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

B228140971

FACILITY: Omnisource Corporation		**SRN / ID:** B2281
LOCATION: 701 LEWIS ST, JACKSON		**DISTRICT:** Jackson
CITY: JACKSON		**COUNTY:** JACKSON
CONTACT: C. Kevin Gross , Safety/Environmental Manager		**ACTIVITY DATE:** 08/03/2017
STAFF: Mike Kovalchick	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Compliance inspection to check on torch cutting operation and shredder.		
RESOLVED COMPLAINTS:		

Minor Source-

Facility Contacts

Kevin Gross-Safety/Environmental Manager & Doug McDonald – Plant Manager

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Website: http://www.omnisource.com/

Purpose

On August 3, 2017, I conducted an unannounced compliance inspection of OmniSource (Company) located in Jackson, Michigan in Jackson County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules and their Permit to Install (PTI) # 93-04A which was issued on January 6, 2005.

Facility Location

The facility is surrounded by commercial and industrial facilities on all sides, except for on the west and the southwest side, which consists of residential and church buildings. See aerial photo of facility. Also see Attachment (1) which is the site plan for the facility.

Facility Background

OmniSource (previously Jackson Iron and Metal until 2004) is a large metal recycler located within the city of Jackson. According to the U.S. Environmental Protection Agency (EPA), this facility is classified as a minor air pollution source. It was last inspected on September 10, 2015.

Metal emission stack testing was last conducted on December 14-15, 2005. Mercury was tested to be 0.008 lbs/hour (.02 limit), manganese was 0.001 lbs/hour (0.01 limit), lead was 0.001 lbs/hour (0.06 limit), nickel at 0.0001 lbs/hour (0.006 limit), cadmium at 0.0005 lbs/hour (0.002 limit), chromium at 0.0002 lbs/hour (0.02 limit) and copper at 0.0006 lbs/hour (0.03 limit). PM was found to be 2.4 lbs/hour (11.25 lbs/hour limit).

Emission Unit ID	Emission Unit Description	Stack Identification
EU-SHREDDER	**Scrap metal shredder with a cyclone and venturi scrubber air pollution control (APC) system, a magnetic (drum magnet) ferrous separation process, a closed-loop single air cascade system (z-box) with a cyclone, oscillators, eddy current separators, nonmagnetic materials separation, associated conveyors, material storage, and all associated process activities including but not limited to management of waste materials associated with the shredding operations.**	SV-SHREDDER
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

Regulatory Applicability

PTI 93-04A covers the entire facility.

The source is also subject to 40 CFR Part 61, Subpart M, which requires that the facility not process any asbestos tailing or w

Torch cutting operations at the facility are no longer exempt from PTI requirements as outlined in letter that was sent to the Cc

"Dear Scrap Metal Recycling Owner,

On December 20, 2016, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), finalized changes to Par cutting. Rules 336.1278 through 336.1290 were established to exempt insignificant sources of air pollution from having to obt

The amended Rule 336.1285(2)(j) states that the requirement of Rule 336.1201(1) to obtain a permit to install (PTI) does not a

(j) Portable torch cutting equipment that does not cause a nuisance or adversely impact surrounding areas and is used for eitl

(i) Activities performed on a non-production basis, such as maintenance, repair, and dismantling.

(ii) Scrap metal recycling and/or demolition activities that have emissions that are released only into the general in-plant envir fabric filter.

As with all AQD permit exemptions, eligibility is based on any owner or operator's ability to provide a demonstration that the p demonstrate that it meets the requirements of an applicable exemption, you may be required to obtain a PTI for continued ope

Complaints that are received by the AQD that are attributed to torching activities will be investigated by district staff and evalu letter is intended to create awareness of this new requirement and to initiate discussion regarding any questions you may hav

Arrival & Facility Contact

Visible emissions from torch cutting were observed upon my approach to the Company's facility. See attached photo. I arrive Kevin Gross (KG)-Safety/Environmental Manger and Doug McDonald (DM) the plant manager. I informed them of my intent

Both KG and KM extended their full cooperation and fully addressed my questions.

Pre-Inspection Meeting

JD outlined that the plant is operating generally between 7 am to 4 pm M-F with occasional work Saturday morning. Truck dri 2 pm.

There are currently 75 employees and business has improved over the last year.

Both gentlemen outlined the flow of scrap metal through the facility referring to an aerial photo on the wall in the conference rc

I requested various records required by the PTI which were provided to me at that time or at the end of inspection. (See **Reco**

Onsite Inspection

Both KG and DM gave me a tour of the facility.

We first visited the north east portion of the facility property to observe the torch cutting operations.

An outside contractor, RJ Industrial Torching, conducts all the torch cutting at this facility. They technically only come there on brand name Smith.) There is 3000 gallon portable oxygen tank on a truck trailer and smaller propane tank sitting on the groun years old. RJ cuts any scrap metal that is too thick to process by the shear that is located directly adjacent to the field that the the bare minimum and have passed on jobs that require torch cutting. Pieces to be cut are simply laid out on the ground and the brown/yellow smoke plume during the torch cutting. Opacity from the torch cutting was generally well above 20% but was read smoke.) I also observed several pieces of wood/debris that was smoking/burning after being set on fire from torch cuttin

Next we visited the depollution area. It is where they process vehicles prior to entering the shredder. Freon, engine oil, gasolir requirements. Inspected and depolluted scrap was then placed in a stock pile. (Process cars are spray painted with red.) Ap (Buses/trucks can also be processed but generally need to be cut up some before entering the shredder.) Mercury switches ir equipment/switches. See attached photos. One of the photos shows a waste drum labeled radioactive. Scrap metal that ente

shredder.

Next, we went over to observe the "fluff" bunker area. Various conveyers carry processed material from the shredder. The non-magnetic portion of it is considered the "fluff". The fluff may contain plastic, which may have melted due to the heat generated by the shredding processing. The Company currently has a large pile of fluff directly adjacent to the bunker but not actually in the bunker. No fugitive dust was noted as the material appeared quite wet to the point that some liquid was seeping out the bottom of the pile onto the paved ground. The material appears to be wet due to the spray bar associated with the shredder. The Company no longer processes the fluff on site. It remain onsite for only a short period of time before a front end loader scoops it up and places into a truck that goes to Toledo for processing there.

Next, we headed over to observe the shredder and associated equipment. The shredder was not in operation. It was down because the amount of feed scrap material in the pile adjacent to the shredder wasn't large enough yet to make it worthwhile to turn on the equipment. Since the process was not in operation, only a brief walk through of it was conducted.

I was shown the room housing the scrubber. (It was not operating.) I observed a gauge that was labeled "sump level" which appeared to actually be measuring the pressure drop across the scrubber based on where the pressure sensors were located. (See attached photo.) I observed the gauge that the use to measure flow rate to the scrubber. It is reset every day (See attached photo.) Overall, the scrubber appeared to be in good shape. I asked how the waste from the scrubber is being handled. KM indicated that very little sludge is being generated at all but thought it was being handled as a non-hazardous solid waste. The vast majority of the collected material is being captured by the 2 cyclones. (See attached photos.) The Z-box cyclone exhausts back into the process and is the larger of the 2 cyclones. Material collected form the 2 cyclones directly enters a conveyer system.

I did not observe any collected air containments on the ground and the area surrounded the shredder process was paved with just small amounts of wet material on it.

Per SC 2.4, the shredder may not be operated unless the cyclone and venturi scrubber are installed, maintained, and operated in a satisfactory manner. DM indicated that the system is now interlocked so the shredder can't be turned on without the associated scrubber/cyclones operating.

We wrapped up the tour by observing the southernmost part of the facility to see if there was any fugitive dust since the previous inspector noted a problem with it. No fugitive dust was observed.

Recordkeeping/Permit Requirements Review

I asked if the required Waste Management Plan has been updated since the last version dated September 2015. The version of the plan had not been updated since then besides some new safety training attendance sheets. The plan appears to be adequate.

I asked about dust suppression records that are required to be maintained per Appendix A of their PTI-Fugitive Dust plan. The Company was able to produce examples of chloride being applied twice in June. See Attachment (2).

I asked for the latest copy of their Malfunction Abatement Plan for all the pollution control devices at the facility. See Attachment (3). The plan appears to be current and adequate.

It lists the normal operating parameters for the scrubber to be 4" to 9" of water, a flow recycle rate of 1 to 3 gallons/hour with a water level reading of between 5 to 200 gallons.

I asked for records that show daily operating hours, tons of material processed each day, required daily pressure drop readings, liquid flow rates since spring of 2016. The records showed compliance. See Attachment (4).

The Company appears to be compliance with all other conditions of the Permit. (Note: Since the shredder and associated pollution control equipment was not in operation during the inspection, a number of permit conditions could not be verified.)

Post-Inspection Meeting

I held a brief post-inspection meeting with KG and MD. We mostly discussed the torch cutting operation and how it should be handled going forward. No easy solution was obvious. I indicated that the AQD would work with the Company to resolve this issue. I also indicated that since I did not get to see the shredder in operation, I may return in the near future.

I thanked both gentlemen for their time and cooperation, and I departed the facility at approximately 11:45 AM.

Compliance Summary

The Company is in compliance with their air permit.

The torch cutting operation is in violation of Rule 201-no PTI. A Violation Notice (VN) will be sent to the Company regarding this issue that will request a plan of action within 21 days.

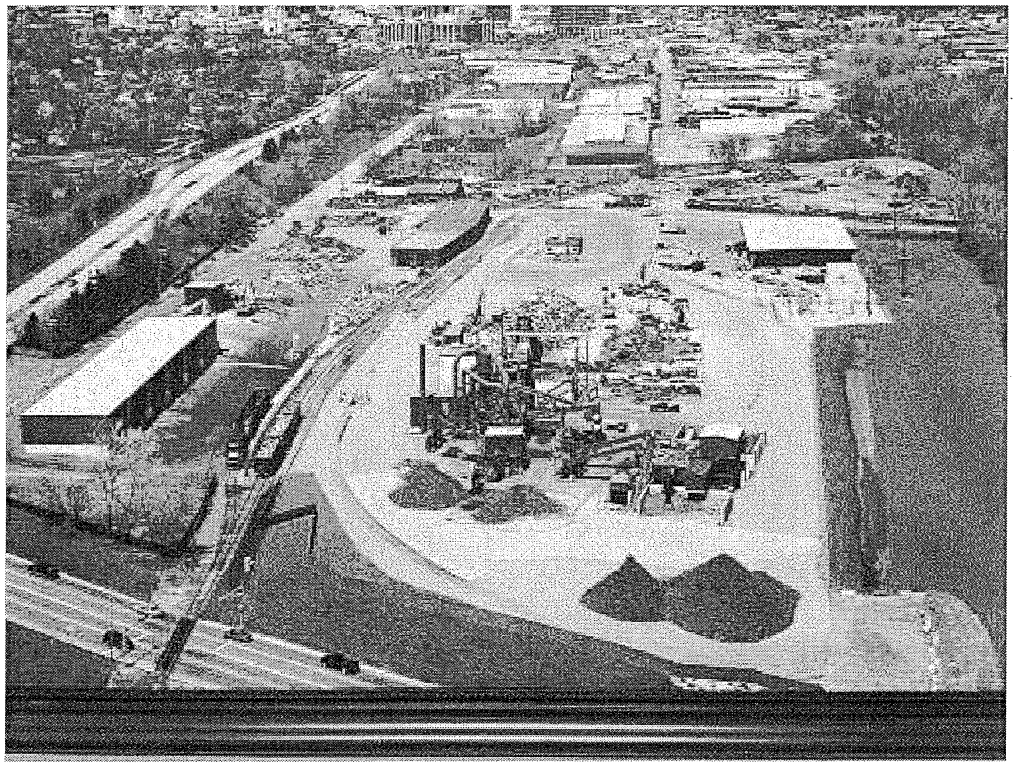

Image 1(Aerial photo) : Aerial photo

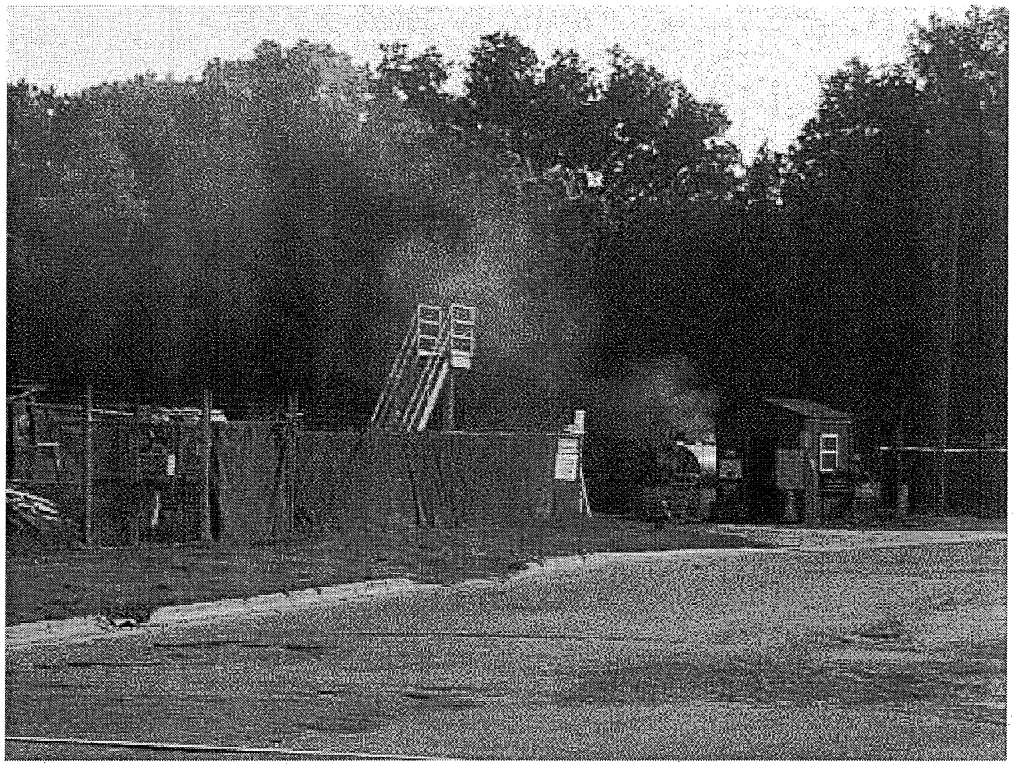

Image 2(Torch Cutting) : Smoke from torch cutting observed when arrived at facility

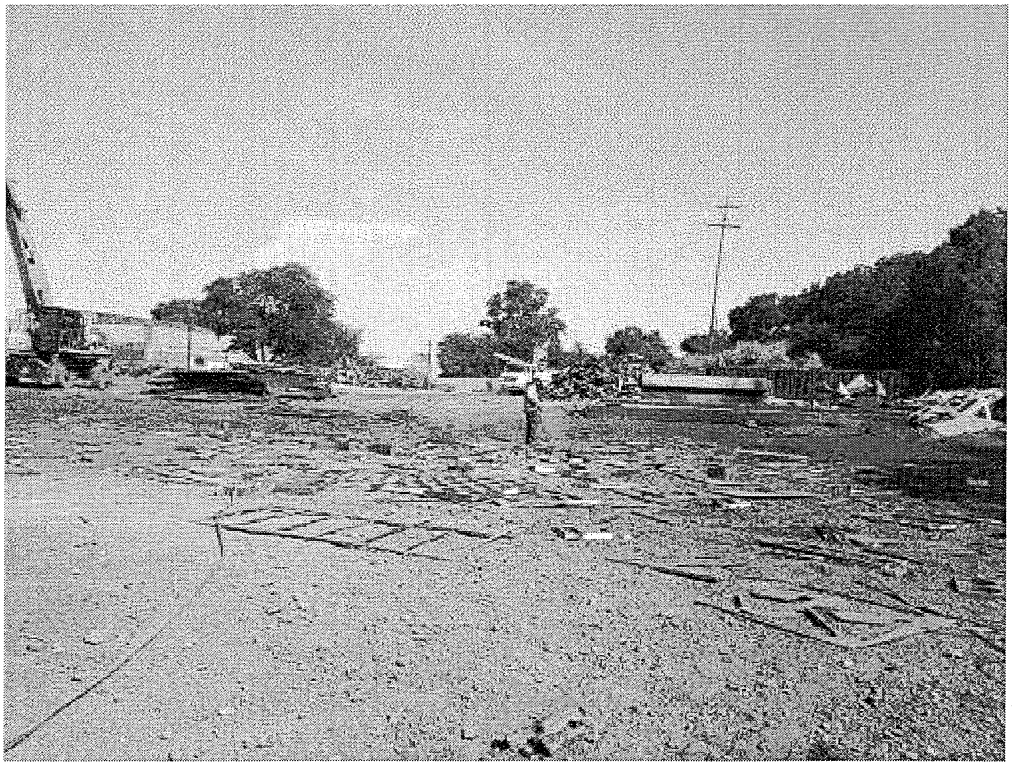

Image 3(torch yard) : Torch cutting yard. Shear is in the background on the left.

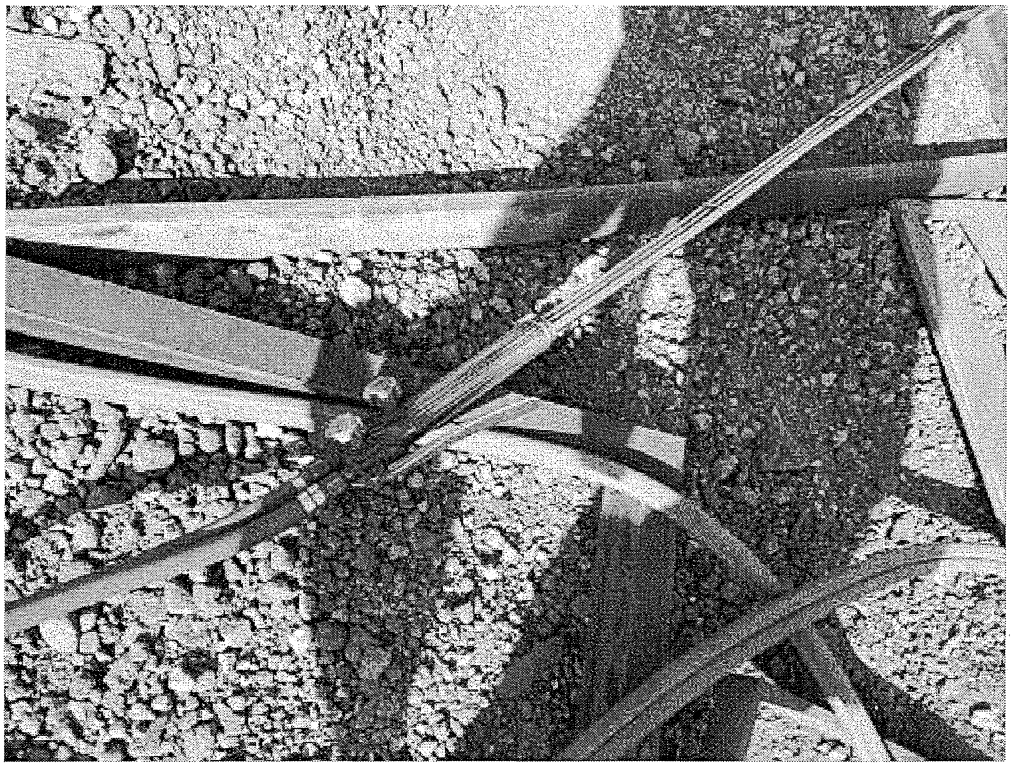

Image 4(torch) : torch

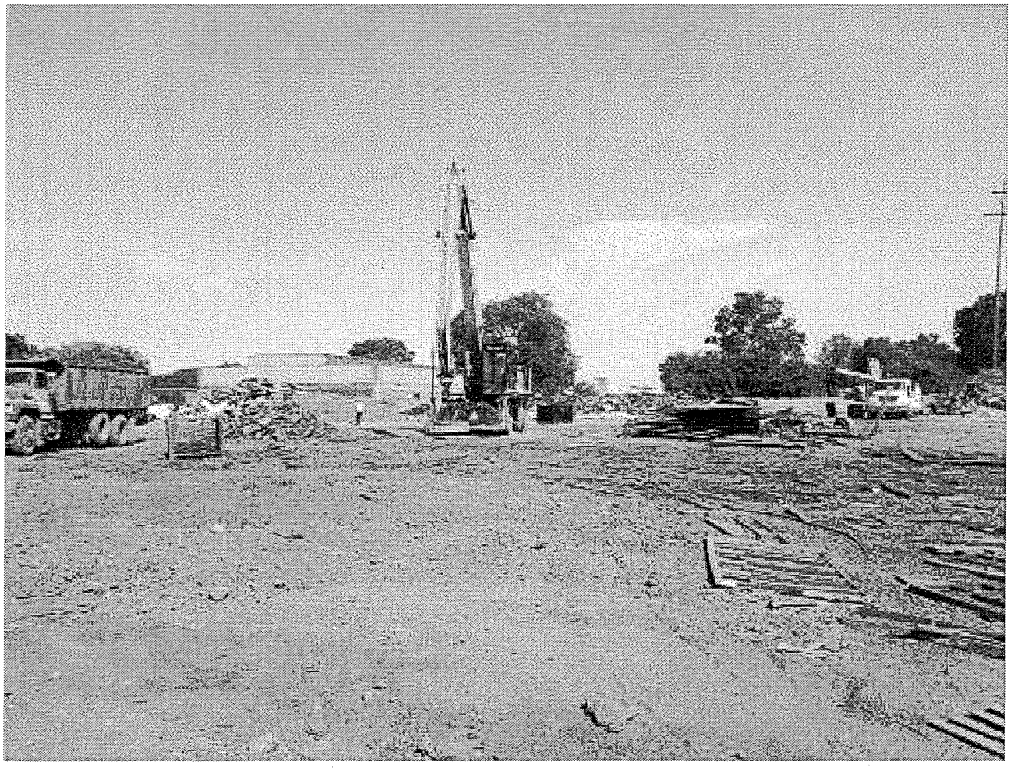

Image 5(shear) : Shear at torch cutting area

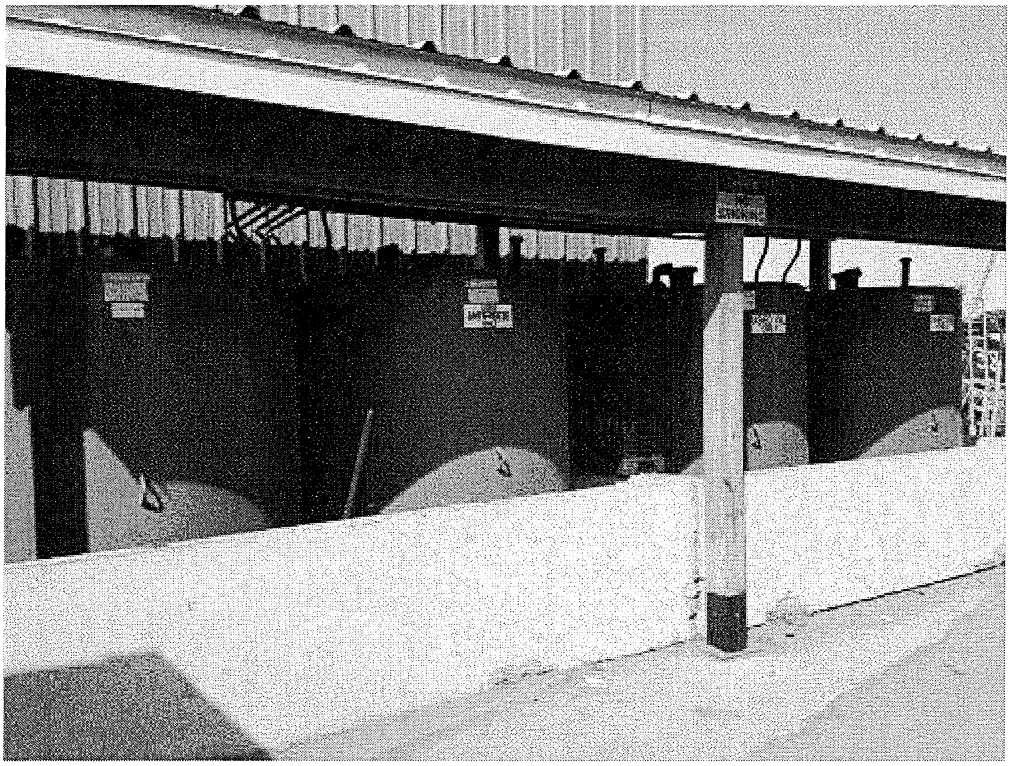

Image 6(storage tanks) : Storage tanks at depollution area

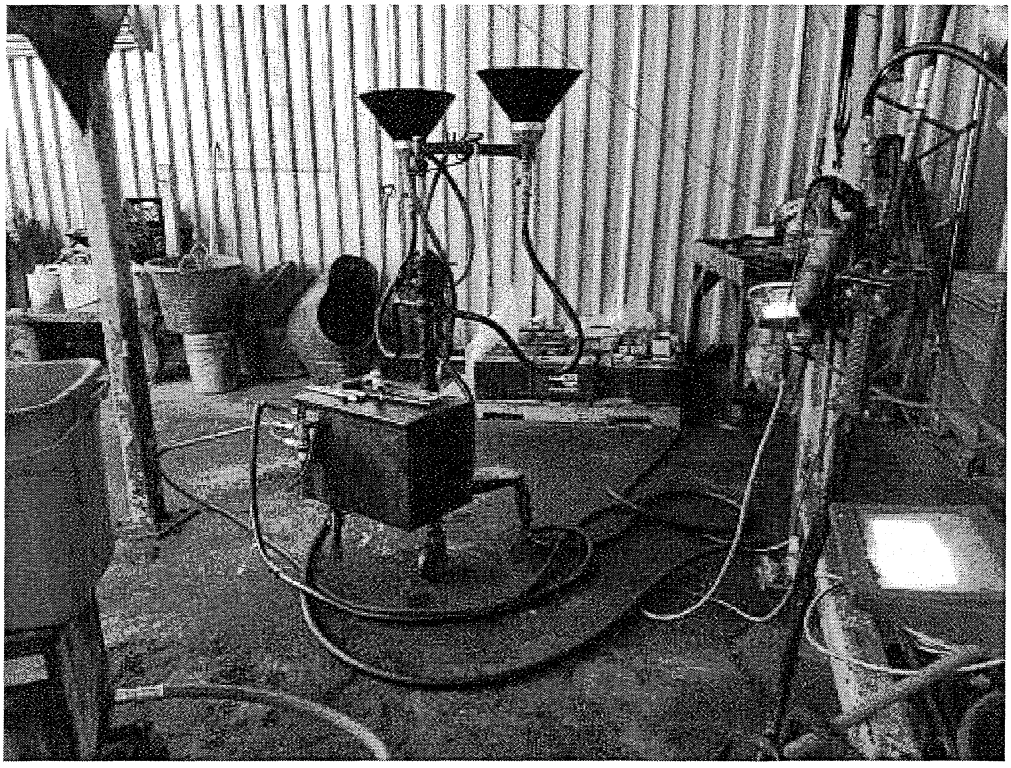

Image 7(Depollution) : Depollution area

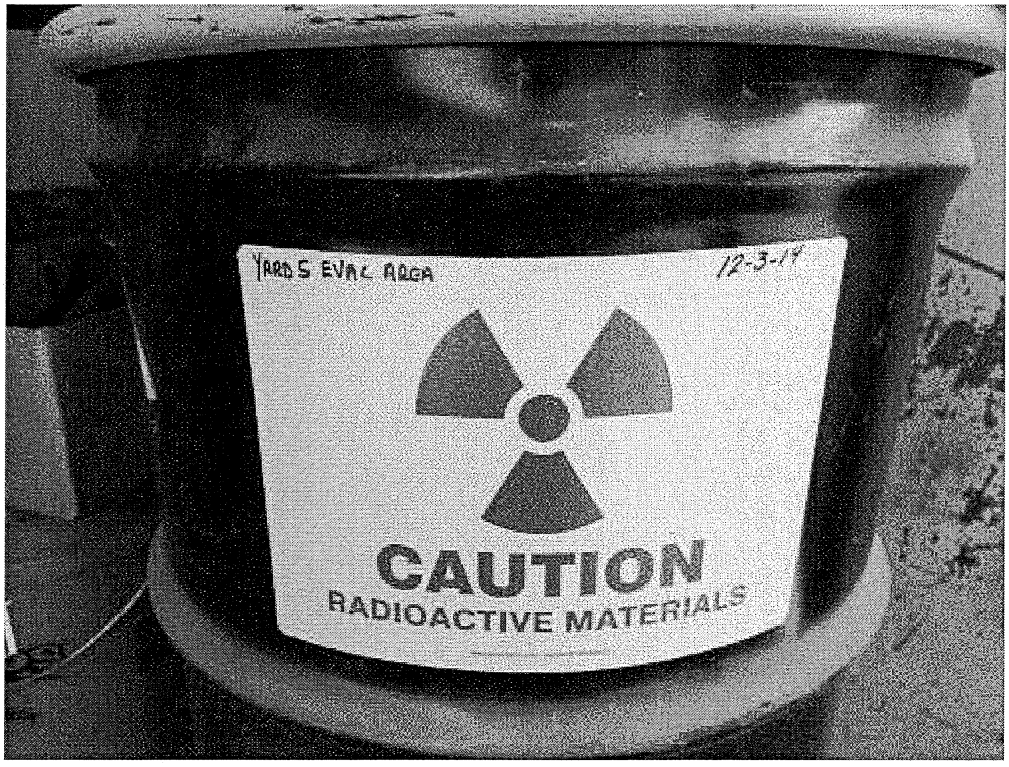

Image 8(Radioactive) : Collected radioactive material

Image 9(mercury switches) : Mercury switches

Image 10(mercury switches) : Mercury switch collection container

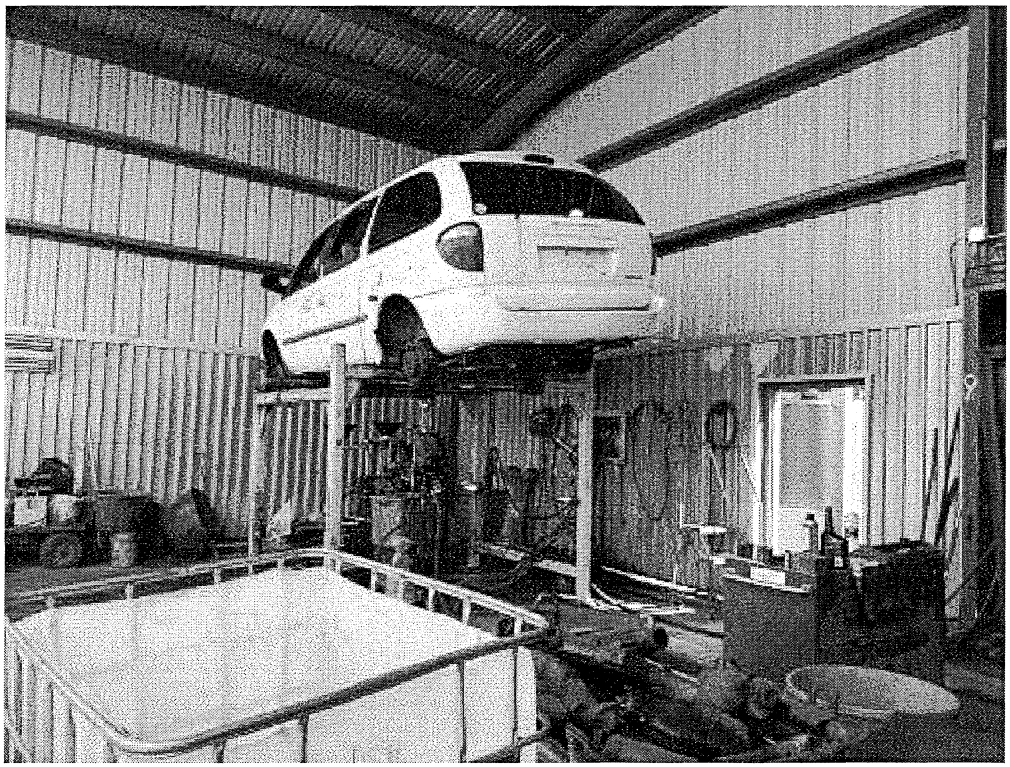

Image 11(Depollution area) : Depollution area

Image 12(Crane) : Crane near shredder

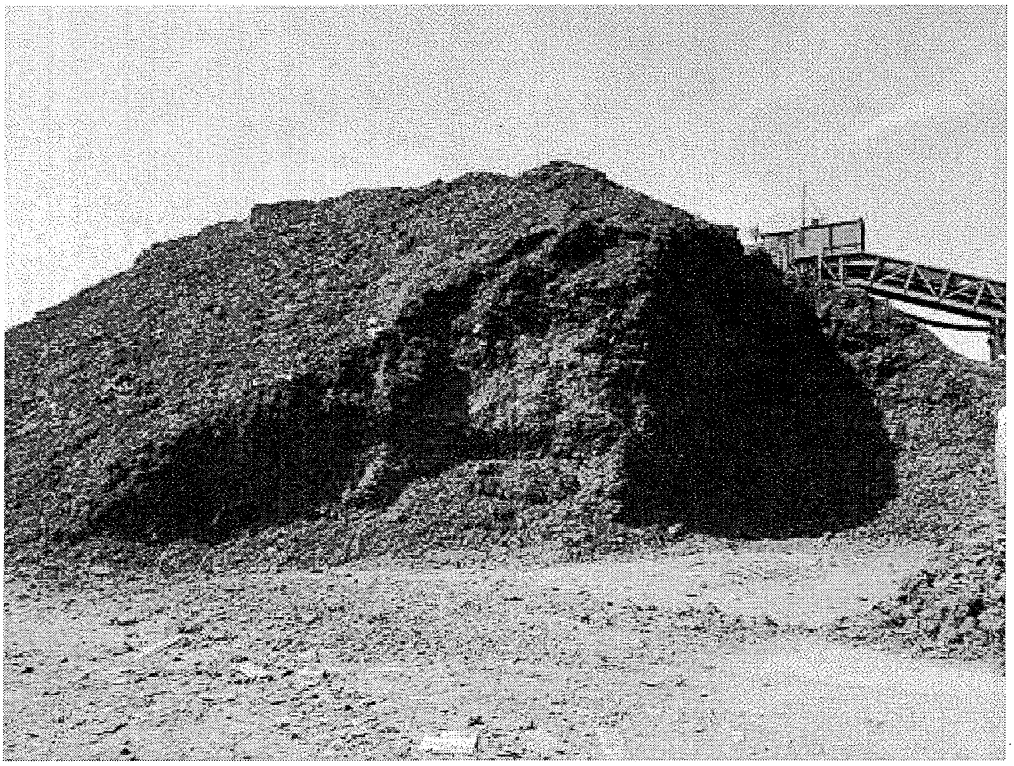

Image 13(Fluff pile) : Fluff pile

Image 14(Fluff bunker) : Fluff bunker

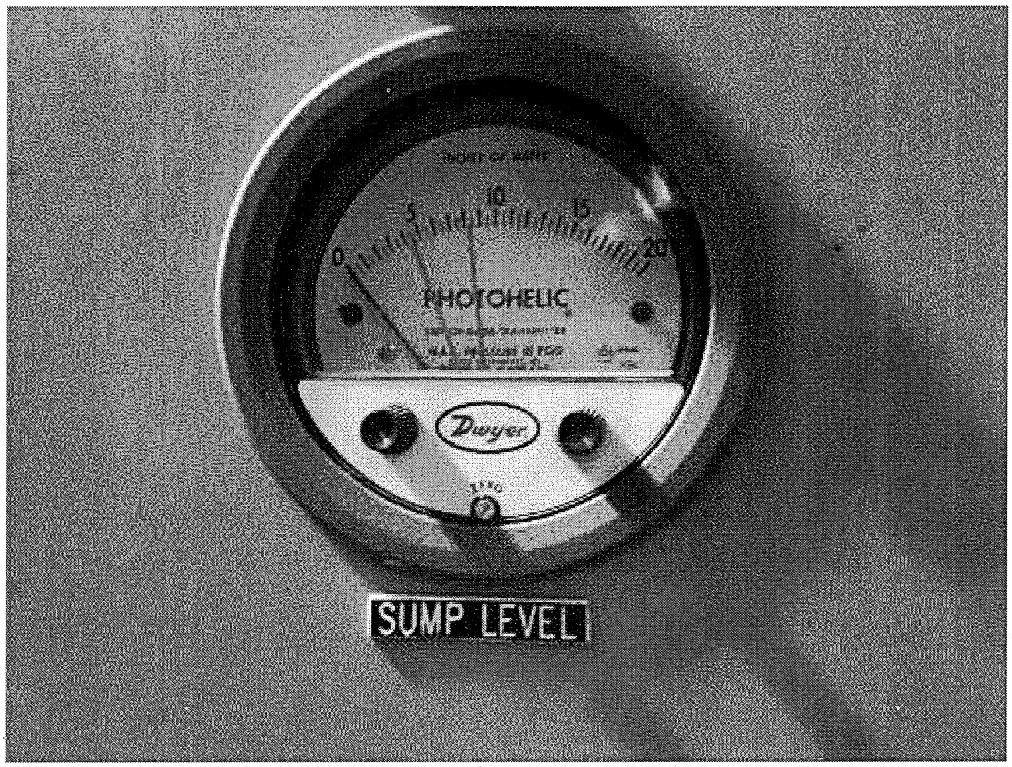

Image 15(Venturi gauge) : Venturi scrubber pressure drop gauge

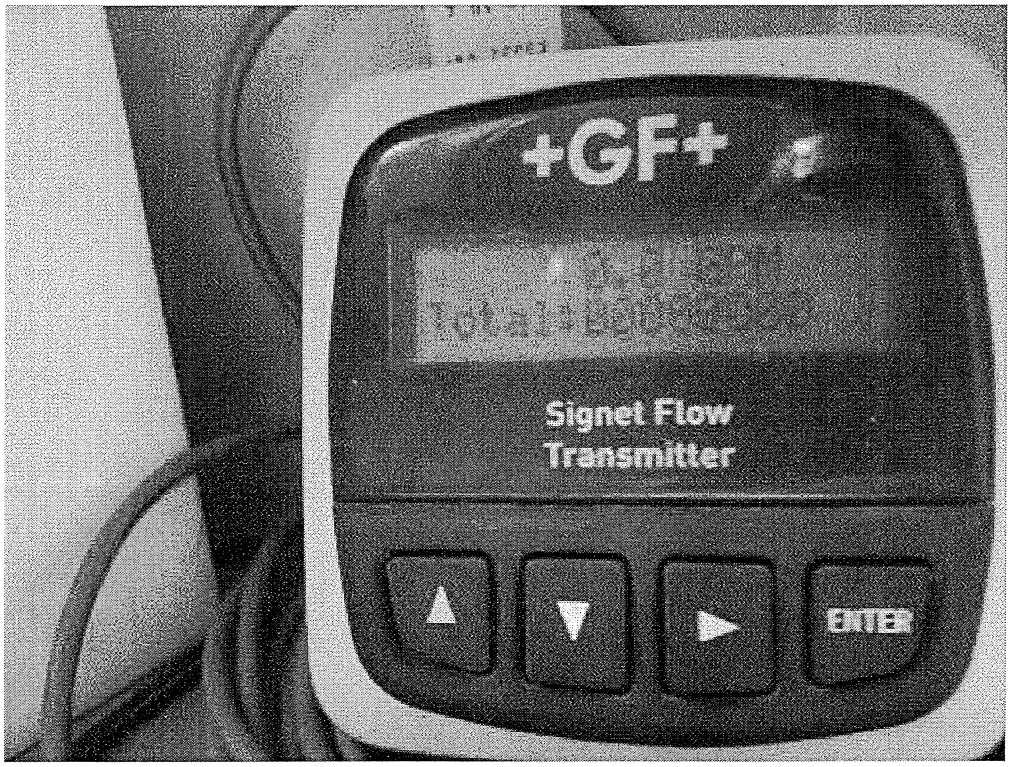

Image 16(flow rate gauge) : Venturi scrubber flow rate gauge

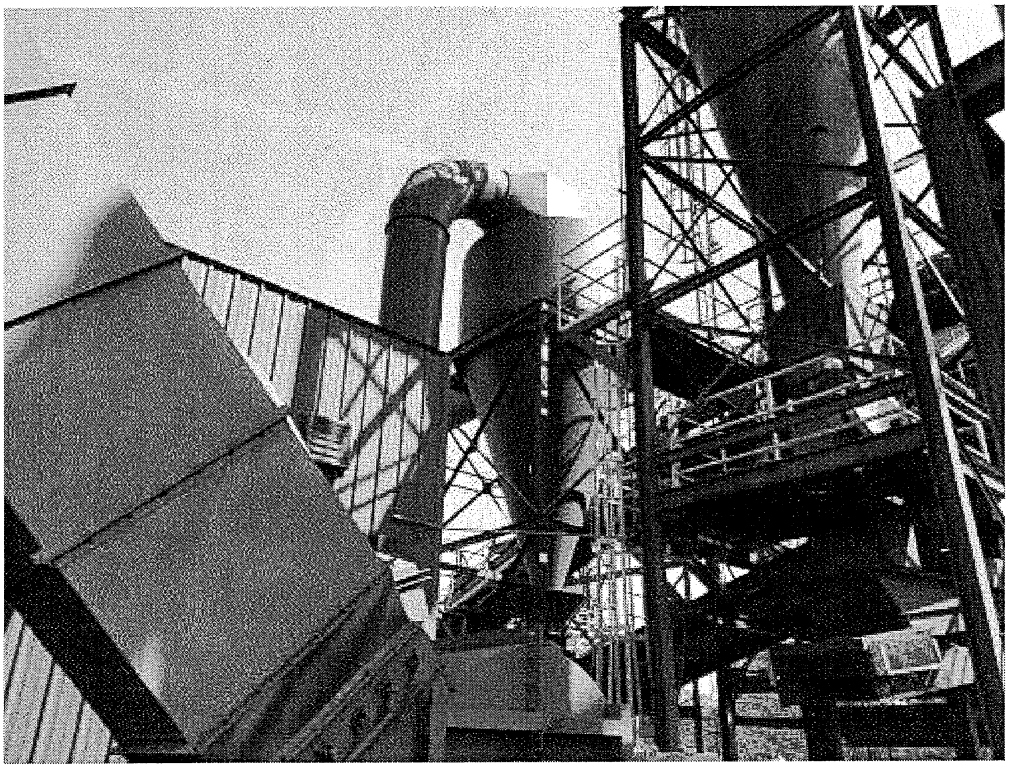

Image 17(cyclones) : Main cyclone on left, Z-box cyclone on right

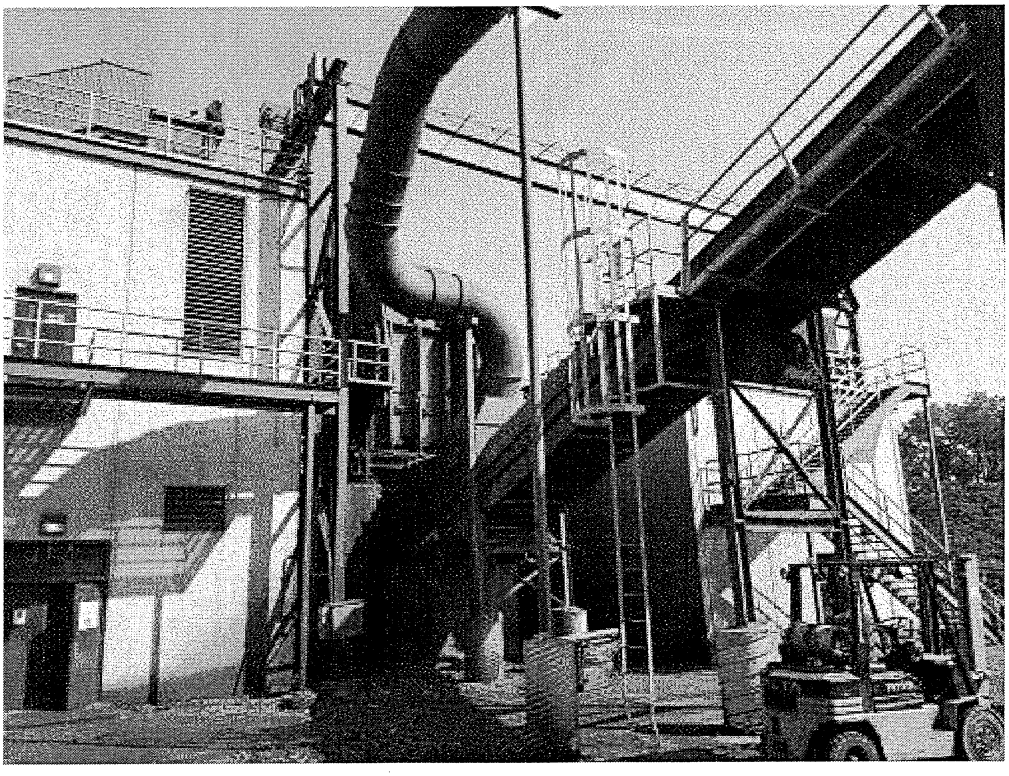

Image 18(shredder) : Shredder

NAME M. Kowalski DATE 8/28/2017 SUPERVISOR