

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

Iowa Prison Industries

Ave E & First St.
Fort Madison, IA 52627
(319) 316-7180

EPA ID Number: IAD040599789

On

April 1, 2021

By

Eastern Research Group, Inc.

For

U.S ENVIRONMENTAL PROTECTION AGENCY

Region 7

Enforcement and Compliance Assurance Division

1.0 INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division/Chemical Branch/RCRA Section (ECAD/CB/RCRA) of the U.S. Environmental Protection Agency (EPA) Region 7, Eastern Research Group, Inc. (ERG) conducted a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at Iowa Prison Industries (IPI) in Fort Madison, Iowa on April 1, 2021. The CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. Throughout the CEI, data and information were collected to determine compliance with the applicable regulatory and statutory requirements. The inspection report and attachments present the results of the CEI.

2.0 PARTICIPANTS

Iowa Prison Industries:

Jeff Bailey, State Industries Supervisor
Shane Blanchard, Senior Technician
Brad Kite, Production Coordinator
Craig Ahlen, Senior Technician
Laura Mendez, Senior Technician
Shawn Thompson, Safety Officer

RCRA 04/01/2021



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EPA Representative, ERG:
Janosh Wolters, Energy Engineer

3.0 INSPECTION PRECEDURES

Due to the COVID-19 pandemic, I contacted the facility via telephone and spoke with Mr. Bailey approximately two weeks prior to the inspection. We discussed facility specific safety protocols to ensure the safety of all personnel involved during the inspection and I informed him when I would arrive at the facility to perform the inspection. After arriving announced at IPI at approximately 07:45, I performed a drive-by visual inspection of the facility and did not note any areas of concern. I did not take a photograph from outside due to signage stating for security reasons, taking photographs on the premises was prohibited. Mr. Bailey stated he would not be present during the inspection because he would be out on vacation. Mr. Bailey stated I would be guided throughout the prison by Mr. Thompson. Mr. Bailey added that if any documents were to be brought on site, to please leave them in my car until after the visual inspection was complete. Mr. Bailey stated he would prefer I only bring my field notebook into the prison and all relevant documents can be exchanged after the visual inspection due to security concerns.

Upon arriving on site, I entered through the main entrance for visitors and met with Mr. Thompson. I presented him with my inspector credential and signed into the prison. I received a visitor badge, and we entered the prison. Mr. Thompson informed me that himself, Mr. Blanchard, and Mr. Kite would be present throughout the duration of the visual inspection inside the prison. Mr. Thompson guided me to the prison's manufacturing area, and I initiated the opening conference with Mr. Thomson, Mr. Blanchard, and Mr. Kite representing IPI. I presented Mr. Blanchard and Mr. Kite my inspector credentials. Due to safety concerns inside the prison, I was unable to bring in paperwork including my business card, as well as the business card of the EPA Task Order Contracting Officer Representative, Mr. Trevor Urban. I was unable to present a copy of RCRA Section 3007(a), which contains EPA's inspection authority. I explained my need to collect accurate information and did not presented them with a copy of Title 18 U.S. Code, Sections 1001 and 1002. I thoroughly explained these documents and provided the IPI representatives all documents discussed once we were outside of the prison. I then explained to the IPI representatives that a copy of *Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections* would be provided to them after the visual inspection. In addition, I explained IPI's confidentiality rights.

The inspection consisted of a discussion of facility operations, waste generation and waste management, a review of waste management records, and a visual inspection of the waste generation and management areas. IPI could not provide a facility layout due to security precautions. A Google Maps aerial view is provided in Attachment 1 of the prison. IPI explained facility operations and locations of hazardous waste generation and management areas. I conducted an in-depth visual inspection of each of these areas.

During the visual inspection of the facility, Mr. Thompson, Mr. Blanchard, and Mr. Kite guided me throughout the prison's manufacturing area in order to conduct thorough evaluations of the processes and areas where waste is generated. At the time of the inspection, the manufacturing area was closed due to a recent event at the prison, which caused a complete lockdown of the

prison. Mr. Kite explained that during normal operating conditions, the shop manufactures furniture. At the time of the inspection, the shop was not accumulating universal waste batteries. Throughout the entire visual inspection, I did not observe universal waste batteries being accumulated. IPI was accumulating universal waste lamps, which I visually observed. In addition, IPI generates a small amount of used oil.

Three photographs inside the hazardous waste warehouse were collected as inspection documentation and are shown in Attachments 2 and 3. Information collected during the inspection is documented on the *EPA Inspection Checklist* (see Attachment 4). I followed the inspection procedures discussed in the RCRA CEI Standard Operating Procedure (No. 2321.01D), unless noted differently. At the conclusion of the inspection, I provided Mr. Kite with a *Confidentiality Notice*, and a *Receipt for Documents and Samples*, which he signed as acknowledgement of receipt (see Attachments 5 and 6 respectively). I did not observe or note any findings during my visual inspection and therefore did not provide IPI a notice of preliminary findings. Mr. Kite, Mr. Thomson, Mr. Ahlen and Ms. Mendez were all present during the closing conference.

The following inspection documents and compliance assistance handouts were left with IPI:

RCRA Section 3007(a)

Title 18 U.S. Code, Sections 1001 and 1002

*Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by
EPA in Connection with Inspections*

Confidentiality Notice (Top page of the completed carbonless transfer set)

Receipt of Documents and Samples (Top page of the completed carbonless transfer set)

NOPF (Top page of the completed carbonless transfer set)

Instructions for Responding to a NOPF

Security Awareness

Commercial Motor Vehicle Transportation

Security Planning

EPA E-Manifest Fact Sheet U.S.

EPA Small Business Resources

U.S. EPA Publication, Managing Your Hazardous Waste

U.S. EPA Publication, Managing Used Oil-Advice for Small Businesses

PowerPoint Presentation, 2013 Solvent Wipes Final Rule

Pollution Engineering Article, 10 Common Questions for Waste Generators

Iowa Department of Natural Resources (IDNR) Waste Exchange Folder and P2 Brochures

IDNR Management of Fluorescent Lamps for Businesses Information Sheets

IDNR Aerosol Can Disposal for Businesses Information Sheet

University of Northern Iowa Waste Reduction Center Information Card

Solvent-Contaminated Wipes Final Rule Summary Chart

4.0 FINDINGS AND OBSERVATIONS

4.1 Facility Information and Operations

IPI began operations in 1912 and currently employs approximately 47 people. The facility operates two shifts. The first shift works 07:30 to 15:30, Monday to Friday. First shift also works Saturdays from 05:00 to 10:00. The second shift works 15:30 to 00:00, Monday to Friday. The facility has a footprint of approximately 35,000 square feet. IPI leases the inside manufacturing shop and warehouse used to store raw materials and wastes from the Iowa State Penitentiary. IPI operations include cutting, painting, and staining wood furniture. The major raw materials used thinner, lacquer, stains, paint, and wood. The major manufacturing or processing operations that generate waste streams include manufacturing furniture and refinishing old furniture. The following waste streams are produced: thinner waste, paint booth filters, wastewater rinse, aerosol cans, used oil, universal wastes, and general trash.

4.2 RCRA Status

According to the *Hazardous Waste Site Info Verification Report for Inspector* (see Attachment 7), IPI notified as a federal Very Small Quantity Generator (VSQG) of D001-D004, D007-D011, D018, D022, D035, D040, F001-F003, F005, P044, P105, and multiple U-listed hazardous wastes. I asked all IPI representatives I encountered to review the *Hazardous Waste Site Info Verification Report for Inspector*, which I provided during the inspection. All IPI representatives did not know why U or P waste codes were listed. I did not observe any of these wastes during my visual inspection. The only hazardous waste stream I observed, was from thinner used to flush paint gun lines. In addition, all IPI representatives were in agreement that most of the D-wastes codes were incorrect and the shop was not generating these types of waste. After reviewing the records and walking through the facility, I determined that the facility is operating as a VSQG of D007, D008, F002, F003, and F005 hazardous wastes, a generator of used oil, and a SQH (small quantity handler) of universal waste. This determination was based on a review of facility records, a visual inspection of process and waste management areas, and interviewing personnel.

IPI was previously inspected by an EPA contractor on May 24, 2006. The inspection did not lead to a NOPF. I did not leave an NOPF at the conclusion of this inspection.

4.3 Facility Waste Streams and Management

The facility operates and generates all hazardous waste inside the prison's manufacturing shop. Once the 55-gallon hazardous waste container holding paint thinner waste is full, the facility moves the container to a warehouse outside the prison walls. This is a security precaution, because the prison does not allow vendors to drop off or pick up any materials inside the prison. The warehouse receives all raw materials from vendors and then IPI personnel using IPI owned vehicles transports all materials to and from the prison. A Waste Stream and Waste Handling Table for IPI is presented below. The table describes waste streams generated, generation process/rates, hazardous waste determinations, and on-site/off-site management.

#	WASTE STREAM	GENERATION PROCESS	HAZARDOUS WASTE DETERMINATION	ESTIMATED GENERATION RATE	ON-SITE MANAGEMENT	OFF-SITE MANAGEMENT
1	Thinner Waste (SDS provided in Attachment 8)	Painting operations and flushing paint gun lines	D005, D007, F003, and F005 (based on process knowledge and knowledge of the product) (F002 should also be added to this waste stream)	50 gallons every six months	55-gallon container	Heritage- Crystal Clean, LLC in Chicago, IL (ILR000130062) to Petro-Chem Processing Group in Detroit, MI (MID980615298)
2	Used Oil	Forklift maintenance, air compressor maintenance	Nonhazardous (managed as used oil under 40 CFR 279)	55-gallons every year	55-gallon container	Heritage- Crystal Clean, LLC in Chicago, IL (ILR000130062) to Petro-Chem Processing Group in Detroit, MI (MID980615298)
3	Universal Waste (Used Batteries)	Facility maintenance	Nonhazardous (managed as universal waste)	One to two batteries yearly	None on-site	Great River Waste Authority Sanitary Landfill (IAP0000001247)
4	Universal Waste (Used Lamps)	Facility maintenance	Nonhazardous (managed as universal waste)	One four-foot cardboard box per year (see Attachment 3, Photo 3)	Four-foot cardboard box	Great River Waste Authority Sanitary Landfill (IAP0000001247)

#	WASTE STREAM	GENERATION PROCESS	HAZARDOUS WASTE DETERMINATION	ESTIMATED GENERATION RATE	ON-SITE MANAGEMENT	OFF-SITE MANAGEMENT
5	Used Aerosol Cans (RCRA Empty)	Spray paint walking paths	Nonhazardous (based on process knowledge and knowledge of the product)	12 cans per year	Used aerosol cans are used until empty and added to general trash	Republic Services in Fort Madison, IA
	Paint Booth Filters	Painting operations	Nonhazardous (based on process knowledge and knowledge of the product)	12 paint booth filters per year	Paint booth filters are replaced and do not contain free liquid when disposed of in general trash	Republic Services in Fort Madison, IA
6	Wastewater rinse	Cleaning old furniture before staining or painting	Nonhazardous (based on process knowledge and knowledge of the product)	55-gallons every other month	55-gallon container	Heritage- Crystal Clean, LLC in Chicago, IL (ILR000130062) to Petro-Chem Processing Group in Detroit, MI (MID980615298)
7	General Trash	Facility operations	Nonhazardous (based on process knowledge and knowledge of the product)	20-cubic yard roll-off container picked up once per month or bi-monthly	20-cubic yard roll-off container	Republic Services in Fort Madison, IA from prison or dump truck from warehouse.

4.2 Paint and Stain Operations

IPI operates three spray booth areas. Two of the areas are used to apply stain on final products. The third spray booth area is a paint booth that Mr. Kite stated is the facility's least used booth. Mr. Kite explained the majority of final products are stained compared to painted. The shop generates a hazardous waste in these processes by flushing paint, gloss stain and clear base stain gun lines with a paint thinner mixture. The safety data sheet (SDS) and waste approval letter from Crystal Clean, LLC are provided in Attachments 8 and 9, respectively. The waste approval letter states that the waste codes attached to the waste stream are "based on data provided to Heritage-Crystal Clean on the waste stream survey form and/or on analytical results obtained from sample testing. IPI could not provide me with analytical data showing the results of sampling. Mr. Kite stated he does not believe any analytical testing occurred on any of the facility's waste streams. SDS's for the paint stripping solvent, gloss stain, and clear base stain used by the prison shop are provided in Attachments 10, 11, 12, respectively. I asked Mr. Kite why D001 was not listed on the waste approval letter based on the SDS. Mr. Kite stated that Heritage Crystal Clean, LLC examined the waste stream and provided the facility with the waste approval letter shown in Attachment 9. Due to the fact the waste stream has the F003 waste code and F005 waste code, it is implied that it must also be D001, but it is not required to explicitly state the waste code.

The paint related material waste stream also appeared to need to have the F002 waste code. At the time of the inspection, I misunderstood Mr. Kite stating the SDS shown in Attachment 10 was a product paint. Upon drafting the report, reviewing my notes, and the SDS, it was made clear that the SDS was for the paint stripping solvent applied onto pieces of furniture before being refinished. The SDS indicates the solvent is 50% - 100% methylene chloride and the waste related to this process was included in the paint related material waste stream. At the time of the inspection, I did not leave a notice of preliminary findings for a failure to determine if a waste meets any of the listings in 40 CFR 261 Subpart D. However, the waste stream appears to meet the F002 waste listing based on the composition of the material and how the waste was being generated and the facility would need to manage this waste stream with the F002 listing.

The shop ships all hazardous waste using the hazardous waste manifest system. An example of the last shipment manifest is provided in Attachment 13. In addition to the paint thinner waste, the shop generates a nonhazardous wastewater by refinishing used furniture. The rinse water acts as a water-based stripper and is collected in 55-gallon containers that is picked up from Heritage-Crystal Clean, LLC as shown on the invoice provided in Attachment 14. The water-based stripper is considered non-hazardous based on process knowledge and knowledge of the product used. Mr. Blanchard stated Heritage-Crystal Clean, LLC uses the waste for an energy recovery process and performs analytical tests of the waste as needed. Mr. Blanchard stated he will contact Crystal Clean, LLC to discuss if additional analytical data is needed in order to determine if all waste codes for the shop's hazardous waste streams are correct and have not changed.

4.3 Universal Waste Accumulation Area

IPI periodically generates universal waste. At the time of the inspection, I did not observe any universal waste batteries being accumulated. I asked Mr. Ahlen to guide me to the universal waste storage area. Mr. Ahlen stated the shop had just replaced a large number of lamps due to changing out light fixtures. I observed eight boxes of universal waste lamps. The containers were closed, labeled "Universal Waste Lamps", and had an accumulation date of 03/23/2021 (see Attachment 3, Photo 3). I asked Mr. Ahlen how universal waste was transported off site. Mr. Ahlen stated that he transports the generated universal waste to the Great River Regional Waste Authority Sanitary Landfill himself. I did not observe any used batteries throughout the visual walkthrough. I asked Mr. Ahlen if the shop generated waste batteries. Mr. Ahlen stated the shop generates approximately one or two waste batteries from cordless hand tools per year. Mr. Ahlen stated once the batteries are generated, he puts them into a closed container, labels the container "Universal Waste Batteries", puts a start accumulation date on the container and transports them to the landfill. In addition, Mr. Ahlen stated Iowa State Batteries replaces forklift batteries and provided the most recent invoice as shown in Attachment 15. Based on observations and conversations with IPI personnel, I determined IPI is a SQH of universal wastes.

I did not note any issues or findings at the universal waste accumulation area.

4.4 Used Oil

IPI generates approximately 55 gallons of used oil per year. The used oil is a result of forklift and air compressor maintenance. I observed the 55-gallon container of used oil inside the shop's raw material storage area. In addition, Mr. Ahlen stated it is possible that Big River Equipment would service forklifts off site at the company's facility. An invoice for the last service completed by Big River Equipment on site is provided in Attachment 16. When Big River Equipment is not used for forklift services, the facility uses Heritage-Crystal Clean, LLC to dispose of any used oil. Mr. Ahlen provided the waste approval letter as shown in Attachment 9. The container was closed, labeled "Used Oil", and in good condition. I did not note any issues or findings at the universal waste accumulation area.

5.0 SUMMARY OF FINDINGS

I observed no issues or findings during this inspection. However, I misunderstood Mr. Kite stating the SDS shown in Attachment 10 was a product paint. Upon drafting the report, reviewing my notes, and the SDS, it was made clear that the SDS was for the paint stripping solvent applied onto pieces of furniture before being refinished. The paint related material waste stream appears to meet the F002 waste listing. I did not leave a notice of preliminary findings for a failure to determine if a waste meets any of the listings in 40 CFR 261 Subpart D during the inspection. Therefore, further EPA review may add findings, specifically the facility's potential need to manage the paint related material waste to include the F002 waste code.

**Janosh
Wolters**

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Janosh Wolters
Energy Engineer
Date: May 26, 2021

**AMBER
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Amber Whisnant
Section Chief
ECAD/CB/RCRA, EPA Region 7
Date: _____

Attachments

- 1) Attachment 1 - Facility Layout (1 page)
- 2) Attachment 2 - Iowa Prison Industries Photolog (1 page)
- 3) Attachment 3 - Iowa Prison Industries Photos (3 photos/4 pages)
- 4) Attachment 4 - EPA Inspection Checklist (14 pages)
- 5) Attachment 5 - Confidentiality Notice (1 page)
- 6) Attachment 6 - Receipt for Documents and Samples (1 page)
- 7) Attachment 7 - Hazardous Waste Site Info Verification Report for Inspector (1 page)
- 8) Attachment 8 - Lacquer Thinner Example (6 pages)
- 9) Attachment 9 - Waste Approval Letters (3 pages)
- 10) Attachment 10 - Paint and Coatings Removal SDS (10 pages)
- 11) Attachment 11 - Gloss Stain (19 pages)
- 12) Attachment 12 - Stain Clear Base (17 pages)
- 13) Attachment 13 - Manifest (1 page)
- 14) Attachment 14 - Crystal Clean Invoice (1 page)
- 15) Attachment 15 - Iowa Battery Invoice (1 page)
- 16) Attachment 16 - Forklift Service (1 page)