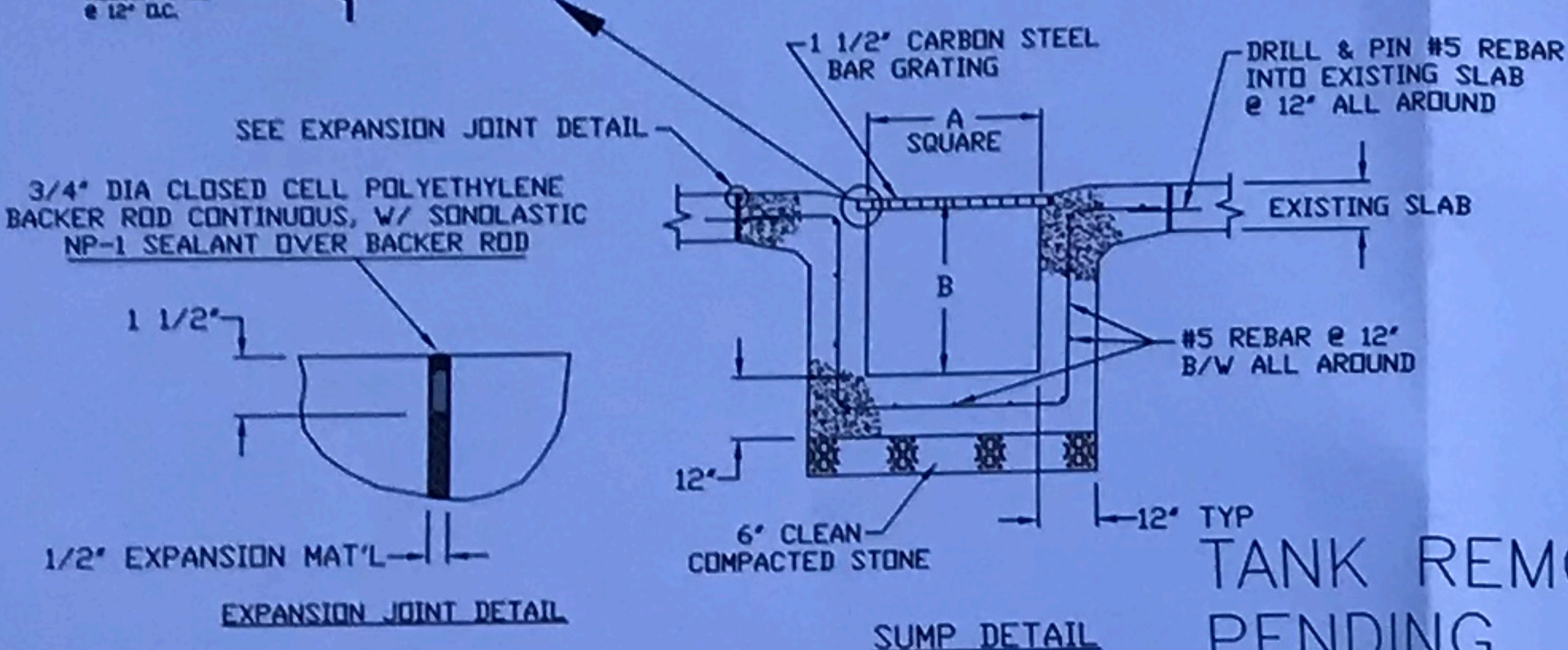
SUMP TABLE		
SUMP LOCATION	DIMENSION 'A'	DIMENSION 'B'
SAFETY-THERM ROOM	2'-0" SQUARE	2'-0" DEEP
CONT. STOR. AREA 2E	3'-0" SQUARE	3'-0" DEEP
STILL ROOM	1'-4" SQUARE	2'-0" DEEP



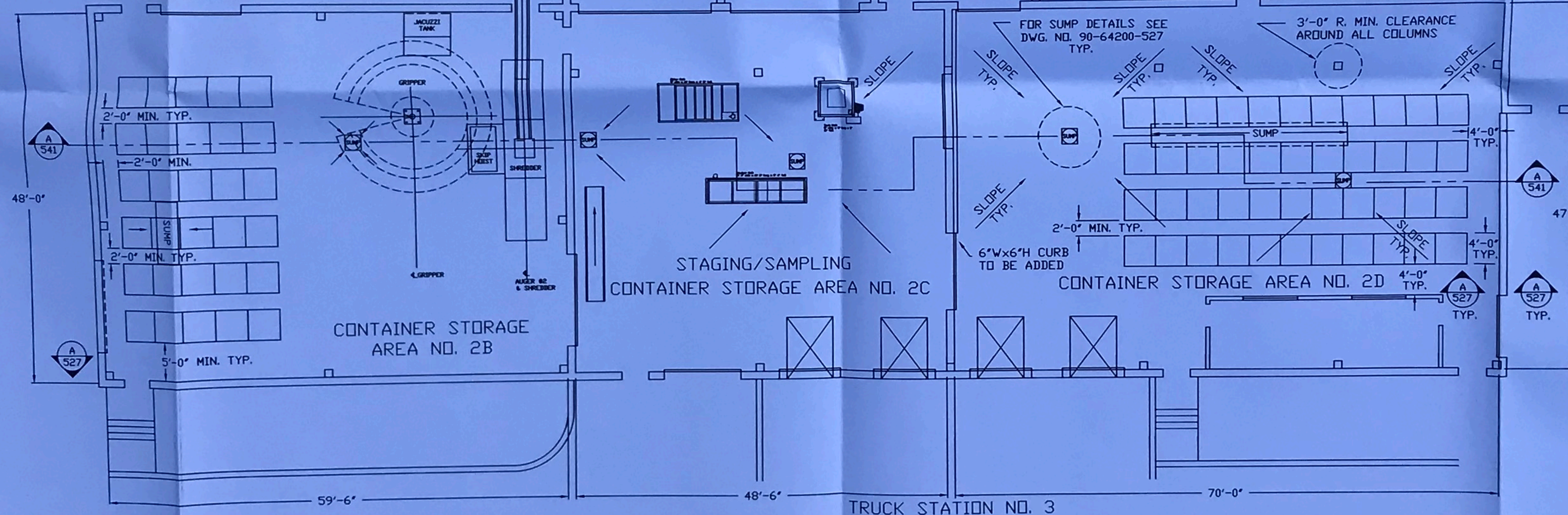
SEE EXPANSION JOINT DETAIL  
3/4" DIA CLOSED CELL POLYETHYLENE BACKER ROD CONTINUOUS, W/ SONOLASTIC NP-1 SEALANT OVER BACKER ROD



EXPANSION JOINT DETAIL



TANK REMOVED  
PENDING  
REPLACEMENT



CONTAINER STORAGE AREA NO. 2B  
FLOODED FLOOR VOLUME = 1336 GALLONS

CONTAINMENT VOLUME REQUIRED  
30 PALLETS x 4 DRUMS = 120 DRUMS  
120 DRUMS x 2 HIGH STACKING = 240 DRUMS  
240 DRUMS x 55 gal/DRUM = 13,200 GALLONS  
13,200 GALLONS x (0.10) = 1,320 GALLONS

DISPLACEMENTS  
30 PALLETS x 2.0 cuft/PALLET = 60 cuft.  
60 cuft. x 7.48 gal/cuft. = 448 GALLONS  
NET CONTAINMENT = 888 GALLONS

NEW SUMP  
3' x 8' x 3' DEEP = 72 cuft.  
72 cuft. x 7.48 gal/cuft. = 538 GALLONS  
1,426 GALLONS - 1,320 GALLONS = 106 GALLONS EXCESS

CONTAINER STORAGE AREA NO. 2C

CONTAINER STORAGE AREA NO. 2D  
FLOODED FLOOR VOLUME (W/CURB ADDED) = 970 GALLONS

CONTAINMENT VOLUME REQUIRED  
(4) SUMPS FOR CONTAINMENT  
(3') x (3') x (3') x 7.48 gal/cuft = 202 GALLONS  
(4) SUMPS x 202 GALLONS EACH = 808 GALLONS

CONTAINMENT VOLUME REQUIRED  
36 PALLETS x 4 DRUMS = 144 DRUMS  
144 DRUMS x 55 gal/DRUM = 7,920 GALLONS  
7,920 GALLONS x (0.10) = 792 GALLONS  
808 GALLONS - 792 GALLONS = 16 GAL. EXCESS

CONTAINMENT VOLUME REQUIRED  
44 PALLETS x 4 DRUMS = 176 DRUMS  
176 DRUMS x 2 HIGH STACKING = 352 DRUMS  
352 DRUMS x 55 gal/DRUM = 19,360 GALLONS  
19,360 GALLONS x (0.10) = 1,936 GALLONS

DISPLACEMENTS  
44 PALLETS x 2.0 cuft/PALLET = 88 cuft.  
88 cuft. x 7.48 gal/cuft. = 658 GALLONS  
NET CONTAINMENT = 312 GALLONS

NEW SUMP  
3' x 25' x 3' DEEP = 225 cuft.  
225 cuft. x 7.48 gal/cuft. = 1,683 GALLONS  
1,995 GALLONS - 1,936 GALLONS = 59 GALLONS EXCESS

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REFERENCE DWG. NO'S: 90-64200-527 EXHIBIT 24A  
90-64200-541 EXHIBIT 24E  
90-64200-538 EXHIBIT 44B

DF-Exhibit 24C Rev. 7

EXHIBIT NO. 24C

CONTAINER STORAGE AREA  
NO. 2  
DRUM ARRANGEMENT

Clean Harbors

581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3532

SCALE 1" = 10' DRAWN RDK CHECKED PROJ. ENL. APPROVED DATE 9/16/90

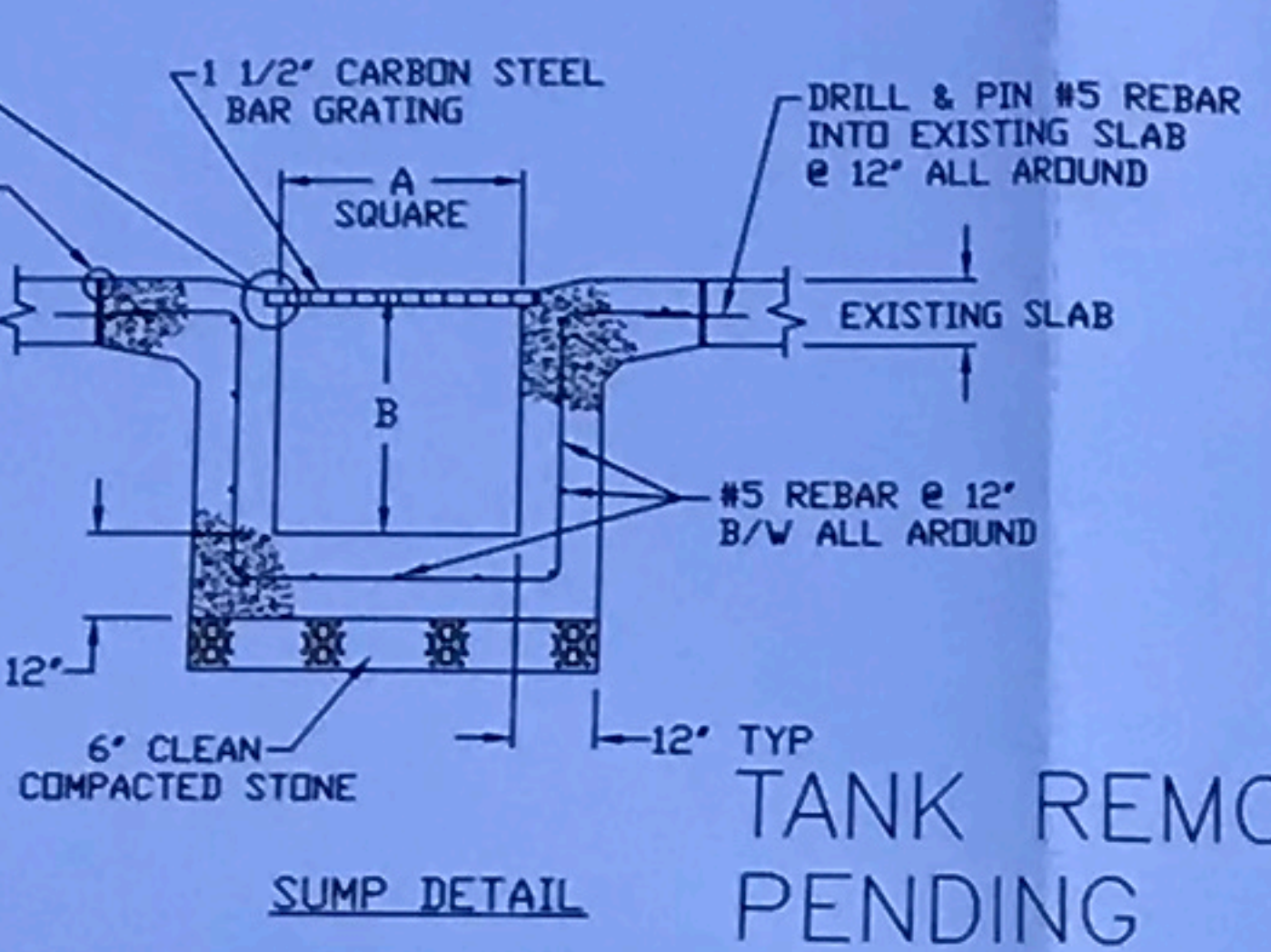
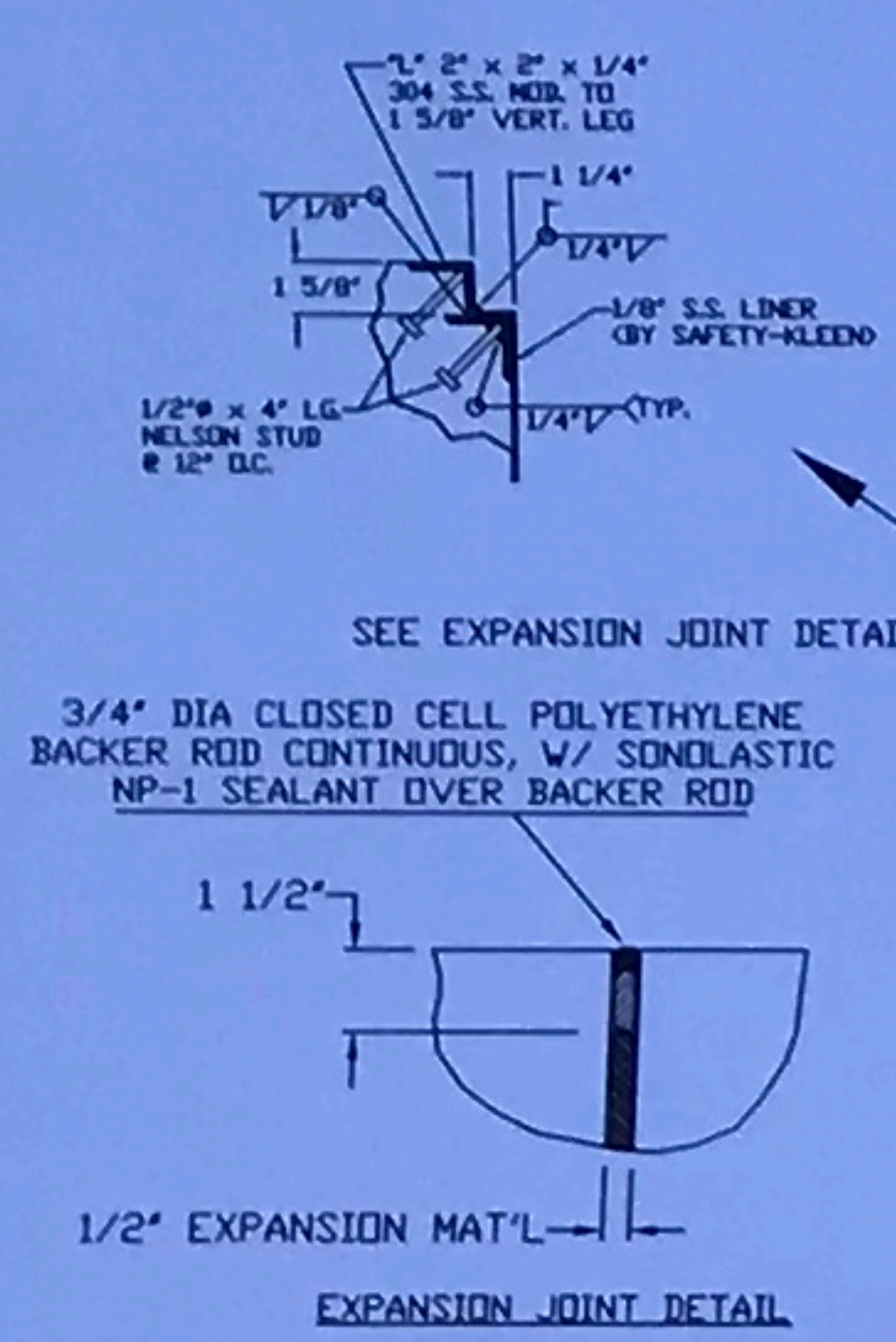
HEBRON, OHIO RECYCLE CENTER DRAWING NO. 90-64200-203 REV 7

NO.	DESCRIPTION	BY	CK	APPR	DATE
7	RCRA PART B MODIFICATION	KMC	JRL	JRL	3/25/90
6	RCRA PERMIT RENEWAL UPDATES	KMC			11/19/95
5	RCRA PERMIT RENEWAL UPDATE	KMC			12/12/94
4	REMOVED PROPOSED AREA 2A	SWL			7/2/92
3	REVISED PER NOD 1994	M.D.C.	KJM		11/17/94
2	ISSUED FOR PART "B" PERMIT NOD	RDK			11/16/95
1	ISSUED FOR PART "B" PERMIT NOD	RDK			11/16/95

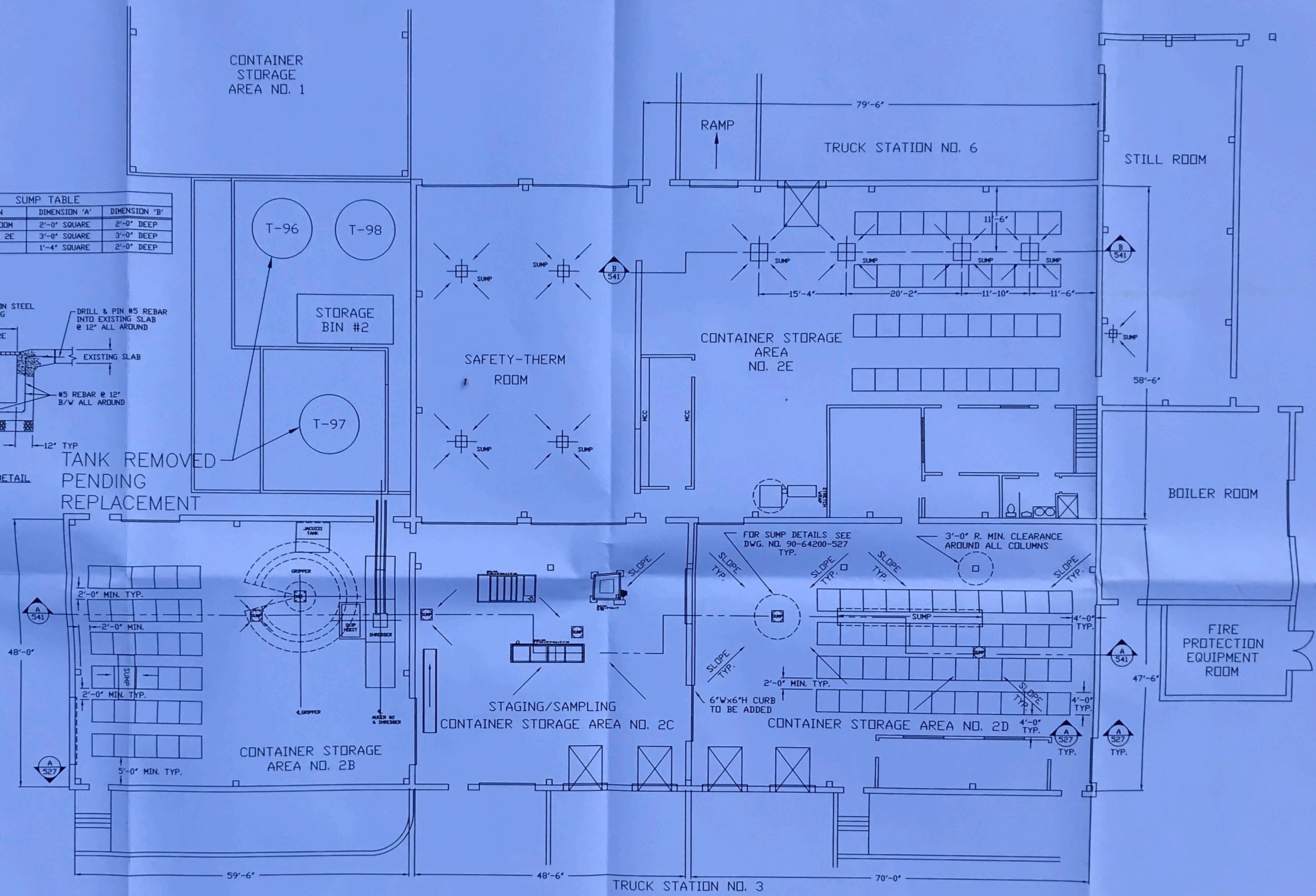




SUMP TABLE		
SUMP LOCATION	DIMENSION 'A'	DIMENSION 'B'
SAFETY-THERM ROOM	2'-0" SQUARE	2'-0" DEEP
CONT. STOR. AREA 2E	3'-0" SQUARE	3'-0" DEEP
STILL ROOM	1'-4" SQUARE	2'-0" DEEP



TANK REMOVED  
PENDING  
REPLACEMENT



CONTAINER STORAGE AREA NO. 2B  
FLOODED FLOOR VOLUME = 1336 GALLONS  
CONTAINMENT VOLUME REQUIRED  
30 PALLETS x 4 DRUMS = 120 DRUMS  
120 DRUMS x 2 HIGH STACKING = 240 DRUMS  
240 DRUMS x 55 gal/DRUM = 13,200 GALLONS  
13,200 GALLONS x (0.10) = 1,320 GALLONS

DISPLACEMENTS  
30 PALLETS x 2.0 cuft/PALLET = 60 cuft  
60 cuft x 7.48 gal/cuft = 448 GALLONS  
NET CONTAINMENT = 888 GALLONS

NEW SUMP  
3' x 8' x 3' DEEP = 72 cuft  
72 cuft x 7.48 gal/cuft = 538 GALLONS  
1,426 GALLONS - 1,320 GALLONS = 106 GALLONS EXCESS

CONTAINER STORAGE AREA NO. 2C  
CONTAINMENT VOLUME REQUIRED  
(4) SUMPS FOR CONTAINMENT  
(3') x (3') x (3') x 7.48 gal/cuft = 202 GALLONS  
(4) SUMPS x 202 GALLONS EACH = 808 GALLONS

CONTAINER STORAGE AREA NO. 2D  
FLOODED FLOOR VOLUME (w/CURB ADDED) = 970 GALLONS

CONTAINER STORAGE AREA NO. 2E  
CONTAINMENT VOLUME REQUIRED  
36 PALLETS x 4 DRUMS = 144 DRUMS  
144 DRUMS x 55 gal/DRUM = 7,920 GALLONS  
7,920 GALLONS x (0.10) = 792 GALLONS  
808 GALLONS - 792 GALLONS = 16 GAL. EXCESS

CONTAINMENT VOLUME REQUIRED  
44 PALLETS x 4 DRUMS = 176 DRUMS  
176 DRUMS x 2 HIGH STACKING = 352 DRUMS  
352 DRUMS x 55 gal/DRUM = 19,360 GALLONS  
19,360 GALLONS x (0.10) = 1,936 GALLONS

DISPLACEMENTS  
44 PALLETS x 2.0 cuft/PALLET = 88 cuft  
88 cuft x 7.48 gal/cuft = 658 GALLONS  
NET CONTAINMENT = 312 GALLONS  
NEW SUMP  
3' x 25' x 3' DEEP = 225 cuft  
225 cuft x 7.48 gal/cuft = 1,683 GALLONS  
1,995 GALLONS - 1,936 GALLONS = 59 GALLONS EXCESS

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REFERENCE DWG. NO'S: 90-64200-527 EXHIBIT 24A  
90-64200-541 EXHIBIT 24E  
90-64200-538 EXHIBIT 44B

# EXHIBIT NO. 24C

## CONTAINER STORAGE AREA NO. 2 DRUM ARRANGEMENT



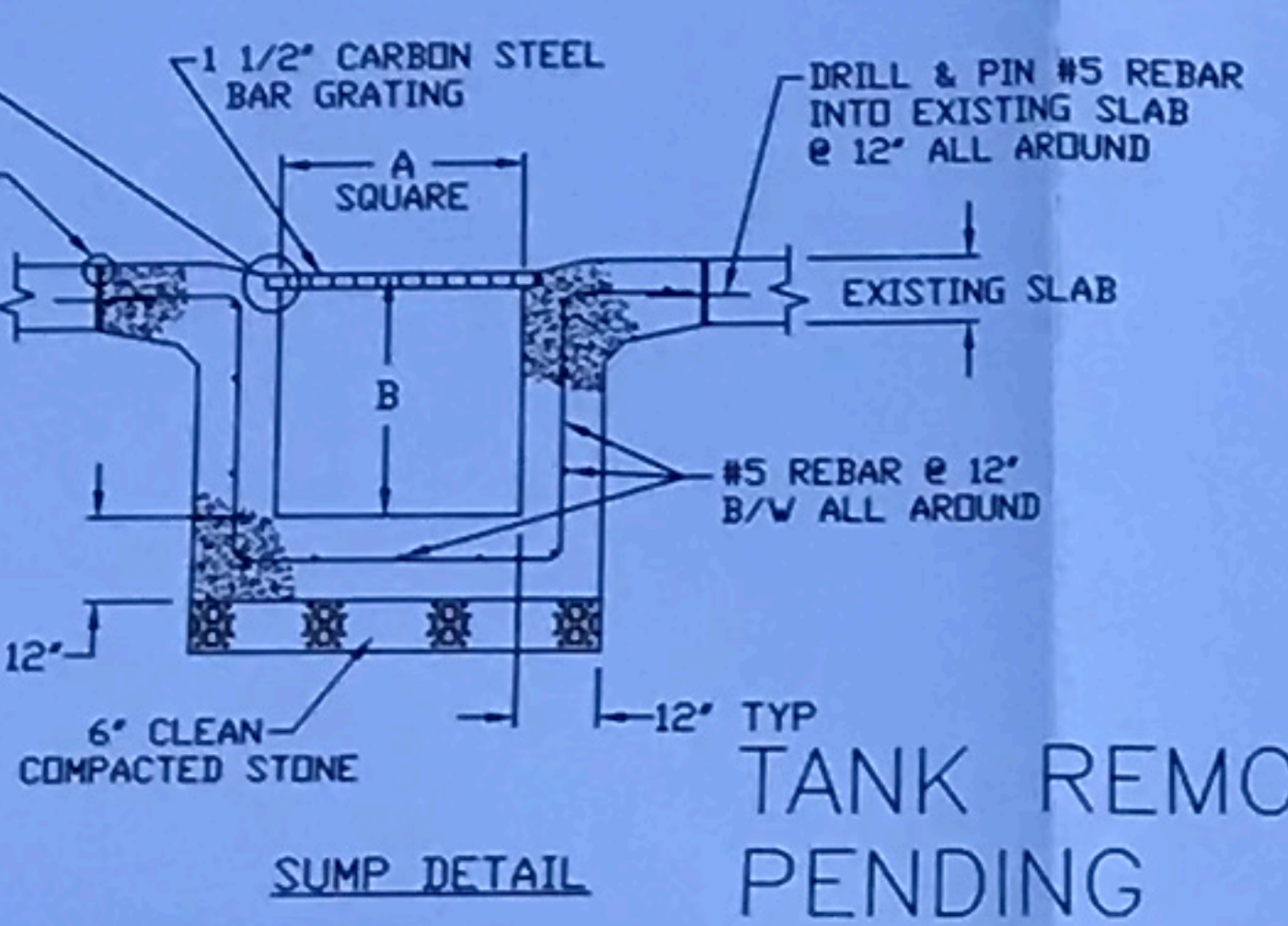
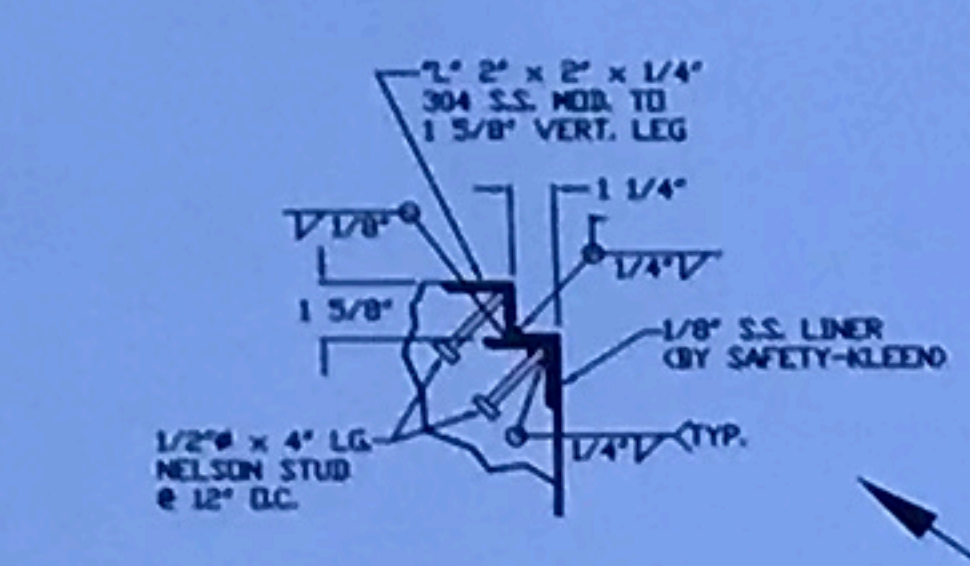
581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3530

REVISIONS		BY	CHK	APPR	DATE
7	RCRA PART B MODIFICATION	KMC	JRL	JRL	3/25/08
6	RCRA PERMIT RENEWAL UPDATES	KMC			11/19/05
5	RCRA PERMIT RENEWAL UPDATE	KMC			12/10/04
4	REMOVED PROPOSED AREA 2A	SWL			7/2/02
3	REVISED PER NOD 1994	MD'C	KJM		11/17/94
2	ISSUED FOR PART 'B' PERMIT NOD	RDK			03/06/92
1	NO.				
DESCRIPTION		HEBRON, OHIO	DRAWING NO.	90-64200-203	REV 7

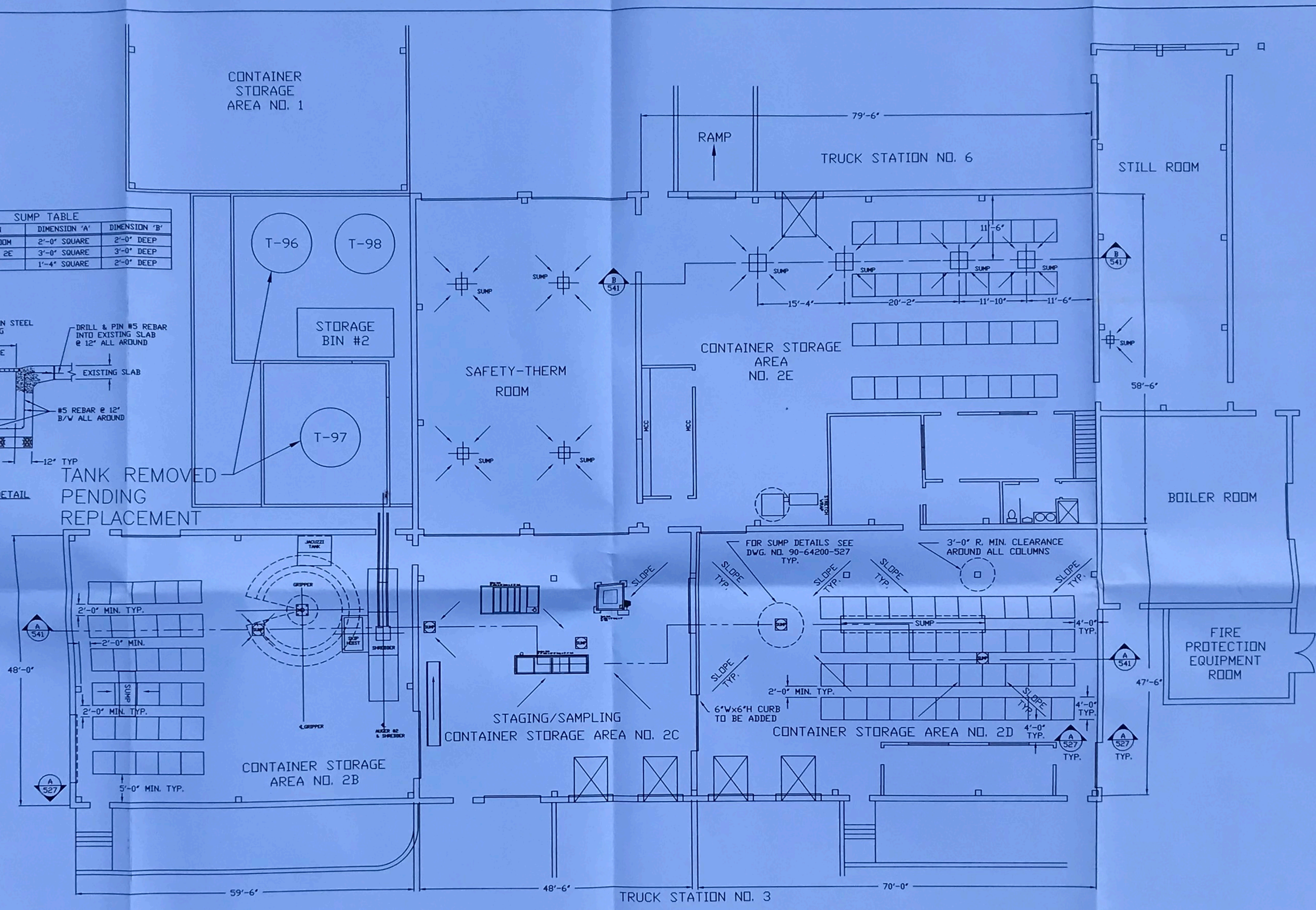




SUMP TABLE		
SUMP LOCATION	DIMENSION 'A'	DIMENSION 'B'
SAFETY-THERM ROOM	2'-0" SQUARE	2'-0" DEEP
CONT. STOR. AREA 2E	3'-0" SQUARE	3'-0" DEEP
STILL ROOM	1'-4" SQUARE	2'-0" DEEP



TANK REMOVED  
PENDING  
REPLACEMENT



**CONTAINER STORAGE AREA NO. 2B**  
FLOODED FLOOR VOLUME = 1336 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
30 PALLETS x 4 DRUMS = 120 DRUMS  
120 DRUMS x 2 HIGH STACKING = 240 DRUMS  
240 DRUMS x 55 gal/DRUM = 13,200 GALLONS  
13,200 GALLONS x (0.10) = 1,320 GALLONS

**DISPLACEMENTS**  
30 PALLETS x 20 cuft/PALLET = 60 cuft.  
60 cuft. x 7.48 gal/cuft. = 448 GALLONS  
NET CONTAINMENT = 888 GALLONS

**NEW SUMP**  
3' x 8' x 3' DEEP = 72 cuft.  
72 cuft. x 7.48 gal/cuft. = 538 GALLONS  
1,426 GALLONS - 1,320 GALLONS = 106 GALLONS EXCESS

**CONTAINER STORAGE AREA NO. 2C**

**CONTAINER STORAGE AREA NO. 2D**  
FLOODED FLOOR VOLUME (w/CURB ADDED) = 970 GALLONS

**CONTAINER STORAGE AREA NO. 2E**  
(4) SUMPS FOR CONTAINMENT  
(3') x (3') x (3') x 7.48 gal/cuft = 202 GALLONS  
(4) SUMPS x 202 GALLONS EACH = 808 GALLONS

**CONTAINMENT VOLUME REQUIRED**  
36 PALLETS x 4 DRUMS = 144 DRUMS  
144 DRUMS x 55 gal/DRUM = 7,920 GALLONS  
7,920 GALLONS x (0.10) = 792 GALLONS  
808 GALLONS - 792 GALLONS = 16 GAL. EXCESS

**CONTAINMENT VOLUME REQUIRED**  
44 PALLETS x 4 DRUMS = 176 DRUMS  
176 DRUMS x 2 HIGH STACKING = 352 DRUMS  
352 DRUMS x 55 gal/DRUM = 19,360 GALLONS  
19,360 GALLONS x (0.10) = 1,936 GALLONS

**DISPLACEMENTS**  
44 PALLETS x 20 cuft/PALLET = 88 cuft.  
88 cuft. x 7.48 gal/cuft. = 658 GALLONS  
NET CONTAINMENT = 312 GALLONS

**NEW SUMP**  
3' x 25' x 3' DEEP = 225 cuft.  
225 cuft. x 7.48 gal/cuft. = 1,683 GALLONS  
1,995 GALLONS - 1,936 GALLONS = 59 GALLONS EXCESS

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REFERENCE DWG. NO'S: 90-64200-527 EXHIBIT 24A  
90-64200-541 EXHIBIT 24E  
90-64200-538 EXHIBIT 44B

## EXHIBIT NO. 24C

### CONTAINER STORAGE AREA NO. 2 DRUM ARRANGEMENT



581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 909-3532  
SCALE: 1" = 10'  
DRAWN: RDK  
CHECKED: PROJ. ENG. APPROVED: DATE: 9/6/98  
HEBRON, OHIO RECYCLE CENTER  
DRAWING NO. 90-64200-203  
REV. 7

REVISIONS		NO.	DESCRIPTION	BY	CK	APPR	DATE
7	RCRA PART B MODIFICATION	KMC	JRL	JRL			3/25/00
6	RCRA PERMIT RENEWAL UPDATES	KMC					8/19/95
5	RCRA PERMIT RENEWAL UPDATE	KMC					12/2/94
4	REMOVED PROPOSED AREA 2A	SWL					7/2/92
3	REVISED PER NOD 1994	M.O.C.	KJM				10/17/94
2	ISSUED FOR PART "B" PERMIT NOD	RDK					12/16/92

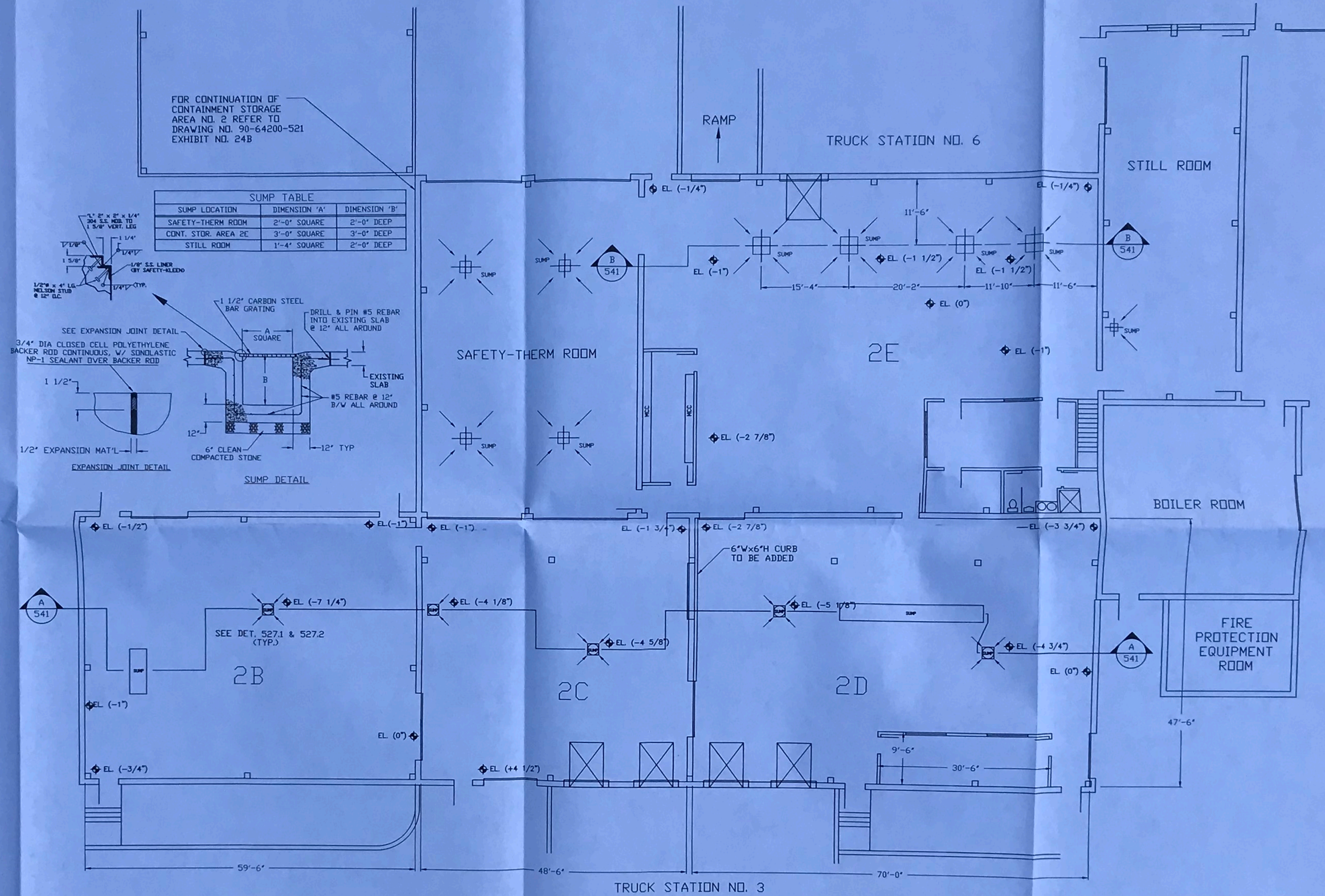


HEBRON, OHIO		
RECYCLE CENTER	90-64200-527	4



RECYCLE CENTER	90-64200-527	4
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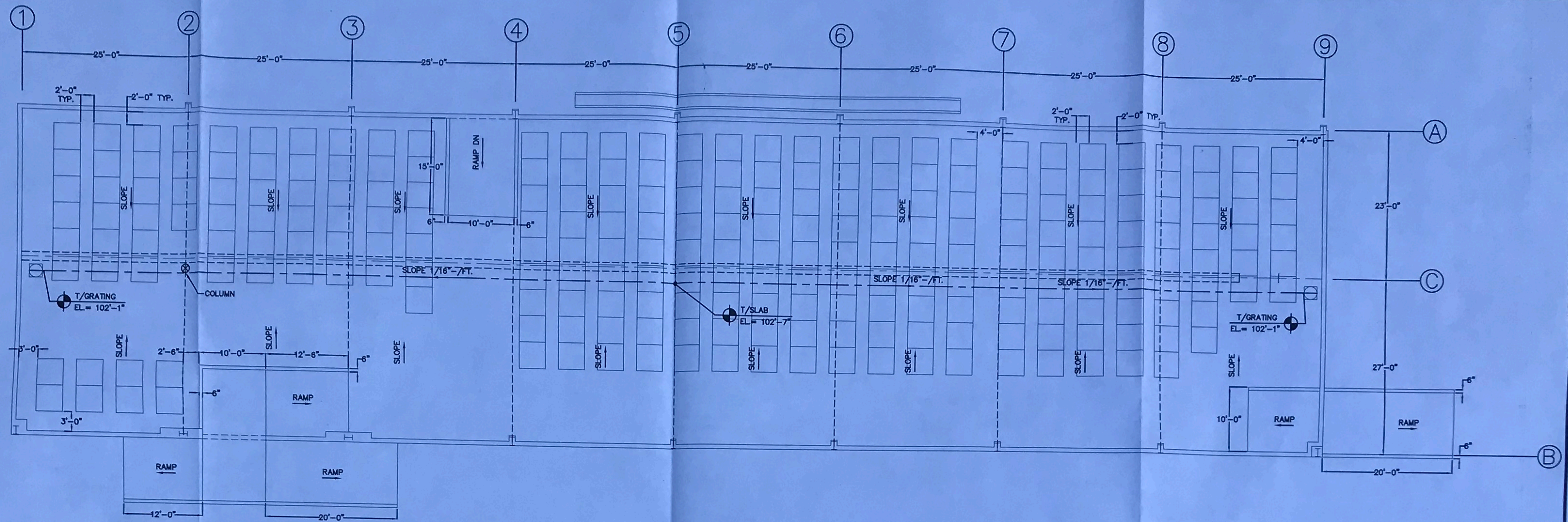


SECTION A-A  
TYPICAL WALL SECTION  
ILLUSTRATING CONTAINMENT CURB  
SCALE: 1/2" = 1'-0"

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ANY REPRODUCTIONS, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY  
PROHIBITED EXCEPT BY CLEAN HARBORS OR AS CLEAN HARBORS MAY AGREE  
IN WRITING.

EXHIBIT 24A Rev. 4				EXHIBIT NO. 24A			
4	RCRA PERMIT RENEWAL UPDATE	KMC/JRL	JRL	7/15/20	CONTAINER STORAGE NO. 2		
3	RCRA PERMIT RENEWAL UPDATE	KMC		12/12/14	CONCRETE		
2	REVISED PER NOD 1994	M.D'C	KJM	10/18/94	CONSTRUCTION LAYOUT		
1	ISSUED FOR PART "B" PERMIT NOD	M.D'C		3/02/92	Clean Harbors		
0	ISSUED FOR PERMIT	CEW		10/2/90	581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3532		
NO.	DESCRIPTION	BY	CK	APPR	DATE	SCALE	1" = 10'
REVISIONS							
						HEBRON, OHIO	9/6/90
						RECYCLE CENTER	90-64200-527
							4





# CONTAINMENT VOLUME WITH USE OF PALLETS

**WEST HALF**  
**CONTAINMENT VOLUME COLUMN LINES 1-5**  
 AVERAGE FLOOR DEPTH- 9"  
 $47' \times 100' \times 0.75' = 3525 \text{ C.F.} \times 7.48 \text{ GAL/CF} = 26,367 \text{ GAL}$   
 1 SUMP  $= 47 \text{ GAL}$   
**TOTAL = +26,414 GAL**

**DISPLACEMENTS**  
 NORTH RAMP = 1/2 bhw  
 $(.5) (0.75') (15') (10') = 56.25 \text{ C.F.}$   
 SOUTH RAMP = 1/2 bhw  
 $(.5) (0.75') (12') (10') = 45.0 \text{ C.F.}$   
 RAMP PLATFORM  
 $(0.75') (10') (10') = 75 \text{ C.F.}$   
**TOTAL = 176.25 C.F.**  
 $176.25 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <1,319 \text{ GAL}>$   
 $120 \text{ PALLET POSITION} \times 2.0 \text{ C.F.} = 240 \text{ C.F.}$   
 $120 \text{ PALLETS} \times 4 \text{ DRUMS} = 480 \text{ DRUMS}$   
 $\pi (1')^2 (.25') \times 480 \text{ DRUMS} (3" \text{ DRUM DISPL.}) = 377 \text{ C.F.}$   
**TOTAL = 617 C.F.**  
 $617 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <4,616 \text{ GAL}>$   
**NET CONTAINMENT = +20,479 GAL**

**CONTAINMENT VOLUME REQ'D**  
 $120 \text{ PALLET POSITIONS} \times 4 \text{ DRUMS} = 480 \text{ DRUMS}$   
 $480 \text{ DRUMS} \times 3 \text{ HIGH STACKING} = 1440 \text{ DRUMS}$   
 $1440 \text{ DRUMS} \times 55 \text{ GAL/DRUM} = 79,200 \text{ GAL}$   
 $79,200 \text{ GAL} (0.10) = 7920 \text{ GAL REQ'D}$

**SAFETY FACTOR**  
 $20,479 \text{ GAL} - 7,920 \text{ GAL} = +12,559 \text{ GAL EXCESS}$

**EAST HALF**  
**CONTAINMENT VOLUME COLUMN LINES 1-5**  
 AVERAGE FLOOR DEPTH- 9"  
 $47' \times 100' \times 0.75' = 3525 \text{ C.F.} \times 7.48 \text{ GAL/CF} = 26,367 \text{ GAL}$   
 1 SUMP  $= 47 \text{ GAL}$   
**TOTAL = +26,414 GAL**

**DISPLACEMENTS**  
 SOUTH EAST CORNER RAMP = 1/2 bhw  
 $(.5) (0.75') (11') (10') = 41.25 \text{ C.F.}$   
**TOTAL = 41.25 C.F.**  
 $41.25 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <309 \text{ GAL}>$   
 $128 \text{ PALLET POSITION} \times 2.0 \text{ C.F.} = 256 \text{ C.F.}$   
 $128 \text{ PALLETS} \times 4 \text{ DRUMS} = 512 \text{ DRUMS}$   
 $\pi (1')^2 (.25') \times 512 \text{ DRUMS} (3" \text{ DRUM DISPL.}) = 402 \text{ C.F.}$   
**TOTAL = 658 C.F.**  
 $617 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <4,922 \text{ GAL}>$   
**NET CONTAINMENT = +21,183 GAL**

**CONTAINMENT VOLUME REQ'D**  
 $128 \text{ PALLET POSITIONS} \times 4 \text{ DRUMS} = 512 \text{ DRUMS}$   
 $512 \text{ DRUMS} \times 3 \text{ HIGH STACKING} = 1536 \text{ DRUMS}$   
 $1536 \text{ DRUMS} \times 55 \text{ GAL/DRUM} = 84,480 \text{ GAL}$   
 $84,480 \text{ GAL} (0.10) = 8,448 \text{ GAL REQ'D}$

**SAFETY FACTOR**  
 $21,183 \text{ GAL} - 8,448 \text{ GAL} = +12,735 \text{ GAL EXCESS}$

# CONTAINMENT VOLUME WITHOUT USE OF PALLETS

**WEST HALF**  
**CONTAINMENT VOLUME COLUMN LINES 1-5**  
 AVERAGE FLOOR DEPTH- 9"  
 $47' \times 100' \times 0.75' = 3525 \text{ C.F.} \times 7.48 \text{ GAL/CF} = 26,367 \text{ GAL}$   
 1 SUMP  $= 47 \text{ GAL}$   
**TOTAL = +26,414 GAL**

**DISPLACEMENTS**  
 NORTH RAMP = 1/2 bhw  
 $(.5) (0.75') (15') (10') = 56.25 \text{ C.F.}$   
 SOUTH RAMP = 1/2 bhw  
 $(.5) (0.75') (12') (10') = 45.0 \text{ C.F.}$   
 RAMP PLATFORM  
 $(0.75') (10') (10') = 75 \text{ C.F.}$   
**TOTAL = 176.25 C.F.**  
 $176.25 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <1,319 \text{ GAL}>$   
 $120 \times 4 \text{ DRUMS} = 480 \text{ DRUMS}$   
 $\pi (1')^2 (.75') \times 480 \text{ DRUMS} (9" \text{ DRUM DISPL.}) = 1,131 \text{ C.F.}$   
**TOTAL = 1,131 C.F.**  
 $1,131 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <8,460 \text{ GAL}>$   
**NET CONTAINMENT = +16,635 GAL**

**CONTAINMENT VOLUME REQ'D**  
 $480 \text{ DRUMS} \times 3 \text{ HIGH STACKING} = 1440 \text{ DRUMS}$   
 $1440 \text{ DRUMS} \times 55 \text{ GAL/DRUM} = 79,200 \text{ GAL}$   
 $79,200 \text{ GAL} (0.10) = 7920 \text{ GAL REQ'D}$

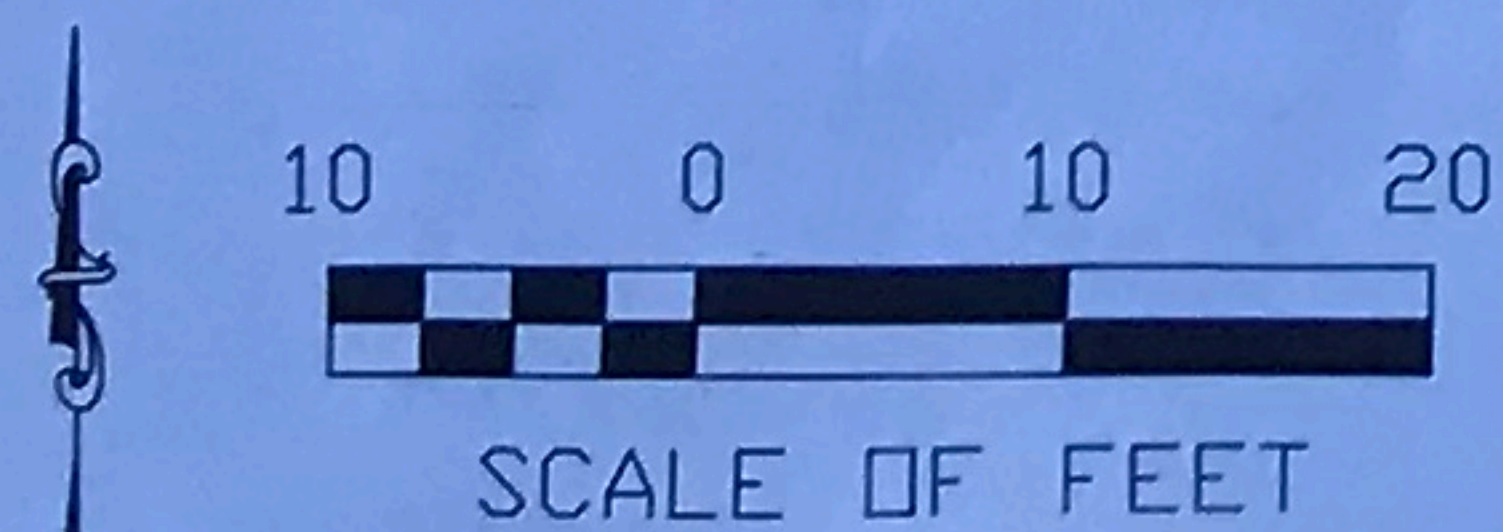
**SAFETY FACTOR**  
 $16,635 \text{ GAL} - 7,920 \text{ GAL} = +8,715 \text{ GAL EXCESS}$

**EAST HALF**  
**CONTAINMENT VOLUME COLUMN LINES 1-5**  
 AVERAGE FLOOR DEPTH- 9"  
 $47' \times 100' \times 0.75' = 3525 \text{ C.F.} \times 7.48 \text{ GAL/CF} = 26,367 \text{ GAL}$   
 1 SUMP  $= 47 \text{ GAL}$   
**TOTAL = +26,414 GAL**

**DISPLACEMENTS**  
 SOUTH EAST CORNER RAMP = 1/2 bhw  
 $(.5) (0.75') (11') (10') = 41.25 \text{ C.F.}$   
**TOTAL = 41.25 C.F.**  
 $41.25 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <309 \text{ GAL}>$   
 $128 \times 4 \text{ DRUMS} = 512 \text{ DRUMS}$   
 $\pi (1')^2 (.75') \times 512 \text{ DRUMS} (9" \text{ DRUM DISPL.}) = 1,206 \text{ C.F.}$   
**TOTAL = 1,206 C.F.**  
 $1,206 \text{ C.F.} \times 7.48 \text{ GAL/CF} = <9,021 \text{ GAL}>$   
**NET CONTAINMENT = +17,084 GAL**

**CONTAINMENT VOLUME REQ'D**  
 $128 \text{ PALLET POSITIONS} \times 4 \text{ DRUMS} = 512 \text{ DRUMS}$   
 $512 \text{ DRUMS} \times 3 \text{ HIGH STACKING} = 1536 \text{ DRUMS}$   
 $1536 \text{ DRUMS} \times 55 \text{ GAL/DRUM} = 84,480 \text{ GAL}$   
 $84,480 \text{ GAL} (0.10) = 8,448 \text{ GAL REQ'D}$

**SAFETY FACTOR**  
 $17,084 \text{ GAL} - 8,448 \text{ GAL} = +8,636 \text{ GAL EXCESS}$



NOTE:

REFERENCE DRAWINGS

B	REVISE CALCS	JEK	071320	JL
A	REISSUED IN CAD	JEK	012020	JL
REV.	DESCRIPTION	DRAWN BY	DATE	APPROVED BY
		JEK	1/8" = 1'	01/20/20

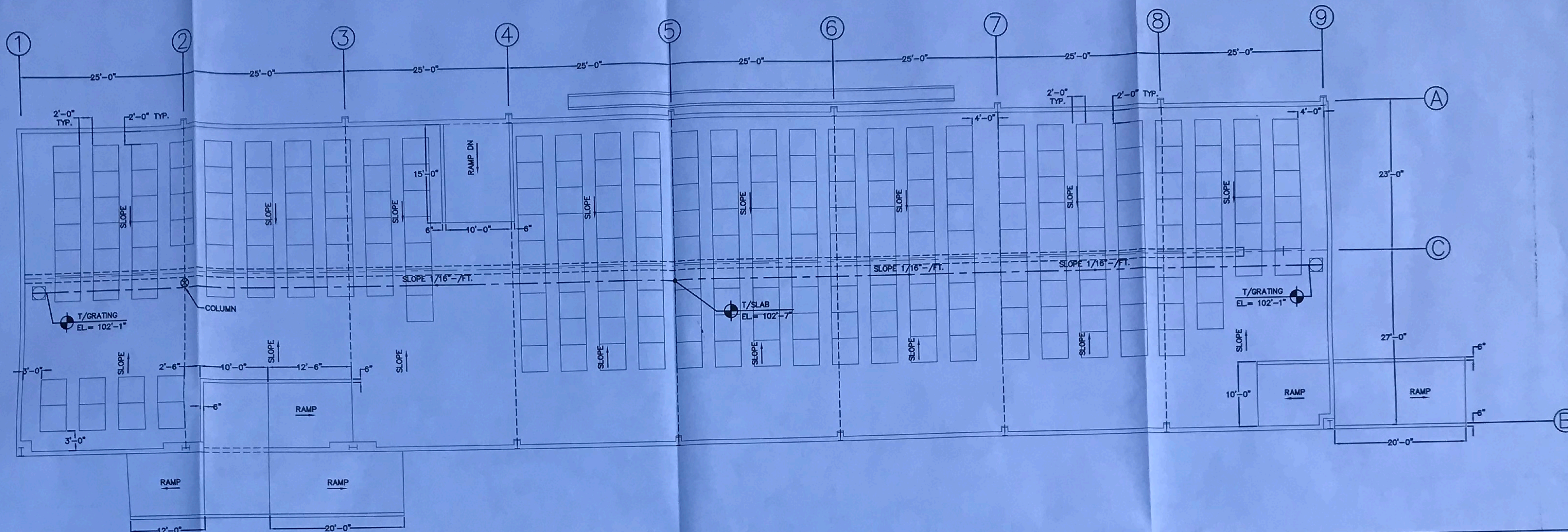


**CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.**  
 HEBRON, OH. RECYCLE CENTER  
 CONTAINER STORAGE AREA #1  
 DRUM ARRANGEMENT

DRAWN BY: JEK  
 CHECKED: JL  
 SCALE: 1/8" = 1'  
 DATE: 01/20/20

DRAWING NO.: 90-64200-202  
 REV: B





# CONTAINMENT VOLUME WITH USE OF PALLETS

WEST HALF  
CONTAINMENT VOLUME COLUMN LINES 1-5  
AVERAGE FLOOR DEPTH- 9"  
47' X 100' X 0.75' = 3525 C.F. X 7.48 GAL/CF = 26,367 GAL.  
1 SUMP = 47 GAL.  
TOTAL = +26,414 GAL.

DISPLACEMENTS  
NORTH RAMP = 1/2 bhw  
(.5) (0.75') (15') (10') = 56.25 C.F.

SOUTH RAMP = 1/2 bhw  
(.5) (0.75') (12') (10') = 45.0 C.F.

RAMP PLATFORM  
(0.75') (10') (10') = 75 C.F.  
TOTAL = 176.25 C.F.

176.25 C.F. X 7.48 GAL/CF = <1,319 GAL>

120 PALLET POSITION X 2.0 C.F. = 240 C.F.  
120 PALLETS X 4 DRUMS = 480 DRUMS  
π (1')² (.25') X 480 DRUMS (3" DRUM DISPL.) = 377 C.F.  
TOTAL = 617 C.F.

617 C.F. X 7.48 GAL/CF = <4,616 GAL>  
NET CONTAINMENT = +20,479 GAL

CONTAINMENT VOLUME REQ'D  
120 PALLET POSITIONS X 4 DRUMS = 480 DRUMS  
480 DRUMS X 3 HIGH STACKING = 1440 DRUMS  
1440 DRUMS X 55 GAL/DRUM = 79,200 GAL.  
79,200 GAL (0.10) = 7920 GAL REQ'D

SAFETY FACTOR  
20,479 GAL - 7,920 GAL = +12,559 GAL EXCESS

EAST HALF  
CONTAINMENT VOLUME COLUMN LINES 1-5  
AVERAGE FLOOR DEPTH- 9"  
47' X 100' X 0.75' = 3525 C.F. X 7.48 GAL/CF = 26,367 GAL.  
1 SUMP = 47 GAL.  
TOTAL = +26,414 GAL.

DISPLACEMENTS  
SOUTH EAST CORNER RAMP = 1/2 bhw  
(.5) (0.75') (11') (10') = 41.25 C.F.  
TOTAL = 41.25 C.F.

41.25 C.F. X 7.48 GAL/CF = <309 GAL>

128 PALLET POSITION X 2.0 C.F. = 256 C.F.  
128 PALLETS X 4 DRUMS = 512 DRUMS  
π (1')² (.25') X 512 DRUMS (3" DRUM DISPL.) = 402 C.F.  
TOTAL = 658 C.F.

617 C.F. X 7.48 GAL/CF = <4,922 GAL>

CONTAINMENT VOLUME REQ'D  
128 PALLET POSITIONS X 4 DRUMS = 512 DRUMS  
512 DRUMS X 3 HIGH STACKING = 1536 DRUMS  
1536 DRUMS X 55 GAL/DRUM = 84,480 GAL.  
84,480 GAL (0.10) = 8,448 GAL REQ'D

SAFETY FACTOR  
21,183 GAL - 8,448 GAL = +12,735 GAL EXCESS

# CONTAINMENT VOLUME WITHOUT USE OF PALLETS

WEST HALF  
CONTAINMENT VOLUME COLUMN LINES 1-5  
AVERAGE FLOOR DEPTH- 9"  
47' X 100' X 0.75' = 3525 C.F. X 7.48 GAL/CF = 26,367 GAL.  
1 SUMP = 47 GAL.  
TOTAL = +26,414 GAL.

DISPLACEMENTS  
NORTH RAMP = 1/2 bhw  
(.5) (0.75') (15') (10') = 56.25 C.F.

SOUTH RAMP = 1/2 bhw  
(.5) (0.75') (12') (10') = 45.0 C.F.

RAMP PLATFORM  
(0.75') (10') (10') = 75 C.F.  
TOTAL = 176.25 C.F.

176.25 C.F. X 7.48 GAL/CF = <1,319 GAL>

120 X 4 DRUMS = 480 DRUMS  
π (1')² (.75') X 480 DRUMS (9" DRUM DISPL.) = 1,131 C.F.  
TOTAL = 1,131 C.F.

1,131 C.F. X 7.48 GAL/CF = <8,460 GAL>  
NET CONTAINMENT = +16,635 GAL.

CONTAINMENT VOLUME REQ'D  
480 DRUMS X 3 HIGH STACKING = 1440 DRUMS  
1440 DRUMS X 55 GAL/DRUM = 79,200 GAL.  
79,200 GAL (0.10) = 7920 GAL REQ'D

SAFETY FACTOR  
16,635 GAL - 7,920 GAL = +8,715 GAL EXCESS

EAST HALF  
CONTAINMENT VOLUME COLUMN LINES 1-5  
AVERAGE FLOOR DEPTH- 9"  
47' X 100' X 0.75' = 3525 C.F. X 7.48 GAL/CF = 26,367 GAL.  
1 SUMP = 47 GAL.  
TOTAL = +26,414 GAL.

DISPLACEMENTS  
SOUTH EAST CORNER RAMP = 1/2 bhw  
(.5) (0.75') (11') (10') = 41.25 C.F.  
TOTAL = 41.25 C.F.

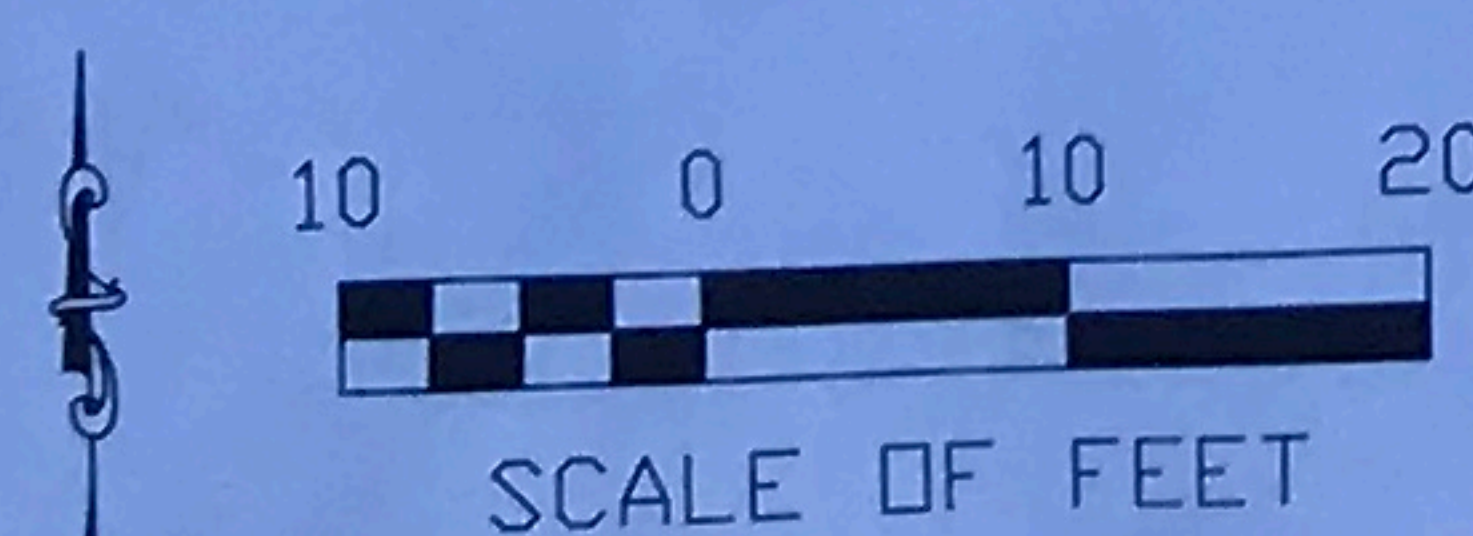
41.25 C.F. X 7.48 GAL/CF = <309 GAL>

128 X 4 DRUMS = 512 DRUMS  
π (1')² (.75') X 512 DRUMS (9" DRUM DISPL.) = 1,206 C.F.  
TOTAL = 1,206 C.F.

1,206 C.F. X 7.48 GAL/CF = <9,021 GAL>  
NET CONTAINMENT = +17,084 GAL.

CONTAINMENT VOLUME REQ'D  
128 PALLET POSITIONS X 4 DRUMS = 512 DRUMS  
512 DRUMS X 3 HIGH STACKING = 1536 DRUMS  
1536 DRUMS X 55 GAL/DRUM = 84,480 GAL.  
84,480 GAL (0.10) = 8,448 GAL REQ'D

SAFETY FACTOR  
17,084 GAL - 8,448 GAL = +8,636 GAL EXCESS

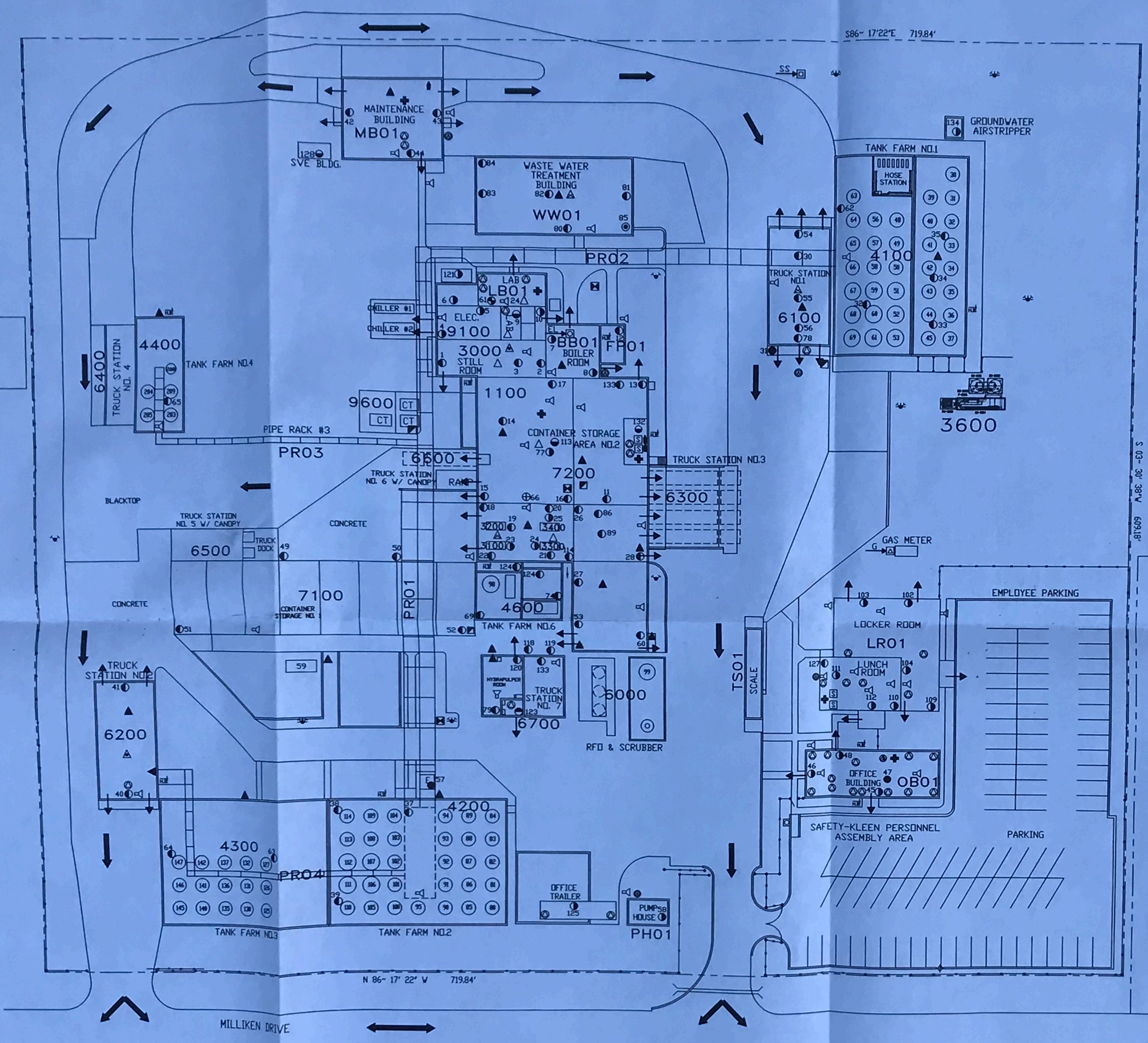


NOTE:

REFERENCE DRAWINGS

Clean Harbors				TITLE			
ANY CHANGES TO THIS DRAWING MUST BE APPROVED BY THE DESIGNER.				CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.			
				HEBRON, OH. RECYCLE CENTER			
				CONTAINER STORAGE AREA #1			
				DRUM ARRANGEMENT			
REV.	DESCRIPTION	DATE	BY	DRAWN	CHECKED	SCALE	DATE
B	REVISE CALCS	07/13/20	JL	JEK		1/8" = 1'	01/20/20
A	REISSUED IN CAD	01/20/20	JL	JEK			
				DRAWING NO. 90-64200-202			

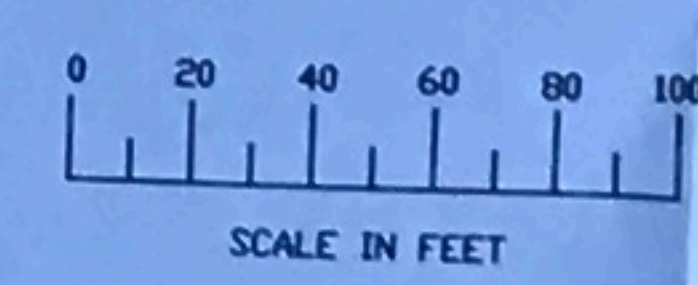




- ### LEGEND
- 1. CARBON DIOXIDE FIRE EXTINGUISHER - HAND HELD TYPE (10 # BC)
  - 2. CARBON DIOXIDE FIRE EXTINGUISHER - HAND HELD TYPE (15 # BC)
  - 3. DRY CHEMICAL FIRE EXTINGUISHER - HAND HELD TYPE (10 # ABC)
  - 4. DRY CHEMICAL FIRE EXTINGUISHER - HAND HELD TYPE (20 # ABC)
  - 5. CLEANGUARD FIRE EXTINGUISHER - HAND HELD (9.5 #)
  - 6. CLEANGUARD FIRE EXTINGUISHER - HAND HELD (4.75 #)
  - 7. HALON FIRE EXTINGUISHER (5 #)
  - 8. HALON FIRE EXTINGUISHER (9 #)
  - 9. HALON FIRE EXTINGUISHER (13 #)
  - 10. OXYGEN BOTTLE
  - 11. FIRST-AID KIT
  - 12. SAFETY SHOWER WITH EYE WASH FOUNTAIN
  - 13. HAND SPRAY ONLY
  - 14. EYE WASH WITH HAND SPRAY
  - 15. EYE WASH ONLY
  - 16. EXTERIOR HOSE BIBB
  - 17. SPILL BOX
  - 18. TELEPHONE
  - 19. TELEPHONE W/INTERCOM
  - 20. CELLULAR PHONE
  - 21. SELF-CONTAINED BREATHING APPARATUS (S.C.B.A.)
  - 22. FIRE HOSE
  - 23. SPRINKLER ALARM
  - 24. INTERCOM/ALERT (HORN)
  - 25. SPRINKLER RISER FOR A.F.F. (AQUEDUS FILM FORMING FOAM)
  - 26. PULL STATION
  - 27. P.I.V. (POST INDICATOR VALVE)
  - 28. HYDRANT - FOAM MONITOR
  - 29. HYDRANT - WATER
  - 30. MEZZANINE
  - 31. MAIN ELECTRIC SWITCH
  - 32. MAIN GAS VALVE
  - 33. STORM SEWER CUTOFF
  - 34. EMERGENCY EVACUATION ROUTES
  - 35. EXIT ROUTES FOR BUILDINGS
  - 36. PERMANENTLY INSTALLED 50# FIXED DRY CHEMICAL SYSTEM
  - 37. NUMBERS GIVEN NEXT TO EXTINGUISHERS ARE FOR MAINTENANCE REMOVAL AND RETURN OF EXTINGUISHERS LOCATED THROUGH-OUT SITE.

### NOTES

PROCESS NUMBERING SYSTEM	
1100	DISTILL. COLUMN NO. 1
2100	LUWA NO. 1
2200	LUWA NO. 2
3000	STILL ROOM
3100	SAFETY-THERM NO. 1
3200	SAFETY-THERM NO. 2
3300	SAFETY-THERM NO. 3
3400	SAFETY-THERM NO. 4
3600	DEHYDRATION UNIT
4100	TANK FARM NO. 1
4200	TANK FARM NO. 2
4300	TANK FARM NO. 3
4400	TANK FARM NO. 4
4600	TANK FARM NO. 6
6100	TRUCK STATION NO. 1
6200	TRUCK STATION NO. 2
6300	TRUCK STATION NO. 3
6400	TRUCK STATION NO. 4
6500	TRUCK STATION NO. 5
6600	TRUCK STATION NO. 6
6700	TRUCK STATION NO. 7
7100	CONTAINER STORAGE AREA NO. 1
7200	CONTAINER STORAGE AREA NO. 2
9100	ELECTRICAL ROOM
9600	COOLING WATER
FACILITY SUPPORT UNIT/AREA LETTERING SYSTEM	
BB01	BOILER BUILDING
FB01	FIRE PROTECTION BUILDING
LB01	LABORATORY BUILDING
LR01	LOCKER ROOM
MB01	MAINTENANCE BUILDING
OB01	OFFICE BUILDING
PH01	PUMP HOUSE
PR01	PIPERACK
PR02	PIPERACK
PR03	PIPERACK
PR04	PIPERACK
TS01	TRUCK SCALE
WW01	WASTE WATER TREATMENT BUILDING



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NO.	DESCRIPTION	BY	CK	APPR	DATE	NO.	DESCRIPTION	BY	CK	APPR	DATE
18	RCRA PERMIT RENEWAL UPDATE	KMC	JRL	JRL	7/15/20	12	ADDED EXT. No. 133	GK			5/24/99
17	RCRA PERMIT RENEWAL UPDATE	KMC			12/12/14	11	ADDED EXT. No. 132	GK			5/7/99
16	UPDATED FIRE EXTINGUISHERS	GK			03/31/06	10	ADD EXT.#128	GK			2/11/99
15	ADDED EXT. No. 134	GK			11/30/05	9	ADD EXT.#127	GK			12/1/98
14	ADDED S/S & EYEWASH T/T #2	GK			9/15/00	8	ADD PAGING SPKRS & EXT.#126	GK			5/12/98
13	RFD, HYDRAP. & TRAILER MOD'S	GK			3/28/00	7	OFFICE TRLR & PHONE MOD'S	GK			11/7/97

ATTACHMENT 7-10  
EXHIBIT NO. 5

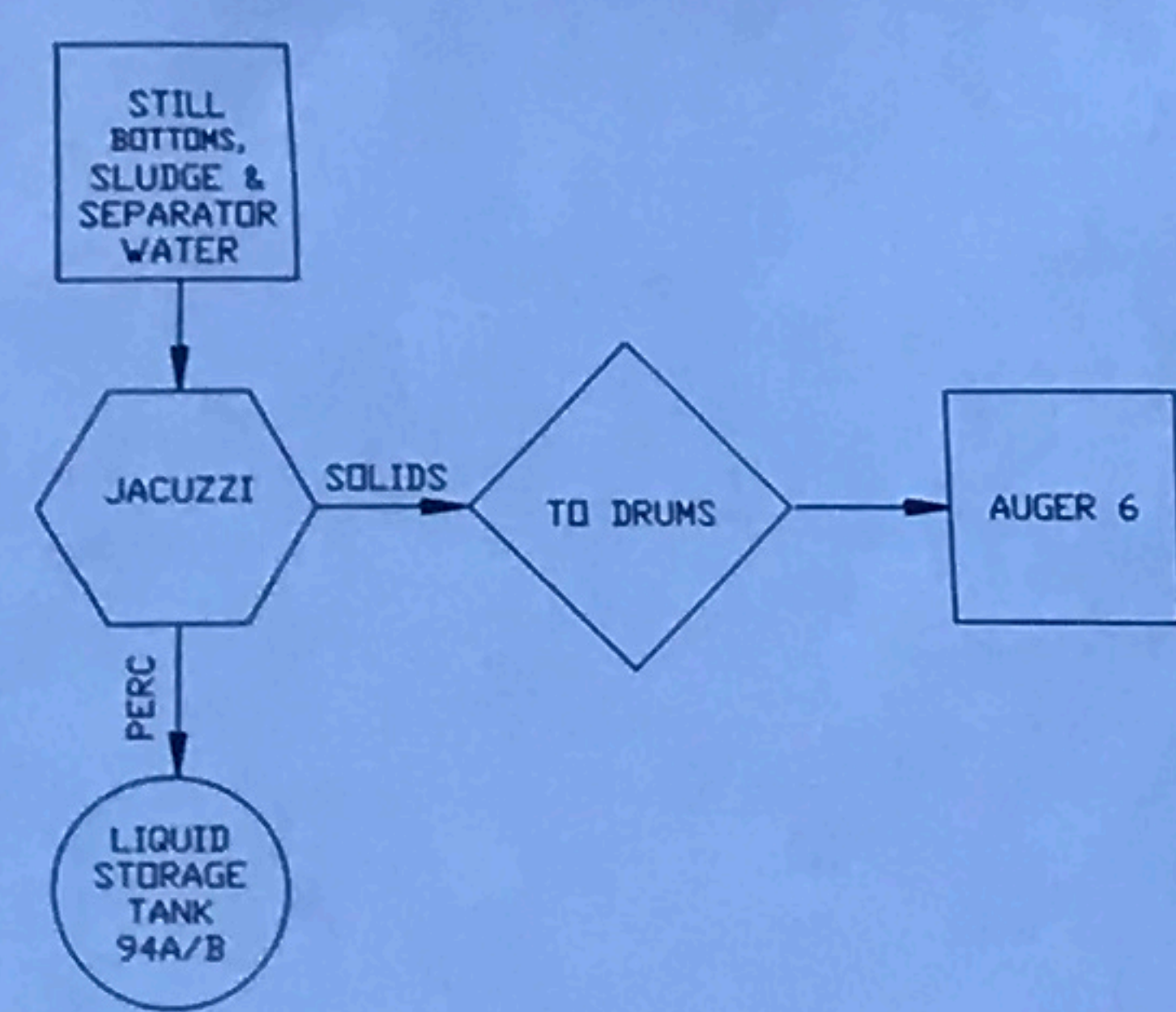
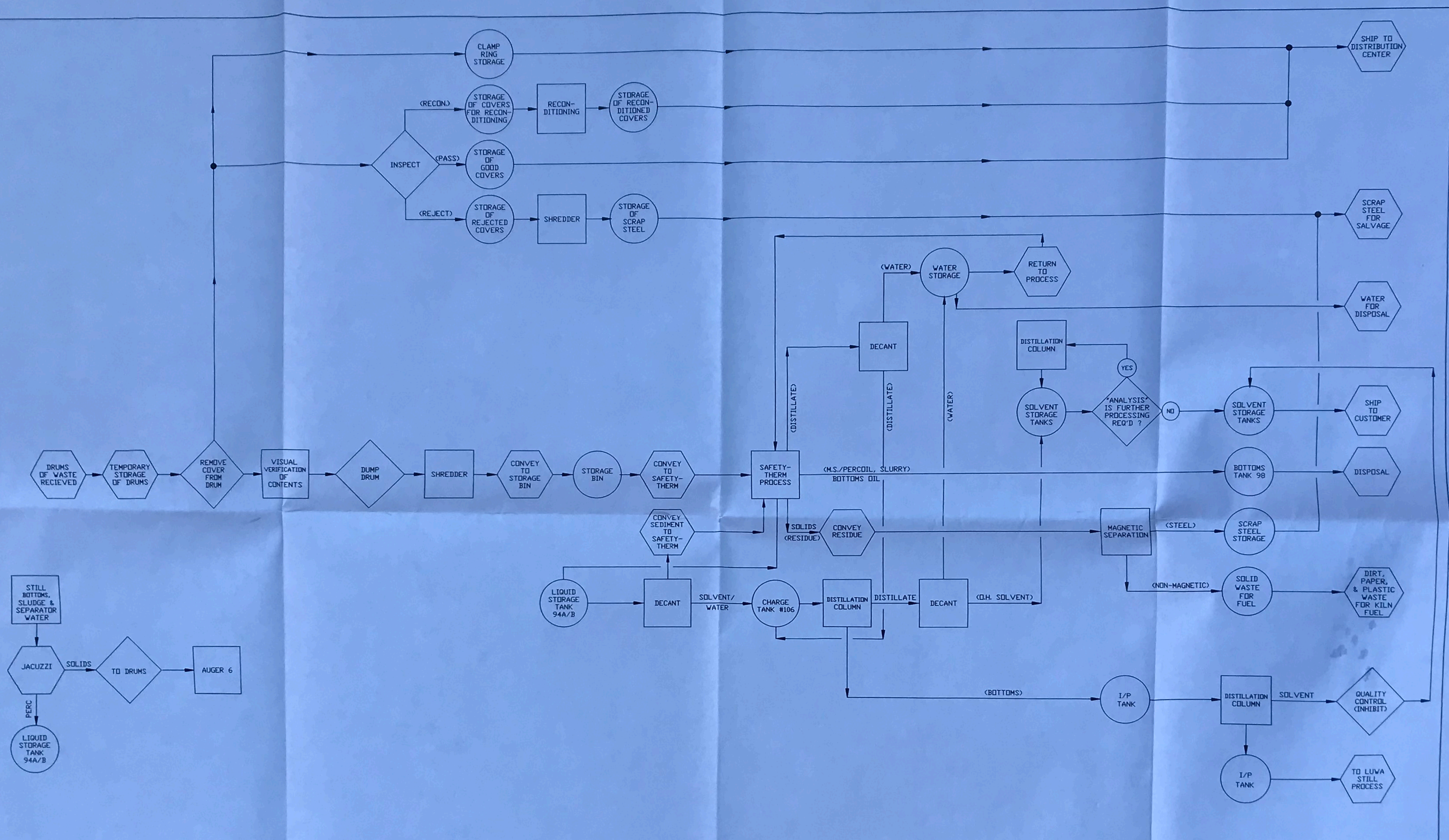
EXISTING FACILITY TRAFFIC FLOW, EMERGENCY EQUIPMENT LOCATIONS AND EVACUATION ROUTES

**Clean Harbors**

581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3530

SCALE 1"=40'	DRAWN RDK	CHECKED KJM	ROLL ENG. APPR.	OPERATION APPR.	DATE 10/18/94
HEBRON, OH RECYCLE CENTER			DRAWING NO. 90-64200-004		REV 18





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ATTACHMENT 4-1									
PROCESS FLOW DIAGRAM FOR DRY CLEANING WASTE									
4	RCRA PERMIT RENEWAL UPDATE	KMC	JRL	JRL	7/15/20	 581 MILLIKEN DRIVE, HEBRON, OHIO 43025 PHONE (740) 929-3532			
3	RCRA PERMIT RENEWAL UPDATE	KMC			12/12/14				
2	REVISED FOR PERMIT RENEWAL	SWL			8/19/02				
1	REVISED PER NDD 1995	RDK	KJM	TS	5/30/95				
0	ISSUED FOR PART "B" PERMIT	CEW	KJM	TS	9/20/90				
NO.	DESCRIPTION	BY	CK	APPR	DATE	SCALE	DRAWN	CHECKED	PROJ. ENGR. APPR.
						NONE	CEW	KJM	TS
HEBRON, OHIO RECYCLE CENTER						DRAWING NO. 90-64200-113		REV. 4	