



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JB PRITZKER, GOVERNOR

JOHN J. KIM, ACTING DIRECTOR

(847) 294-4000
Fax: 847/ 294-4018

April 19, 2019

Fermi National Accelerator Laboratory
Attn: David Hockin, Waste Management Team Leader
P.O. Box 500, MS 363
Batavia, Illinois 60510

Re: 0890105010 - Kane County
Fermi National Accelerator Lab
Compliance File

Dear Mr. David Hockin, Waste Management Team Leader:

On April 17, 2019, an inspection of the above referenced site was conducted by Tina Kovasznyay and James Haennicke representing the Illinois Environmental Protection Agency. The purpose of this inspection was to determine your facility's compliance with Illinois law and regulations related to solid waste management, as well as any solid waste permits the Illinois EPA has issued to your facility.

No violations were noted at the time of this inspection. For your information, a copy of the inspection report is enclosed. Please contact Tina Kovasznyay or James Haennicke at (847) 294-4000 if you have any questions regarding this inspection.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Bruni".

Gino Bruni, Environmental Protection Specialist IV
Field Operations Section
Bureau of Land

Enclosure

cc: Bureau of Land File

**Bureau of Land – Field Operations Section
RCRA Evaluation Report**

General Facility Information			
BOL ID:	0890105010	Region:	Des Plaines
USEPA ID:	IL6890030046	County:	Kane
Site Name:	Fermi National Accelerator Lab	Phone:	630-044-4498
Address:	Wilson Rd	Latitude:	41.8492
City/State/Zip:	Batavia, IL 60510	Longitude:	-88.2533
Inspection Date:	4/17/2019		

Observations	
Time	0930 - 1130
Weather Conditions (Description)	Cloudy
Temperature (°F)	55
Photos Taken (Yes/No)	y

Facility Type		
Most Recent Notification Date	Notified As	Regulated As
10/11/2013	LQG, TSD	LQG, TSD

Evaluation Type
Compliance Evaluation Inspection

Inspection Participants		
Participant	Agency/Bureau	Phone
Tina Kovaszny	Des Plaines IEPA Field Operations Inspector	847/294-4000
James Haennicke	Des Plaines IEPA Field Operations Inspector	847/294-4000

Persons Interviewed		
Person	Phone	Email
David Hockin, Waste Management Team Leader	(630) 840-4498	hockin@fnal.gov
Rick Hersemann, Physical Scientist	(630) 840-4122	hersemann@ch.doe.gov

Owner	Operator
Fermi National Accelerator Lab Rick Hersemann Kirk & Pine PO Box 2000 Batavia, IL 60510	Fermi National Accelerator Lab David Hockin Kirk & Pine PO Box 500 Batavia, IL 60510

Part B Permit					
Application Date	Expiration Date	Log #	Current Mod #	Issue Date	Mod Issue Date
	01/31/2017	B-131R2		12/27/2016	

Active Enforcement Orders					
CACO	Consent Decree	CAFO	IPCB	Federal Court	State Court

TSD Activity Summary				
Activity Process	On Part B	Ever Done	Closed	Done During Inspection
S01 - Container	Yes	Yes	No	Yes

Executive Summary

On April 17, 2019, I conducted a RCRA Compliance Evaluation Inspection at Fermi National Accelerator Lab (Fermilab) located in Batavia, IL as part of Illinois EPA's RCRA workplan. Fermilab, owned by the United States Department of Energy and operated by Fermi Research Alliance, LLC, specializes in high-energy particle physics. In addition to high energy collider physics, Fermilab is also host to several smaller fixed-target and neutrino experiments. I interviewed Dave Hockin, Waste Management Team Leader, and Rick Hersemann, Physical Scientist. No apparent violations were cited.

Evaluation Narrative

Hazardous Waste

Miscellaneous Small Quantity Waste (Drums & Lab Packs) - Various Waste Codes

- small amounts of off-specification, used, or excess chemical products generated at laboratories, equipment manufacturing areas, and maintenance areas throughout the site (includes aerosols, petroleum distillates, ethanol, paint, diesel fuel, etc.)
- generation varies with the amount of research activities or maintenance conducted
- last manifested shipment occurred on 2/11/19 to Veolia ES Technical Solutions, Menomonee Falls, WI (Veolia)
- see attached HWSF Master Waste Inventory for amount of waste on-site

Miscellaneous Waste (Drums) – Various Waste Codes

- off-specification, used, or excess chemical products generated at laboratories, equipment manufacturing areas, and maintenance areas throughout the site (includes aerosols, petroleum distillates, ethanol, paint, diesel fuel, etc.)
- generation varies with the amount of research activities or maintenance conducted
- last manifested shipment occurred on 2/13/19 to Tradebe Treatment & Recycling LLC, East Chicago, IN
- see attached HWSF Master Waste Inventory for amount of waste on-site

Waste Petroleum Naphtha – D039

- from 1 parts washer (Site 38 – Vehicle Maintenance Building)
- generate 15 gallons every 4 months
- last manifested shipment occurred on 2/7/19 to Safety Kleen, Elgin, IL (SK)
- no waste is currently on-site

Non-Hazardous Waste

Aqueous Parts Washer Solution

- from 1 parts washer located within Site 38
- generate approximately 75 gallons every 4 months
- last manifested shipment occurred on 2/7/19 to SK
- no waste is currently on-site

Waste Petroleum Naphtha

- from 5 parts washers located throughout the facility
- generate approximately 150 gallons every 4 months
- last manifested shipment occurred on 2/7/19 to SK
- no waste is currently on-site

Used Oil

- crankcase and hydraulic oil from vehicle maintenance
- generate approximately 1,500 gallons every 6 months
- last shipment occurred on 2/4/19 to Heritage-Crystal Clean LLC, Monee, IL
- see attached HWSF Master Waste Inventory for amount of waste on-site

Potentially Infectious Medical Waste

- from day care facility, fire department, and medical department on-site
- generation varies
- last shipment occurred on 12/13/18 to Safety Kleen, Dolton, IL
- see attached HWSF Master Waste Inventory for amount of waste on-site

Asbestos Containing Material

- from on-site activities
- generation varies
- last shipment occurred on 4/12/18 to DeKalb County Landfill, DeKalb, IL
- see attached HWSF Master Waste Inventory for amount of waste on-site

Used Oil Filters

- from vehicle maintenance
- generate 30-60 gallons every 4 months
- last shipment occurred on 2/7/19 to SK
- see attached HWSF Master Waste Inventory for amount of waste on-site

PCB Waste

- PCB capacitors are being removed and replaced with non-PCB capacitors or PCB containing ballasts
- generated as needed
- last shipment occurred on 2/11/19 to Veolia ES Technical Solutions, Phoenix, AZ
- see attached HWSF Master Waste Inventory for amount of waste on-site

Water Jet Sludge

- from cutting stainless steel; sand accumulates in bottom of tank and must be removed
- generated as needed
- last shipment occurred on 3/20/19 to Emerald Park Landfill, LLC, Muskego, WI
- see attached HWSF Master Waste Inventory for amount of waste on-site

Universal Waste

Mercury Containing Lamps

- spent light bulbs
- generation varies
- last shipment occurred on 12/17/18 to Fluorecycle, Inc., Ingleside, IL for recycling

Batteries

- spent batteries
- generation varies
- last shipment occurred on 10/17/18 to Battery Solutions, Howell, MI

Mercury Containing Non-PCB Ballasts

- spent ballasts
- generation varies
- last shipment occurred on 3/6/18 to Fluorecycle, Inc., Ingleside, IL for recycling

Lead Acid Batteries

- spent batteries
- generation varies
- last shipment occurred on 4/24/18 to T&S Trading Inc., Chicago, IL

Hazardous Waste Unit

S01 - Container Storage

- building WS-3 within Site 55
- located east of the main accelerator ring
- enclosed by a six-foot chain link fence
- site 55 consists of three aluminum sided buildings
- only WS-3 is permitted for storage in Fermilab's Part B permit
- WS-1 and WS-2 are currently less than 90-day accumulation areas
- see attached HWSF Master Waste Inventory for amount of waste on-site, and Table 1 for a list of waste which may be stored in this area

Additional Notes

Fermilab is currently regulated as a large quantity generator of hazardous waste and is operating as a permitted storage facility.

Fermilab has been a RCRA regulated facility under interim status since 1980 and under its RCRA Part B permit since October 1991. The most recent permit is dated December 27, 2016.

All required paperwork (manifests, land disposal restriction notices, annual reports, contingency plan, personnel training record, inspection logs, etc.) was available and appeared adequate.

Corrective action activities were not evaluated during this inspection.

No violations were cited during this inspection.

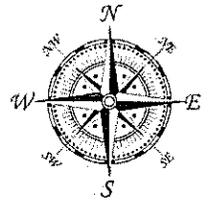
Summary of Apparent Violation(s)			
Status	Date Cited	Violation	Narrative
None Observed			

Attachment Listing		
ID	Type	Description
1	Miscellaneous	HWSF Master Waste Inventory
2	Miscellaneous	Parts Washers
3	Miscellaneous	Hazardous Waste Intended for Storage greater than 90 days

Waste Disposition Form

Facility Name:		Fermi National Accelerator Lab		USEPA ID:		IL6890030046		
Inspection Date:		4/17/2019		IEPA ID:		0890105010		
Waste Name	Generating Process	Waste Determination	Waste Type	HW Annual Report	Amount On-Site	Generation Rate	Last Ship Date	Destination
Waste Petroleum Naphtha	from 1 parts washer (Site 38 – Vehicle Maintenance Building)	Generator Knowledge	D039	Yes	None	generate 15 gallons every 4 months	2/7/2019	Safety Kleen, Elgin, IL
Aqueous Parts Washer Solution	from 1parts washer located within Site 38	Generator Knowledge	Non-Hazardous	No	None	generate approximately 75 gallons every 4 months	2/7/2019	Safety Kleen, Elgin, IL
Waste Petroleum Naphtha	from 5 parts washers located throughout the facility	Generator Knowledge	Non-Hazardous	No	None	generate approximately 150 gallons every 4 months	2/7/2019	Safety Kleen, Elgin, IL
Used Oil	crankcase and hydraulic oil from vehicle maintenance	Analysis	Non-Hazardous	No	see attached HWSF Master Waste Inventory	generate approximately 1,500 gallons every 6 months	2/4/2019	Heritage-Crystal Clean LLC, Monee, IL
Potentially Infectious Medical Waste	from day care facility, fire department, and medical department on-site	Generator Knowledge	Non-Hazardous	No	see attached HWSF Master Waste Inventory	varies	12/13/2018	Safety Kleen, Dolton, IL
Asbestos Containing Material	from on-site activities	Generator Knowledge	Non-Hazardous	No	see attached HWSF Master Waste Inventory	varies	4/12/2018	DeKalb County Landfill, DeKalb, IL
Used Oil Filters	from vehicle maintenance	Generator Knowledge	Non-Hazardous	No	see attached HWSF Master Waste Inventory	generate 30-60 gallons every 4 months	2/7/2019	Safety Kleen, Elgin, IL
PCB Waste	PCB capacitors are being removed and replaced with non-PCB	Generator Knowledge	Non-Hazardous	No	see attached HWSF Master Waste	generated as needed	2/11/2019	Veolia ES Technical Solutions, Phoenix, AZ

Water Jet Sludge	capacitors or PCB containing ballasts	Generator Knowledge	Non-Hazardous	No	see attached HWSF Master Waste	generated as needed	3/20/2019	Emerald Park Landfill, LLC, Muskego, WI
Mercury Containing Lamps	from cutting stainless steel; sand accumulates in bottom of tank and must be removed	Generator Knowledge	Universal	No	Unknown	varies	12/17/2018	Fluorecycle, Inc., Ingleside, IL
Batteries	spent light bulbs	Generator Knowledge	Universal	No	Unknown	varies	10/17/2018	Battery Solutions, Howell, MI
Mercury Containing Non-PCB Ballasts	spent batteries	Generator Knowledge	Universal	No	Unknown	varies	3/6/2018	Fluorecycle, Inc., Ingleside, IL
Lead Acid Batteries	spent ballasts	Generator Knowledge	Universal	No	Unknown	varies	4/24/2018	T&S Trading Inc., Chicago, IL
Miscellaneous Small Quantity Waste (Drums & Lab Packs)	spent batteries	Generator Knowledge	Universal	No	Unknown	varies		
	small amounts of off-specification, used, or excess chemical products generated at laboratories, equipment manufacturing areas, and maintenance areas throughout the site (includes aerosols, petroleum distillates, ethanol, paint, diesel fuel, etc.)	Analysis	Various Hazardous Waste Codes	Yes	see attached HWSF Master Waste Inventory	varies	2/11/2019	Veolia ES Technical Solutions, Menomonee Falls, WI
Miscellaneous Waste (Drums)	off-specification, used, or excess chemical products generated at laboratories, equipment manufacturing areas,	Analysis	Various Hazardous Waste Codes	Yes	see attached HWSF Master Waste Inventory	varies	2/13/2019	Tradebe Treatment & Recycling LLC, East Chicago, IN

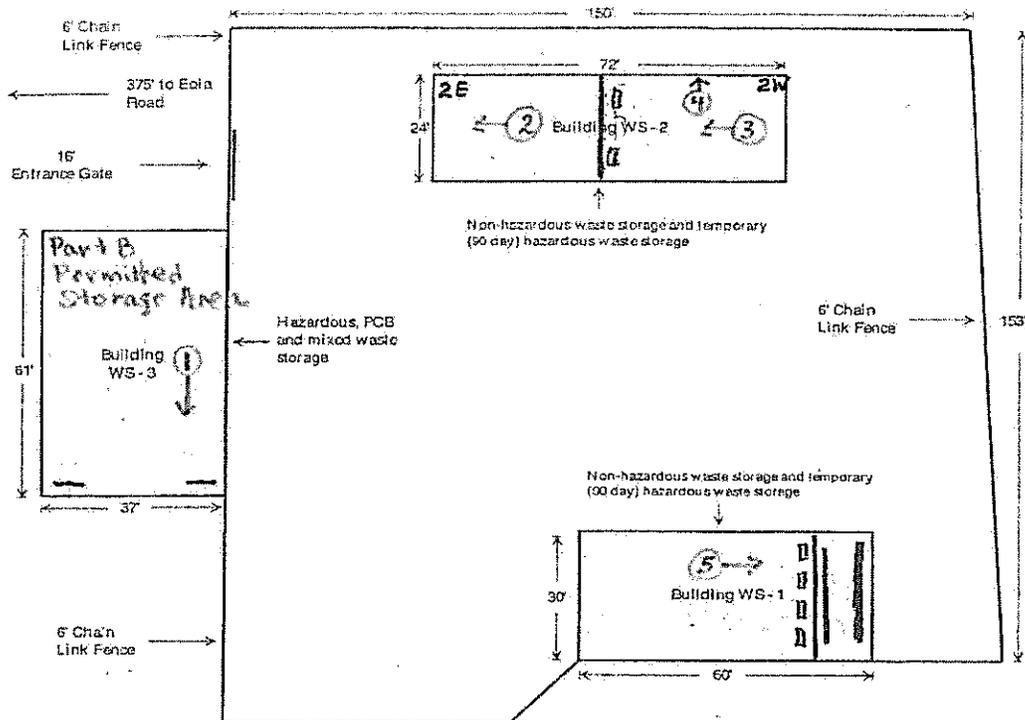


Site Diagram(s)

Site Diagram 1: April 17, 2019 • Fermi National Accelerator Lab (0890105010) • Kane County

Figure 2

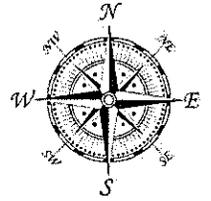
Site 55
Hazardous Waste Storage Facility



Scale - 1" = 30'
Revision - December 00

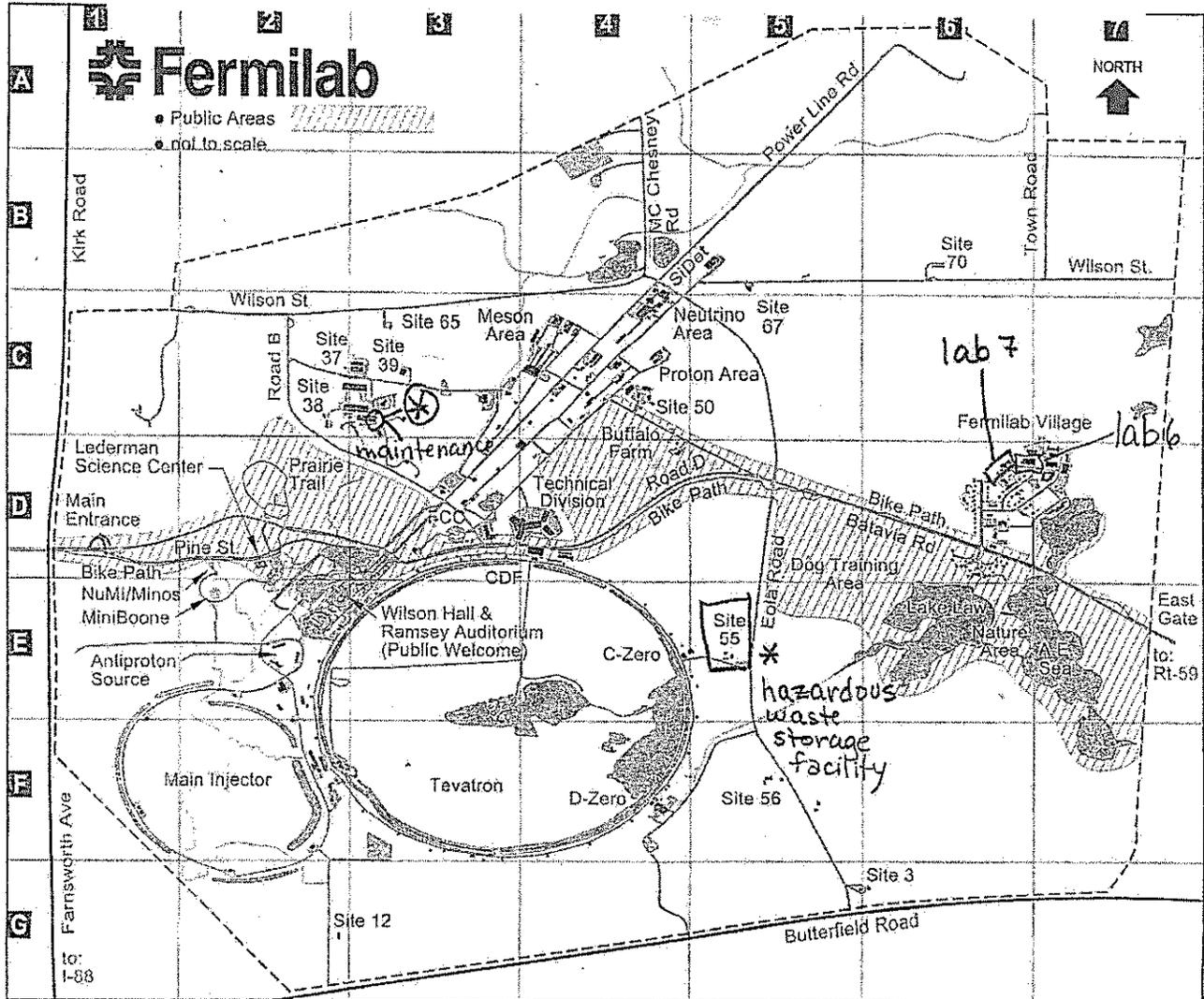


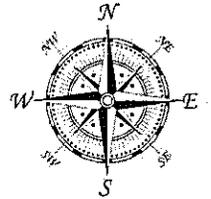
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Site Diagram(s)

Site Diagram 2: April 17, 2019 • Fermi National Accelerator Lab (0890105010) • Kane County





Site Diagram(s)

Site Diagram 3: April 17, 2019 • Fermi National Accelerator Lab (0890105010) • Kane County





Digital Photographs



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 1
Photo Date: 4/17/2019
Photo Time: 09:39:33
Direction: North
Taken By: Tina Kovaszny

Part B Permitted Storage Area
(Site 55) WS-3



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 2
Photo Date: 4/17/2019
Photo Time: 09:42:28
Direction: East
Taken By: Tina Kovaszny

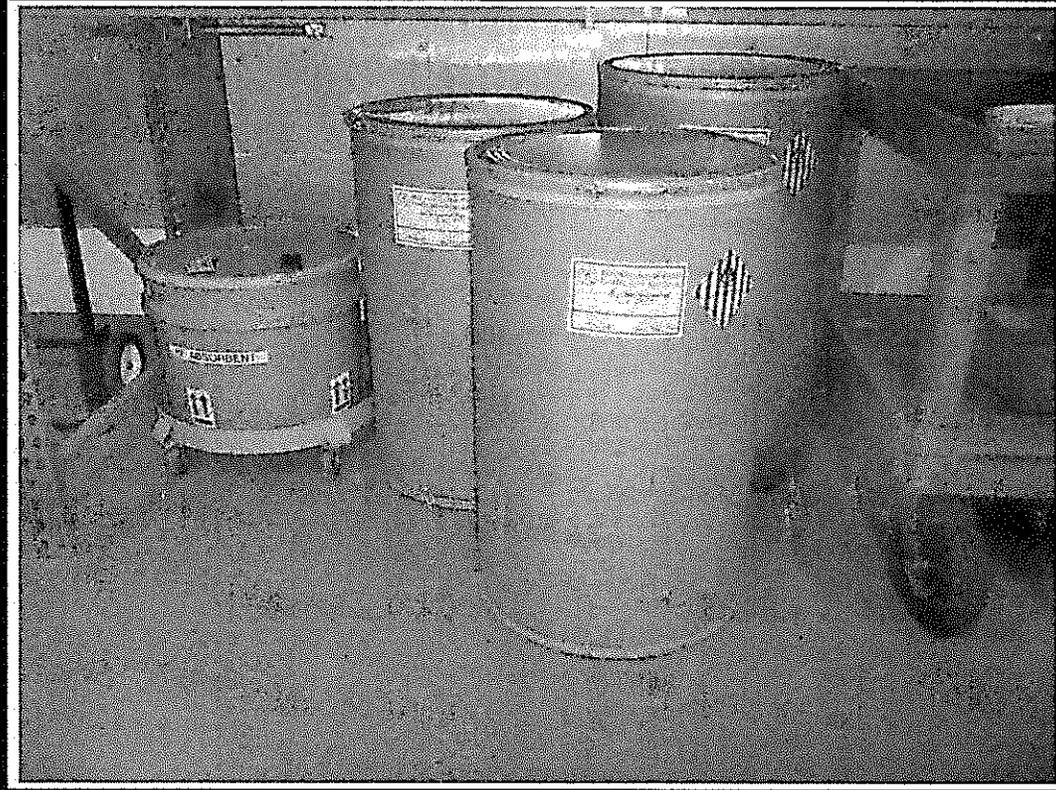
Site 55 Area WS-2E



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 3
Photo Date: 4/17/2019
Photo Time: 09:44:29
Direction: East
Taken By: Tina Kovaszny

Site 55 WS-2W



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 4
Photo Date: 4/17/2019
Photo Time: 09:44:50
Direction: South
Taken By: Tina Kovaszny

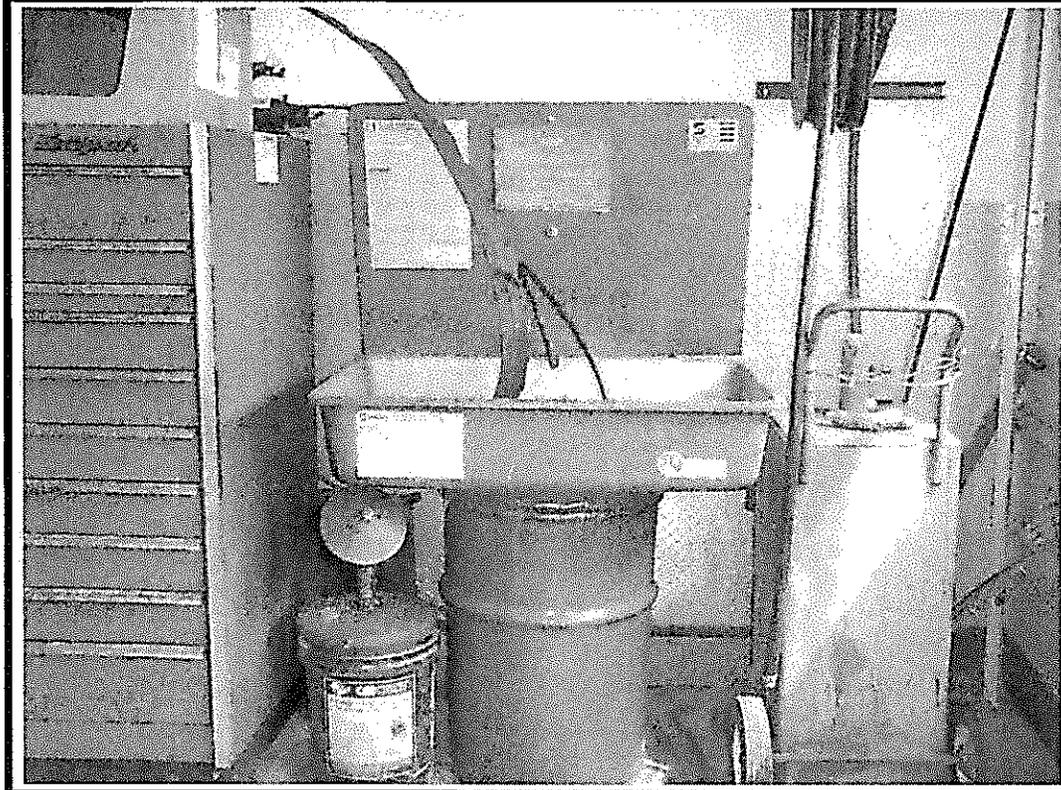
Site 55 WS-2W



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 5
Photo Date: 4/17/2019
Photo Time: 09:47:22
Direction: West
Taken By: Tina Kovaszny

Site 55 WS-1



Site: Fermi National Accelerator
Lab (0890105010)
Kane County

Photo ID: 6
Photo Date: 4/17/2019
Photo Time: 10:08:02
Direction: North
Taken By: Tina Kovaszny

Solvent based parts washer
(D039) at Site 38 (Vehicle
Maintenance)

