

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

P042554630

FACILITY: LAKESHORE RECLAMATION & RESALE		SRN / ID: P0425
LOCATION: 9702 PORTAGE ROAD, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Mark DeLisle , CEO		ACTIVITY DATE: 08/13/2020
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Announced Scheduled Inspection due to COVID-19 Pandemic as well as operations being intermittent typically.		
RESOLVED COMPLAINTS:		

On August 13, 2020 AQD Staff (Matt Deskins) went to conduct a scheduled inspection of the Lakeshore Reclamation and Resale (LRR) (SRN: P0425) facility located in Portage, Kalamazoo County. The inspection had to be scheduled due to the COVID-19 pandemic as well as to make sure someone would be at the facility because it is an intermittent operation. Also attending the inspection would be Ivan Bell of the AQD Technical Program Units (TPU) Asbestos Program. LRR has an air permit (PTI No. 34-13A) that was issued to them for a cable wire stripper and a hammer mill that are to be used for the removal of asbestos sheathing around copper wiring that was to be recycled. The asbestos removal operations are also subject to the Federal NESHAP for Asbestos (40 CFR Part 61 Subpart M) and those requirements were included in the PTI. The purpose of the visit was for Ivan to check out the asbestos recycling operations and for district staff it was to conduct an inspection to determine if LRR is in compliance with their permit. Staff departed the district office at approximately 9:25 a.m. since they were to meet the facility contacts and TPU staff there at 10:00 a.m.

Staff arrived at LRR at approximately 9:50 a.m. and Staff noted that Mark DeLisle (owner) and Josh DeLisle (son and an employee of LRR) were already there. Staff waited in their vehicle and Ivan ended up arriving a few minutes later. Staff introduced them self to Ivan and went over a brief history of the facility before proceeding into the building. Once in the building, staff was able to locate Mark and introductions were made. The following is a summary of our discussions with him along with facility operations. It will then be followed by the Special Conditions of PTI No. 34-13A and staff's comments regarding them.

**NOTE:** The facility wasn't currently operating and according to Mark, it hasn't all year due to the lack of material to process as well as the Covid-19 pandemic.

According to Mark, the operations at LRR haven't changed since staff's last inspection back in 2016 and they haven't added any new or additional equipment. LRR still receives stator bars that come out of various sized electrical generators. The stator bars kind of act similar to how the brushes would on smaller electric motors for generating power. Mark said that utility companies that use General Electric as their vendor are still his main supplier of the stator bars. He also said that they should be getting some in from Newfoundland this year as well as from the Palo Verde Nuclear Plant in Arizona. Mark said that the stator bars still come out of the generators in 33 foot lengths typically and are cut basically in half (usually 20 foot lengths or less) on location to fit them into roll-off containers prior to shipment to LRR. Once at LRR, the bars are cut to size (typically 18 inches) by a hydraulic shear. The bar armor surrounding the copper is also "cracked" by the shear to remove it. Mark had said during our previous inspection that they use to just process the bars in the hammer mill after shearing but the mica that is contained within it was causing equipment issues which led to the cracking process. Staff also asked again about the wire stripper that had been included in the permit but had been removed prior to staff's previous inspection. Mark stated that was still the case and that they don't have a wire stripper. Mark also confirmed again that the bar armor (black sheathing) still typically contains 7 to 8 percent asbestos and stated that the strand sheathing that surrounds each copper rod in the bar is sometimes positive for asbestos and other times is not. When it is positive, it typically contains 3 to 4 percent asbestos. Mark stated that all the shearing and cracking is still done inside the enclosure/containment area and all waste is wetted, double bagged, and disposed of as asbestos waste no matter what. When they have enough bags accumulated to haul off (typically a 20-yard dumpsters worth), they will call Waste Management in who then hauls it off to their Westside RDF facility in Three Rivers.

Once the bars have been sheared and cracked, they are then placed on a conveyor that transports them up to the hammer mill for final processing. The hammer mill breaks up the copper into small nuggets approximately the size of marbles. The copper nuggets come out of the hammer mill onto a vibrating

conveyor belt/table where it then gets collected. The hammer mill has its emissions controlled by a baghouse that vents inside the containment area. Compressed air is pulse jetted into the baghouse to clean the bags and filters. Mark said the drums that collect the dust still have to be emptied about once an hour during heavy operations. They also still use a water mister that blows across the waste that's falling out of the baghouse to help control any potential fugitive emissions. Staff then asked Mark again about the copper's purity and Mark stated that the copper that they end up with is still 99.9% pure and every load still gets tested before being shipped out. Staff then asked Mark if the amount of copper they get per bar had changed at all and he stated that it does vary but the bars out of one large generator unit still produces about 30,000 pounds of copper. He also stated that they can still process approximately 10,000 pounds of stator bar per week at optimum operating conditions.

Staff then asked if the maintenance on the hammer mill operations is the same as previously to which Mark replied that they were. Mark said that there are 6 hammers on the mill and each one can be rotated 4 times before they need replacement. He said under heavy use each one will still last about 5 months. He went on to say that when in operation that they are also regularly checking or changing belts, and the traps on the system need to be cleaned out about once every 3 weeks.

Staff then asked about the negative air machines (NAMs) and Mark went on to state that the containment area is equipped with three of them, two that are used during operations and one for back-up. They are all still equipped with several filters with the last one being a HEPA filter. Mark said that currently the HEPAs are changed out twice per year no matter what or more frequently if needed. Staff then asked about wash downs of the containment area to which Mark stated that the entire containment area is still washed down either after every load or every three weeks. He also said that they will do a thorough washdown of the entire containment area at least twice a year when it's being used. Staff then asked if they are still using the same filters for both the NAMs and the wastewater filtering system as previously. Mark state that they were and mentioned that the wastewater is still filtered through several filtering systems and then a HEPA filter prior to discharge to the sanitary sewer. Although not operating, Staff was able to view the hammermill, hydraulic shear, NAMs, and other equipment from outside the containment through an observation window.

After Mark was finished explaining their operations again to staff and Ivan, staff began to look over the permit conditions. The following are the special conditions of PTI No. 34-13A and LLR's compliance status with them.

NOTE: As mentioned earlier, the facility no longer has EUWIRESTRIPPER at the facility.

#### SPECIAL CONDITIONS

##### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUWIRESTRIPPER	Asbestos insulated copper wires are stripped using a commercial wire stripper. The clean copper feeds out of the wire stripper. The waste material (tar impregnated asbestos sheath) is wetted, double bagged and labeled before being transported to an approved landfill. All activities occur within the containment area (enclosure).	8-13-2013	FGCOPPER
EUBARSTRIPPER	Asbestos insulated copper stator bars are cut with a hydraulic shear and conveyed into a hammer mill grinder. The clean copper is separated and conveyed out of the hammer mill. The waste material is collected by the air	3-19-2014	FGCOPPER

	separation system (baghouse dust collector), wetted, double bagged and labeled before being transported to an approved landfill. All activities occur within the containment area (enclosure).		
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

### FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCOPPER	Asbestos insulated copper wire reclamation and recycling operations including a commercial wire stripper, hydraulic shear and hammer mill grinder. The processes occur in a containment area (enclosure) which is equipped with negative air machines with HEPA filters.	EUWIRESTRIPPER, EUBARSTRIPPER

#### The following conditions apply to: FGCOPPER

**DESCRIPTION:** Asbestos insulated copper wire reclamation and recycling operations including a commercial wire stripper, hydraulic shear and hammer mill grinder. The processes occur in a containment area (enclosure) which is equipped with negative air machines with HEPA filters.

**Emission Unit IDs:** EUWIRESTRIPPER, EUBARSTRIPPER

**POLLUTION CONTROL EQUIPMENT:** Containment area (enclosure), negative air machines with HEPA filters, baghouse dust collector (internally vented)

#### I. EMISSION LIMITS

- There shall be no visible emissions from FGCOPPER. (R 336.1301(1), 40 CFR 61.145(c), 40 CFR 61.150(a))

**AQD Comment:** Appears to be in Compliance. No VEs have been documented and the equipment wasn't in operation during staff's inspection.

#### II. MATERIAL LIMITS

- The permittee shall process only asbestos insulated wire and stator bar materials within FGCOPPER. (R 336.1224, R 336.1225, 40 CFR Part 61 Subpart M)

**AQD Comment:** Appears to be in Compliance. Staff was told that when operating, stator bars are the only materials being processed now.

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall vent the containment area (enclosure) exhaust through the negative air machines during operation of FGCOPPER, during asbestos waste preparation, and during decontamination of

the containment area (enclosure) in compliance with the provisions of 40 CFR Part 61 Subpart M. (40 CFR 61.145(c), 40 CFR 61.150, R 336.1224)

AQD Comment: Appears to be in Compliance. The facility has and uses negative air machines during their operations.

2. The permittee shall maintain a minimum of -0.02 inches of water column pressure differential between inside and outside the containment area (enclosure) during operation of FGCOPPER including cleaning/decontamination of the process building and equipment. (R 336.1910)

AQD Comment: Appears to be in Compliance. They appear to maintain a differential pressure between 0.023 and 0.06 according to records reviewed by staff.

3. The permittee shall store and stockpile all asbestos-containing material within the process building and in leak-tight wrapping at all times. At no time shall asbestos-containing material be stored outdoors of the facility. (R 336.1224, R 336.1225, 40 CFR 61.145(c))

AQD Comment: Appears to be in Compliance. The facility appears to be doing this and no issues were observed during the inspection.

4. The permittee shall change the HEPA filters in the negative air machines associated with FGCOPPER as recommended by the manufacturer. The permittee shall keep a record of the filter change-outs and keep the records on file at the facility and make them available upon request of the AQD. (R 336.1224, R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance. The facility appears to be changing the filters out as needed and are documenting when it is done.

5. The permittee shall not operate FGCOPPER, perform asbestos waste preparation, or decontaminate the containment area (enclosure) during HEPA filter change-outs on either of the negative air machines. (R 336.1224, R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance. Staff will have to assume the facility is doing this.

6. The permittee shall adequately wet all asbestos-containing material during operation of FGCOPPER as specified in 40 CFR Part 61 Subpart M. (40 CFR 61.145)

AQD Comment: Appears to be in Compliance. The facility has approval for dry removal but staff was told that they do wet and double bag all asbestos containing materials.

7. In lieu of wetting the asbestos-containing material during operation of FGCOPPER, the permittee shall submit a request to, and obtain approval from the AQD District Supervisor and Technical Programs Unit for a dry removal variance prior to operation, and then annually every October 1<sup>st</sup> thereafter. The permittee shall keep the approval for the dry removal variance on file at the facility. (40 CFR Part 61 Subpart M)

AQD Comment: Appears to be in Compliance. The facility requested and has received approval for dry removal of asbestos containing material.

8. The permittee shall not operate FGCOPPER unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted to the AQD District Supervisor and Technical Programs Unit within 60 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b) An identification of the source and air-cleaning device operating variables that shall be

monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

- c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
- d) A description of the procedures to capture, handle, and dispose of all materials to minimize the generation of fugitive emissions.
- e) A description of the procedure for the decontamination of the containment area (enclosure).

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor and Technical Programs Unit. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor and Technical Programs Unit for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1910, R 336.1911, R 336.1915)

AQD Comment: Appears to be in Compliance with all the above MAP requirements. The MAP has been amended once since the facility received their PTI.

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the EUBARSTRIPPER portion of FGCOPPER unless the dust collector is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance. They have a dust collector installed and it vents inside the containment area.

2. The permittee shall not operate EUBARSTRIPPER portion of FGCOPPER unless the pressure differential gauge for the dust collector is installed, maintained and operated in a satisfactory manner. (R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

AQD Comment: Appears to be in Compliance. The dust collector is equipped with a Magnahelic differential pressure gauge. Staff has to assume they are maintaining and operating it properly.

3. The permittee shall not operate FGCOPPER unless all respective HEPA filters are installed, maintained, adequately replaced and operated in a satisfactory manner as defined by the manufacturer's specifications. (R 336.1224, R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance. The facility appears to be doing the above in regards to the HEPA filters.

4. The permittee shall meet all applicable requirements of 40 CFR 61.152. Specifically, the containment area (enclosure) shall be constructed and operated properly, and the HEPA filters shall meet the design criteria of 99.97 percent efficiency for 0.3 micron particles as specified under the Air Cleaning section of 40 CFR Part 61 Subpart M. (40 CFR 61.152(b), R 336.1224)

AQD Comment: Appears to be in Compliance. The facility is using the same HEPA filters and the AQD has a Spec Sheet on file from the previous inspection.

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure differential between inside and outside the containment area (enclosure) on a continuous basis during operation of FGCOPPER including cleaning/decontamination of the process building. The device shall be equipped with an alarm which sounds when the pressure differential falls out of acceptable range. The device shall be installed such that the alarm is either visible or audible to workers during operation of FGCOPPER.

(R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance with above requirements.

6. The permittee shall install three negative air machines with HEPA filters within the containment area (enclosure). One will serve as a backup to the primary negative air machines.(R 336.1224,R336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance with above. They also have several negative air machines that they store at the facility.

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall conduct personal and area air monitoring during all work activities as outlined in the National Institute for Occupational Safety and Health (NIOSH) Method 7400, or another method with prior approval of the AQD Technical Programs Unit. Asbestos air samples shall be collected from areas inside and outside the regulated work area as well as the outlet of the negative air machine. The test results of the NIOSH Method 7400 monitoring shall be at or below the detection limit. (R 336.1224, R 336.1225)

AQD Comment: Appears to be in Compliance with the above requirements.

2. The permittee shall verify test results as required in SC V.1 from an outside third party certified contractor at least once every five days of operation. (R 336.1224, R 336.1225)

AQD Comment: Appears to be in Compliance. The facility still uses Steve Moody Labs (SMMS) in Texas as the 3<sup>rd</sup> party QC analyzer.

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall perform visible emission observations at least once per day while FGCOPPER is operating. The permittee shall not perform the visible emission observations during any time in which there is a threat of safety or asbestos contamination. The permittee shall keep written records at the facility of each visible emission observation, using "yes" or "no" to indicate whether or not there are visible emissions. If visible emissions are observed, the permittee shall shut down FGCOPPER consistent with the provisions of the malfunction abatement plan. (R 336.1301(1), R 336.1910)

AQD Comment: Appears to be in Compliance. The facility is doing the VEs and none have been documented to date.

2. The permittee shall keep records of the air pressure differential between inside and outside the containment area (enclosure) on an hourly basis during operation of FGCOPPER. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1301, R 336.1910)

AQD Comment: Appears to be in Compliance with the above. The monitor they use prints out the readings.

3. The permittee shall monitor and record the static pressure drop across the dust collector once per calendar day when the equipment is in operation. (R 336.1331, R 336.1910)

AQD Comment: Appears to be in Compliance.

4. The permittee shall maintain all records as specified in 40 CFR Part 61 Subpart M, including but not limited to notification forms, amounts and origins of asbestos-containing material and waste shipment records.  
(40 CFR 61.145(b), 40 CFR 61.150(d)(5))