



December 18, 2023

WILKEN AND SONS, INC.  
ATTN ANDY AND SARA WILKEN  
1157 275<sup>th</sup> STREET  
NASHUA IA 50658

Subject: LETTER OF NONCOMPLIANCE-Appliance Demanufacturing Permit Renewal Inspection  
Permit #19-ADP-02-14

Enclosed is the report of the appliance demanufacturing inspection conducted on December 11, 2023, at the facility referenced above. Several deficiencies related to the storage of PCB and mercury-containing components and tracking were observed. Please see the requirements section of this report and submit a written response verifying compliance by January 31, 2024.

We believe you will find the report self-explanatory and strongly encourage you to act on the recommendations listed. If you have any questions about the inspection or report, please contact me at 563-920-9297 or [amber.sauser@dnr.iowa.gov](mailto:amber.sauser@dnr.iowa.gov).

The cooperation and assistance of Andy Wilken in completing this inspection was appreciated.

Sincerely,

AMBER SAUSER  
ENVIRONMENTAL SPECIALIST SENIOR, FIELD OFFICE #1

Enclosure: ADP Inspection  
c: Andy Wilken, [andy.wilken@wilkenandsons.com](mailto:andy.wilken@wilkenandsons.com)  
Solid Waste Section (w/encl. via email: Becky Jolly, Susan Johnson)  
E File 19 SW Wilken & Sons ADP Inc 121123 als

**IOWA DEPARTMENT OF NATURAL RESOURCES  
APPLIANCE DEMANUFACTURING (ADP) PERMIT INSPECTION FORM**

Permit No.: 19 -ADP- 02 - 14 County: Chickasaw  
 Facility Name: Wilken and Son, Inc. Phone Number: 319-215-0146  
 Facility Address: 1157 275<sup>th</sup> Street City/State/Zip: Nashua, IA 50658  
 Phone Number: 319-215-0146  
 Mailing Address: 1157 275<sup>th</sup> Street City/State/Zip: Nashua, IA 50658  
 Date of Last Inspection: 2/11/2019

\*Be advised your facility may require, due to either SIC code or onsite management practices, an NPDES General Permit #1 (Stormwater permit).

**Storage & Handling**

IAC 567 Chapter 118.4: Appliance Storage & Handling Prior to Demanufacturing		Yes	No	NA
118.4(1)	Are appliances being stored to prevent capacitors, refrigerant lines, compressors, and components containing mercury from being damaged and allowing a release into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.4(2)	Are appliances being handled in a way which prevents damage, cuts, or breaks in refrigerant lines, compressors, capacitors and components containing mercury from being damaged and allowing a release into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.4(3)	Are less than 1,000 appliances being stored prior to demanufacturing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.4(4)	Are appliances being demanufactured in 270 days or less?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

All appliances had been demanufactured prior to my arrival. Mr. Wilken reported they had demanufactured two appliances earlier in the day. They were already mixed with the other scrap metal, and I was unable to observe them.

No other appliances were on site. It was noted that the area where demanufacturing is occurring is different than the location identified in the permit application. The new area is acceptable and the map should be updated.

**Operations**

IAC 567 Chapter 118.7: Fixed Facility & Mobile Operations		Yes	No	NA
118.7(1)	Is demanufacturing taking place on an impervious floor (including but not limited to concrete, ceramic tile, or metal)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.7(2)	Is the point of demanufacturing located 50 feet or more from a well and any water of the state?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.7(5)	Is a unique marking system (minimum of nine inches square) being applied to the appliances after demanufacturing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

IAC 567 Chapter 118.8: Training		Yes	No	NA
118.8	Is at least one owner or employee completed a Department-approved training course?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.8	Is one trained person on site at all times when appliances are being demanufactured?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

Mr. Wilken is the only certified staff person. He indicated that he oversees all demanufacturing activities.

It is recommended that another person become certified if this facility intends to continue demanufacturing appliances.

**Refrigerant Recovery**

<b>IAC 567 Chapter 118.6: Permit Application Requirements</b>		Yes	No	NA
118.6(8)	Is a copy of the EPA Refrigerant Recovery or Recycling Device Acquisition Certification available onsite?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
608 CAA (CFR)	Is a copy of the EPA Refrigerant Reclaimer's Certification available onsite if reclamation (purification) is taking place at the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IAC 567 Chapter 118.9: Refrigerant Removal Requirements</b>		Yes	No	NA
118.9(2)	If refrigerant is removed at a location other than a permitted ADP facility, is there documentation that it was removed by a service or repair facility certified for the removal of refrigerant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
118.9(3)	Is removal of refrigerant being done in an area where the temperature of the surrounding air and that of the appliance being demanufactured is 45 degrees Fahrenheit or greater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>IAC 567 Chapter 118.13: Record Keeping &amp; Reporting</b>		Yes	No	NA
118.13(2)"a" & 118.13(2)"g"	Are the number and type of refrigerant containing appliances being tracked, as well as the amount of refrigerant removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
118.13(3)"a"	Are bills of lading being kept as to where refrigerants are being shipped for disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

Mr. Wilken was not familiar with the requirement to have documentation for appliances received with refrigerant removed. I left information for him to review and develop a program for ensuring documentation is properly maintained.

The tracking log for appliances demanufactured was not available at the time of this announced inspection. Mr. Wilken indicated that it was on a piece of equipment that recently left the building and was now off site. I asked that he provide a picture of the form as soon as possible. On December 18 he provided a copy of the log. The log indicated the number and type of appliances demanufactured but not the amount of refrigerant removed. The log should include if refrigerant is removed from the device.

A receipt from Johnstone Supply indicated that a 125# tank of refrigerant was accepted from Wilken and Sons on December 15, 2022, and a 50 # tank was received by Wilken.

**Oil**

<b>IAC 567 Chapter 118.9: Refrigerant Removal Requirements</b>		Yes	No	NA
118.9(5)	If compressor oil is being removed from the refrigeration units, is it being stored in accordance with 567-119.5 (Note: AST must be large enough and on an impermeable surface to prevent spills, meet API construction standards, have absorbent material available, have a gauge to monitor liquid level, & meet Ch. 567-135 &136 if UST)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:****Ammonia Gas Refrigerant**

<b>IAC 567 Chapter 118.9: Refrigerant Removal Requirements</b>		Yes	No	NA
118.9(6)"a"	Is the ammonia gas being vented into water and is the resulting wastewater being properly disposed of?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.9(6)"e"	Is sodium chromate being properly stored in DOT-approved containers labeled with a proper EPA-approved chromium label stating "chromium" or "hazardous waste"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.9(6)"g"	Does the facility have an EPA ID number (RCRA)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.9(6)"h" & 118.9(6)"i"	Is asbestos insulation being removed and handled properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IAC 567 Chapter 118.13: Record Keeping & Reporting		Yes	No	NA
118.13(2)"a"(2)	Are records being kept on the number of sodium chromate-containing appliances being demanufactured	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.13(2)"f"	Are records being kept on the number of sodium chromate-containing appliances shipped to another demanufacturer	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.13(3)"a" & 118.13(3)"b"	Are records being kept on the shipment of sodium chromate (name of the facility to which sodium chromate was shipped, the date of each shipment, the amount shipped and the name and address of the transporter)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

### Mercury Components

IAC 567 Chapter 118.10: Mercury-Containing Component Removal & Disposal		Yes	No	NA
118.10(1)	Are all components containing mercury being removed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.10(2)	Are mercury components being stored in containers with a proper EPA-approved label stating "Universal Waste-Mercury Containing Equipment", or Waste Mercury-Containing Equipment" in both English and the predominant language of any non-English-reading workers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.10(3)	Is the date when the first mercury-containing component was placed in the container affixed to the container?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.10(4)	Storage of mercury is limited to one year, after which, it must be transported to an EPA-approved recycler/recovery facility. Has storage been under one year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
118.10(8)	Are fluorescent tubes, lamps, bulbs, etc., being placed in a container and packaged to prevent breakage to an EPA-approved recycler?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IAC 567 Chapter 118.13: Record Keeping & Reporting		Yes	No	NA
118.13(2)	Are records being kept on the number of mercury-containing appliances being demanufactured, number of mercury switches removed, number of fluorescent tubes removed, as well as the number of mercury thermocouples being removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
118.13(3)	Are records or bills of ladings being kept on the shipment of mercury-containing components?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

At the time of this inspection, mercury components were being stored in a plastic bag in Mr. Wilken's office. It was noted that these switches were from vehicles and appliances. He indicated that he was getting ready to ship them. We discussed appropriate storage containers and labels. No labeling was on the plastic bag. We discussed that these components should be placed into a proper storage container by the end of the day. He agreed to do so and to let me know when that was completed. On December 18, 2023, I received a text with pictures of the newly obtained container and label.

No mercury components have been shipped since 2016 when Midwest Land Recycling was contracted for this service. Mercury components can't be stored for over a year. This issue was also noted in the 2019 inspection. The date on the label submitted via text message was the date the components were placed into the container (12/2023). As at least some of these components have been in storage for over a year, mercury must be shipped and verification of that provided to this office prior to permit renewal. It is unclear where the 7/20/2022 and 5/14/2020 start dates reported on the 2022 and 2021 annual reports, respectively, were obtained.

Obtain a container for fluorescent tube storage.

### PCB Capacitors

IAC 567 Chapter 118.11: Capacitor Removal Requirements		Yes	No	NA
118.11(4)"a"	Does the facility have an EPA TSCA ID number for capacitor storage (required if facility has no RCRA ID #)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.11(4)"b"	Are PCB items being stored in a manner that provides adequate protection from the elements and adequate secondary containment? (Note: Storage must take place on an impervious material above the 100-year floodwater elevation)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.11(4)"c"	Is the point of demanufacturing located above the 100-year flood water elevation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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118.11(4)"d"	Are PCB storage containers filled with two inches of absorbent material in the bottom?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.11(4)"e"	Are PCB containers DOT-approved and labeled with a 6" by 6" yellow label stating "PCBs" as described in CFR part 761.45?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.11(4)"g"	Is the storage for non leaking small PCB capacitors that do not comply with the requirements in 118.11(4) "a" to "f" stored for less than 30 days from the date of removal and a notation places on the PCB capacitor indicating the date the item was removed from the appliance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.11(4)"f" & 118.11(4)"h"	Is the date when the first capacitor was placed in the storage container on the label? Storage of capacitors is limited to 270 days, after which they must be transported to an EPA-approved landfill or incinerator. This burial or incineration must be documented (within one year of the date on the container) and this record kept by the demanufacturer for three years from the date the PCB waste was accepted by the initial transporter.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IAC 567 Chapter 118.13: Record Keeping &amp; Reporting</b>		<b>Yes</b>	<b>No</b>	<b>NA</b>
118.13(2)	Are records being kept on the number of PCB containing appliances being demanufactured, number of PCB capacitors and ballasts as well as the date the first PCB-containing item was placed in the storage drum that is in use on December 31? number of mercury thermocouples being removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
118.13(3)"a" & 118.13(3)"b"	Are records being kept on the shipment of PCB components and the documentation of destruction or receipt from a regional collection center for all PCB materials shipped?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.13(3)"d"	Are records being kept documenting inspections of the PCB storage area as required by 118.11(4)"h"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

PCB components have not been taken to the RCC since February 2019. Mr. Wilken noted that he attempted to take PCB capacitors to the local RCC earlier in the spring. He noted that they observed the partially filled 50-gallon drum contained non-PCB ballasts and reportedly refused the container. He then returned the container to the demanufacturing area and updated the date on the label. He did not go through the components to ensure all were non-PCB. At the time of this inspection, I observed that there were two labels on the drum. Due to inaccessibility, I was only able to read one label with a start date of 2/14/2019. We discussed that all of the components should be inspected to determine if any PCB capacitors were in the container. As the start date of this container is over 270 days, any PCB capacitors should be shipped prior to permit renewal. It is unclear where the 7/20/2022 and 5/12/2020 start dates reported on the 2022 and 2021 annual reports, respectively, were obtained.

On December 18, I received a text message with a picture of a new PCB container and a proper label with a start date of 12/15/2023. You are reminded to ensure that 2 inches of absorbent material is placed on the bottom of the container. As the components in this container have already been stored over 270 days, prior to permit renewal, provide verification that PCB capacitors have been taken to the RCC. Ensure a receipt is obtained from the RCC and obtain a new container with a label and absorbent material for future PCB components. It is recommended that a date not be placed on the container until the first PCB component is placed into it.

The log/tally sheet utilized does not include space for the number of PCB capacitors and ballasts being removed. It is unclear how this number is obtained for the annual report. Please provide an updated tally sheet that includes the number of PCB components removed.

PCB storage area inspection records were on site. However, given the deficiencies noted during this inspection, it does not appear they are effective. These inspections should ensure storage limits are not missed and only appropriate materials are being placed into the container.

**Spills**

<b>IAC 567 Chapter 118.12: Spills</b>		Yes	No	NA
118.12(1)	Are spill records being kept and has the facility reported spills that resulted in a hazardous condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.12(2)	Is a mercury spill kit on hand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

No spills have reportedly occurred since the initial permit was issued.

**Reporting**

<b>IAC 567 Chapter 118.13. Record Keeping &amp; Reporting</b>		Yes	No	NA
118.13(2)	Are records being kept on appliances demanufactured in separate categories, as well as the number of each component, amount of refrigerant, etc?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.13(3)	Are records being kept on all hazardous waste manifest and bills of lading for shipments of refrigerant, mercury switches, PCB-containing material, and kept on site for a minimum of three years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
118.13(3)"f"	Are copies of annual reports (containing all the record keeping requirements) that have been sent to the Department Central Office being retained for at least three years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:**

During this inspection, the demanufacturing log sheet was not on site. As was noted previously, this information was submitted via text on December 18. It was noted that the appliances are tracked by month and not a daily total. It is recommended that the sheet be completed each day appliances are demanufactured.

The demanufacturing log sheet does not include the number of PCB and mercury components and refrigerant being removed. It is unclear how this information is being tracked. Please update the tracking sheet and provide verification this has been done prior to permit renewal.

As was noted previously, the storage timeframes for both PCB and mercury-containing components were exceeded. Staff should include the "ship by" date on the container label.

**Processing**

<b>IAC 567 Chapter 118.15: Shredding of Appliances</b>		Yes	No	NA
118.15(1)	Has fluff from shredding been tested at least quarterly for PCBs, and TCLP for heavy metals? Have these results being sent to the department within 30 days of the end of each quarter?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.15(1)	Have the results from fluff testing been submitted to the department within 30 days of the end of each quarter? And are these records being kept on site for a minimum of three years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.15(3)	Are appliances being demanufactured before shredding or processing?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
118.15(3)	If appliances are being accepted from demanufacturers for recycle/disposal, have the appliances been demanufactured in accordance with Federal regulations and state laws from which the appliances were received?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments:**

Summary of Requirements	Compliance Date:
Update the area where demanufacturing is occurring on the facility map.	Prior to permit renewal
Maintain documentation that refrigerant was removed prior to acceptance at this facility by a service or repair facility certified for the removal of refrigerant. 118.9(2)	Prior to permit renewal
Update the demanufacturing log to record the amount of refrigerant removed. 118.13(2)“g”	Prior to permit renewal
Ship mercury containing components as they have been stored for over one year. 118.10(4)	Prior to permit renewal
Properly store fluorescent tubes, lamps, bulbs, etc., in a container to prevent breakage. 118.10(8)	Prior to permit renewal
Update the demanufacturing log to include the number of mercury switches removed, number of fluorescent tubes removed, as well as the number of mercury thermocouples removed. 118.13(2)	Prior to permit renewal
Provide verification that PCB capacitors have been taken to the RCC and a new container with label and absorbent material obtained. 118.11(4)“h”	Prior to permit renewal
Update the demanufacturing log to include the number of PCB capacitors and ballasts removed. 118.13(2)	Prior to permit renewal
Utilize the PCB storage inspections to ensure PCB components are shipped within 270 days and only PCB components are being placed in the container.	Ongoing

Summary of Recommendations	Compliance Date:
Have another staff person attend demanufacturing training.	
Include the “ship by” date on the PCB and mercury containers.	

Summary of Reminders	Compliance Date:
Ensure receipts are obtained from the RCC for any PCB components accepted.	

Amber Sauser, Environmental Specialist Senior

Brian Jergenson, Environmental Specialist Senior

Inspector: Amber Sauser

Reviewer: Brian Jergenson

Date: 12/18/2023

Date: 12/18/2023