UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 08 2017

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Bobby D. Edwards
IPD Division EHSE Manager
Parker Hannifin Corporation
Instrumentation Products Division
1005 A Cleaner Way SW
Huntsville, Alabama 35805

SUBJ: RCRA Compliance Evaluation Inspection
Parker Hannifin Corporation
EPA ID # ALR000005884

Dear Mr. Edwards:

Enclosed is a copy of the U.S. Environmental Protection Agency inspection report documenting the results of the March 13, 2017, inspection of Parker Hannifin Corporation located at 1005 A Cleaner Way SW, Huntsville, Alabama. This was an EPA compliance evaluation inspection (CEI) for the purpose of evaluating the facility's compliance with the applicable Resource Conservation and Recovery Act (RCRA) regulations.

A copy of this report has been forwarded to the Alabama Department of Environmental Management (ADEM) for follow-up. If you have any questions regarding this matter, please contact Paula Whiting by phone at (404) 562-9277 or by email at whiting.paula@epa.gov.

Sincerely,

Alan A. Annicella
Chief, Hazardous Waste Enforcement and
Compliance Section
Enforcement and Compliance Branch
Resource Conservation and Restoration Division

Enclosure

cc: Bailey Dykes, Industrial Hazardous Waste Program, ADEM Land Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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MAY 08 2017

Vernon H. Crockett
Chief, Industrial Hazardous Waste Branch
Land Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059

SUBJ: RCRA Compliance Evaluation Inspection
Parker Hannifin Corporation
EPA ID Number: ALR000005884

Dear Mr. Crockett:

On March 13, 2017, a U.S. Environmental Protection Agency compliance evaluation inspection was conducted at Parker Hannifin Corporation, located in Huntsville, Alabama, to determine the facility's compliance status with the Resource Conservation and Recovery Act (RCRA). Apparent violations of RCRA were discovered. Please follow-up with Parker Hannifin Corporation to ensure violations have been addressed.

Enclosed is a copy of the EPA inspection report. If you have any questions regarding this matter, please contact Paula Whiting, of my personnel, by phone at (404) 562-9277 or by email at whiting.paula@epa.gov.

Sincerely,

Alan A. Annicella

Alan A. Annicella
Chief, Hazardous Waste Enforcement and
Compliance Section
Enforcement and Compliance Branch
Resource Conservation and Restoration Division

Enclosure

RCRA Inspection Report

1) Inspector and Author of Report

Paula A. Whiting
Environmental Engineer
U.S. Environmental Protection Agency, Region 4
Hazardous Waste Enforcement and Compliance Section
Enforcement and Compliance Branch
Resource Conservation and Restoration Division
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
(404) 562-9277

2) Facility Information

Parker Hannifin Corporation
Instrumentation Products Division
1005 A Cleaner Way SW
Huntsville, Alabama 35805
Madison County
EPA ID: ALR000005884

3) Responsible Official

Bobby D. Edwards
IPD Division EHSE Manager
Parker Hannifin Corporation
1005 A Cleaner Way SW
Huntsville, Alabama 35805

4) Inspection Participants

David Manning	Parker Hannifin Corporation
Bailey Dykes	ADEM Land Division
Paula Whiting	US EPA Region 4 Atlanta

5) Date and Time of Inspection

March 13, 2017 at 12:40 p.m. CDT

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002, 3005 and 3007 (42 U.S.C. §§ 6922, 6925 and 6927), and the regulations promulgated pursuant thereto at 40 Code of Federal Regulations (C.F.R.) Parts 260-270, 273 and 279.

ADEM Administrative Code 335 Division 14

7) **Purpose of Inspection**

The purpose of the inspection was to conduct an unannounced RCRA compliance evaluation inspection (CEI) to determine the compliance of Parker Hannifin Corporation, EPA ID# ALR000005884 with the applicable regulations.

8) **Facility Description**

The Parker Hannifin Corporation Instrumentation Products Division (Parker IPD), Huntsville, Alabama was formerly located at 9400 South Memorial Parkway until 1997. The South Memorial Parkway location was being demolished at the time of the inspection. Parker IPD produces highly engineered pressure and temperature process control instrumentation and systems. These products range from compression tube fittings, cone and thread fittings, needle valves, ball valves, compact stream switching valves to modular process to instrument valve packages. This facility produces 10,000 on-demand fittings per customer request within 24 to 48 hours.

This plant manufactures small instrumentation fittings (below 1/2") that are used in instrumentation valves, skids, tubing, and oil and gas industries (Pictures 1-2). Various materials are used to manufacture these fittings including stainless steel, brass, and some exotics such as hastelloy and monel. Stainless steel is about 85% of the volume with brass being about 10% and the rest of the metals are exotics.

Parker IPD currently has 75 employees, of which 40 of these are office/salary employees and the remaining 35 employees work in the manufacturing area, working one 8-hour shift, 5 days a week. Only one employee at this location handles hazardous waste.

Parker IPD's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated March 28, 2016, characterized the facility as a large quantity generator (LQG) of hazardous waste.

Currently, Parker IPD may generate hazardous waste streams, used oil and universal wastes (such as spent batteries and certain types of lamps), waste solvent, spent aerosol cans, paint waste and other wastes which include EPA Waste Codes D001, D002, and F006.

9) **Previous Inspection History**

This facility was previously last inspected on March 23, 2004 by ADEM. Eleven issues were found and returned to compliance on May 27, 2004.

10) **Findings**

Upon arriving at the Parker Hannifin Corporation facility, the inspectors signed in at the security desk before being escorted around the facility. The inspectors presented their credentials to Mr. Manning at 12:40 p.m. CDT.

A brief explanation for the purpose of the inspection was given, as well as an introduction of the ADEM and EPA inspectors. The inspectors requested a description of the facility operations. The inspectors then performed a walk-through inspection of specific areas in the facility. Below is a description of the observations made during the walk-through.

10.1 Laboratory

The Parker IPD laboratories are used for research and development and quality testing. The inspectors toured the metallurgical lab and Mr. Manning explained that the waste acid is generated in this laboratory. The acid is used to create etchings in the product to be tested to help determine faults in the metal. The waste acid is poured down the sink which goes to the facility wastewater treatment plant (WWTP). No other hazardous waste was in this area and no satellite accumulation areas (SAA) were observed in this area.

The inspectors toured the burst chamber, which is used to blow up the metal parts using heat and cold. No hazardous waste or SAA were observed in this area.

10.2 Production

The Production Area produces brass parts. The inspectors observed stainless steel fines and chips in green and blue 55-gallon drums being collected for recycling (Picture 3). A Better Engineering WR1 parts washer (Picture 5) was next to a brass bright dip process (Picture 7) and across from a passivation process (Picture 6). The parts washer uses Aquaease PL 733, a non-hazardous waste cleaner. Mr. Manning stated that the discarded waste water from the parts washer is shipped off-site along with the facility mop water and the water/oil mixture.

Pickling Process

The passivation process cleans the stainless steel products. The process contains a citric acid tank and two water rinse tanks. Mr. Manning explained that the process generates 40 gallons of soap and citric acid. Since the WWTP is unable to process the citric acid waste, the waste water from the process is neutralized in 55-gallon drums and then shipped off every six months.

Brass Bright Dip

The brass bright dip process produces a polished part and removes any minor corrosion that may be present in the brass parts. This process contains a bright dip tank, two water rinse tanks, a peroxide tank, a soap tank and a caustic tank to produce the desired result. Mr. Manning stated that the process leaches out the brass and discarded waste water is contaminated with lead and copper is sent to the WWTP. The brass bright dip process is the main generation point for the WWTP sludge which generates a Gaylord box every six months.

Sand Filter

The inspectors observed a Mitsubishi Electric MC Machinery System, Inc. waterjet using red garnet sand. The sand is stored in a metal hopper, then fed through the water jet where water and sand is sent through at a high pressure to cut metal parts. The waste water and the spent sand are separated in a water separator tank (Picture 8). Mr. Manning stated that the red garnet sand is non-hazardous, however an analysis to determine if the spent sand is hazardous waste has not been made.

Production Floor

The inspectors toured the production floor and observed three yellow fire cabinets each located along the back wall of the area. Each cabinet contained a 55-gallon drum of used absorbent pads (Pictures 9-10). The drums were labeled "Used Oil" but not closed. Mr. Manning closed each drum. An oil and coolant system was observed on the production floor. Mr. Manning explained that coolant is recirculated into the system and the oil is skimmed using an oil and water skimmer. The recirculated coolant evaporates from the system and is recollected by a mist collector, in addition to fresh coolant being added to the system. The mist collector separates the coolant from the air being breathed by the production operators. The skimmed oil and water are collected into a red one-gallon container underneath the skimmer (Pictures 11-12). The container was observed not closed when it was not in use.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(a)1., a container holding used oil must always be closed during storage, except when it is necessary to add or remove used oil.

A dry vacuum used to pick up a mixture of metal chips and sand was located next to a belt sander (Picture 13). The inspector observed some of the metal chips and sand mixture on the floor beside the dry vacuum (Picture 14). Mr. Manning explained the metal chips are sent out for recycling and an analysis to determine if the metal chips is hazardous waste has not been made.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must determine if that waste is a hazardous waste following the methods articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

10.3 Salt Corrosion Testing Room

In this room salt water is sprayed on the metal to simulate environmental exposure. The salt water leaches brass fines from the metal. The spent salt water is sent to the WWTP and the brass fines are collected in the sludge.

10.4 Oil Room

The Oil Room is the collection center for used oil and storage area for incoming oil and lubes used in the facility (Picture 21). The inspectors observed the following in this area:

- Three 5-gallon containers of used cutting oil that was intended to be reintroduced into the equipment (Pictures 15-16). However, the containers had been left unlabeled and not closed for two days without reuse;
- One 70-gallon used oil collector that is pumped into the oil tank. The tank was not closed (Pictures 17-19);
- A blue mop bucket had used oil stored inside (Picture 20). The bucket was not labeled "Used Oil" or closed; and
- An 85-gallon overpack drum with a damaged 55-gallon drum of incoming raw material (Pictures 22-23).

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(c)1. [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

The Production staff added the three 5-gallon containers into a 55-gallon drum and labeled the drum during the inspection (Picture 29).

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(a)1., a container holding used oil must always be closed during storage, except when it is necessary to add or remove used oil.

10.5 Chips/Drum Shed

The Chips and Drum Shed was located outside the exterior door of the Oil Room. The inspectors observed empty drums being stored, blue 55-gallon drums used to separate the metal chips by material type and a Gaylord box of mixed metal (Picture 24). No hazardous waste was observed in this area.

10.6 Used Red Garnet

The inspectors observed 12 super sacks of used red garnet sand sitting outside on the concrete (Picture 25). Mr. Manning stated that the spent sand was not hazardous but was being shipped by a hazardous waste hauler. Mr. Manning assured the inspectors that the no brass stock was cut on this sand blaster. However, an analysis to determine if the spent sand is hazardous waste has not been made.

10.7 Oil Shed

The Oil Shed is a standalone building that houses a 10,000-gallon tank for used oil and water (Picture 26). The inspectors observed underneath the tank four 5-gallon containers of used oil, a green pan with used oil inside and used oil dri on the floor (Pictures 27-28). The containers and pan were not closed and not labeled. In additionally, the used oil dri had not been removed from the floor.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(c)1. [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(a)1., a container holding used oil must always be closed during storage, except when it is necessary to add or remove used oil.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(d) [40 C.F.R. § 279.22(d)], upon detection of a release of used oil to the environment, the facility must clean up and manage properly the released used oil and other materials.

10.8 Waste Water Treatment Plant

The WWTP is operated by Mr. Manning. The wastewater treatment unit is a microfiltration unit and is only in operation once or twice a week due to the low flow of material coming in (Pictures 30-31). The main use of the unit is for minor pH adjustments. All the floor grates and drains, and the waste water generated by the facility with the exception of passivation process is sent to the WWTP. The inspectors observed the following at the WWTP:

- One blue 55-gallon drum of Hydrogen peroxide and sulfuric acid from the Brass Bright Dip process (Picture 32);
- One black 55-gallon drum of used Metex 6625E soap (Picture 33);
- Used bleach and used sulfuric acid for cleaning the WWTP filter. The spent material is

collected and put into the WWTP system for final disposal.

- One Gaylord box of hazardous waste sludge labeled "Metal Hydroxide, F006, Wastewater Sludge, C151142MDI." The box was closed and the label was hidden under the plastic (Pictures 34-35). The log book kept by Mr. Manning had the new box of sludge dated as February 3, 2017.
- Bags of abrasive red garnet grains and powder, labeled non-hazardous waste material red sand, AR07151; and
- Two 55-gallon drums of used citric acid waiting to be neutralized by caustic soda before being picked up for disposal (Pictures 36-38).

No issues were observed in this area.

10.9 Mezzanine

The universal waste lamps were stored in the Mezzanine. The inspectors observed:

- Seven 4-foot boxes of spent fluorescent lamps not closed (Pictures 39-40);
  - Five of the 4-foot boxes were dated November 23, 2016, August 24, 2016, November 9, 2016, December 6, 2016 and January 9, 2017;
  - One 4-foot box was not labeled or dated;
  - One 4-foot box was not dated;
- One 8-foot box of spent fluorescent lamps, not closed, not labeled or dated (Pictures 40-41).

Pursuant ADEM Admin. Code r. 335-14-11-.02(4)(d) [40 C.F.R. § 273.13(d)], a Small Quantity Handler of Universal Waste (SQHUW) must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment.

Pursuant to ADEM Admin. Code r. 335-14-11-.02(5)(e) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamps."

Pursuant to ADEM Admin. Code r. 335-14-11-.03(6)(a) and (c) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

10.10 Universal Waste Battery Storage

The Universal Waste Battery Storage Area (Picture 42) contained a half-gallon container of spent nickel cadmium batteries that was not closed, labeled and dated December 14, 2015 (Pictures 45, 49); a 3.5-gallon container of spent lithium ion batteries that was closed, labeled and dated October 6, 2015 (Pictures 43, 48); and a half-gallon of spent nickel metal hydride that was closed, labeled and dated April 20, 2016 (Pictures 44, 46, 47).

The inspectors observed that the two of the containers had been stored over a year. Mr. Manning explained that the facility was trying to fill up the containers before shipping them off for disposal.

Pursuant to ADEM Admin. Code r. 335-14-11-.02(6)(a) and (c) [40 C.F.R. § 273.15(a) and (c)], a Small Quantity Handler Universal Waste may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

Records Review

After the walkthrough, the inspectors requested the training records, the contingency plan, inspection logs and the 2014-2016 hazardous, non-hazardous, used oil and the universal waste manifests. The generator status notification (EPA Form 8700-12) was last updated March 28, 2016.

The training records for the David Manning were requested. The job description and duties were reviewed. Mr. Manning received Hazardous Waste Operations and Emergency HazWOPER Training on May 7-9, 2014 from the University of Alabama, Huntsville; Hazardous Materials Spill and Emergency Response training on June 18, 2015 from the University of Alabama, Huntsville; and DOT HazMat General and Security Awareness online training on July 28, 2015. The training record for Mr. Bobby Edwards was also reviewed, and Mr. Edwards received RCRA Awareness training on April 27, 2016 from the Parker Hannifin.

The inspectors requested the contingency plan. The plan included a current emergency contact list and contact home addresses, a fire extinguisher map, an evacuation map and a list of emergency response equipment. Documentation (i.e., green return receipt cards) that copies of the contingency plan were provided to the local emergency response agencies (i.e., fire, police, hospital) was available. The emergency contact list needed to be updated to remove former employee Gail Perna.

The inspectors reviewed the weekly inspection records from 2014 – 2016 for the HWSA. The facility does not have a dedicated less than 90-day hazardous waste storage area. In the hazardous waste storage area inspection records, the December 2016 inspection record was missing the date. Mr. Manning immediately corrected the record. No universal waste records were available for review. The inspectors recommended updating the inspection form to include the universal waste storage areas.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(a)1.(i) [40 C.F.R. § 262.34(a)(1)(i)], which incorporates 335-14-6-.09(5) [40 C.F.R. § 265.174], and is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect areas where containers are stored looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Waste profiles were reviewed for F006 Wastewater Sludge analyzed by Michigan Disposal Waste Treatment Plant (EPA ID MID000724831) dated March 25, 2015; red garnet sand dated 2008; and waterjet sludge dated 2008. The inspectors stated that updated analyses were needed for the red garnet sand and waterjet sludge.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must determine if that waste is a hazardous waste following the methods articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Hazardous and non-hazardous manifests were reviewed for 2014-2016. Hazardous wastes (F006) was transported by Univar USA Inc. (EPA ID GAD980845077), and EQ Industrial Services (EPA ID MIK435642742) to and disposed of by EQ Michigan Disposal (EPA ID MID000724831) for storage/treatment.

Non-hazardous neutralized citric acid and red garnet sand was transported by Spectra (EPA ID TNR000005439) and Univar USA Inc. (EPA ID GAD980845077) to Clean Earth of Alabama (EPA ID ALD981020894) and VLS Armor, LLC (EPA ID TND981920119).

The land disposal restriction forms were reviewed and no issues were observed during the review.

Used oil shipping records were not available during the records review.

11) Summary

The inspectors conducted the exit meeting with Mr. Manning. During this meeting, the EPA and ADEM presented the preliminary results of the inspection. Parker IPD was inspected as a large quantity generator of hazardous waste. At the time of the inspection, Parker IPD did not appear to be in compliance with some requirements of RCRA.

12) Signed

Paula A. Whiting,
Environmental Engineer

5/3/17
Date

Concurrence

Alan A. Annicella, Chief
Hazardous Waste Enforcement and Compliance Section
Enforcement and Compliance Branch
Resource Conservation and Restoration Division

5/4/17
Date

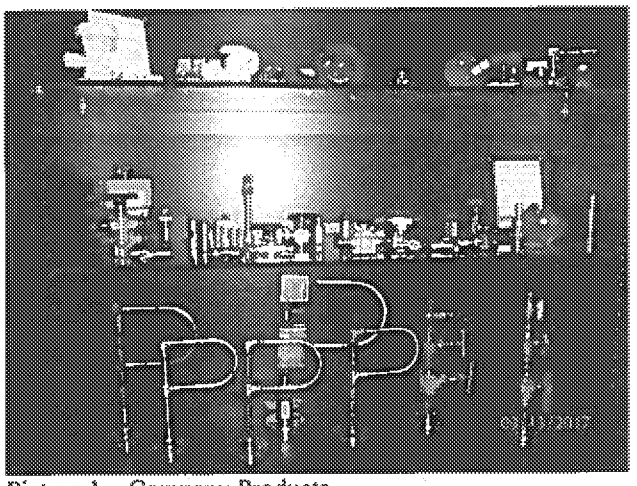
ATTACHMENT A

PARKER HANNIFIN CORPORATION

HUNTSVILLE, ALABAMA

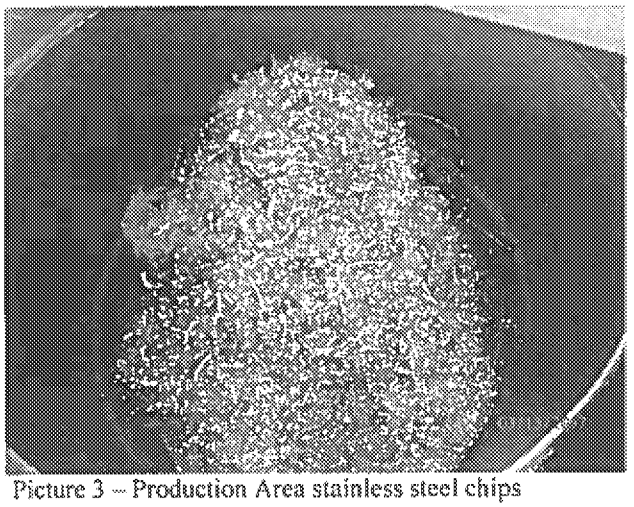
COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS

MARCH 13, 2017



Picture 1 – Company Products

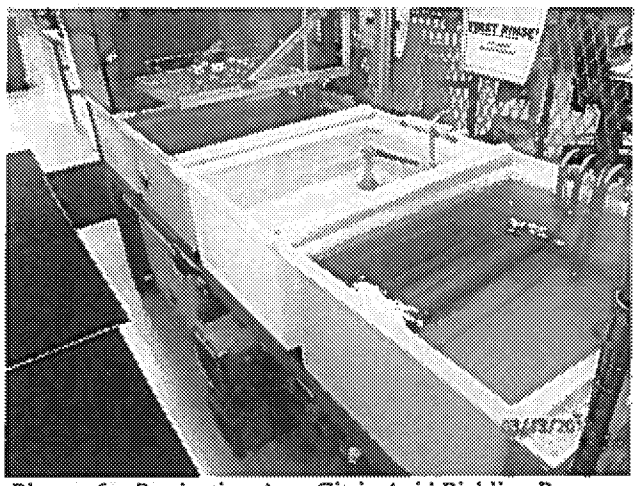
Picture 2 – Company Products



Picture 3 – Production Area stainless steel chips

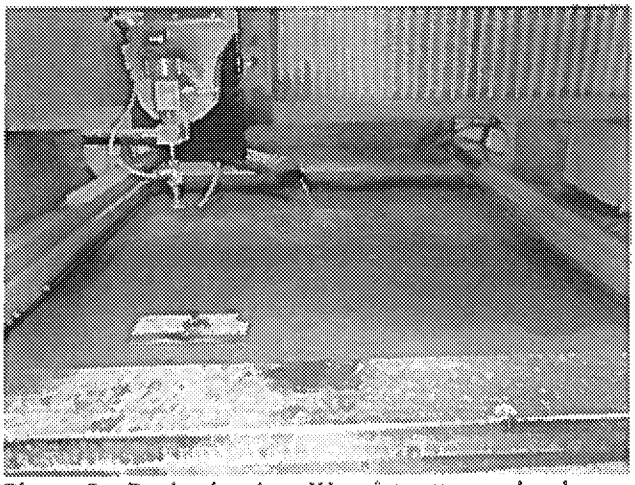
Picture 4 – Production Area stainless steel chips drum

Picture 5 – Production Area parts washer

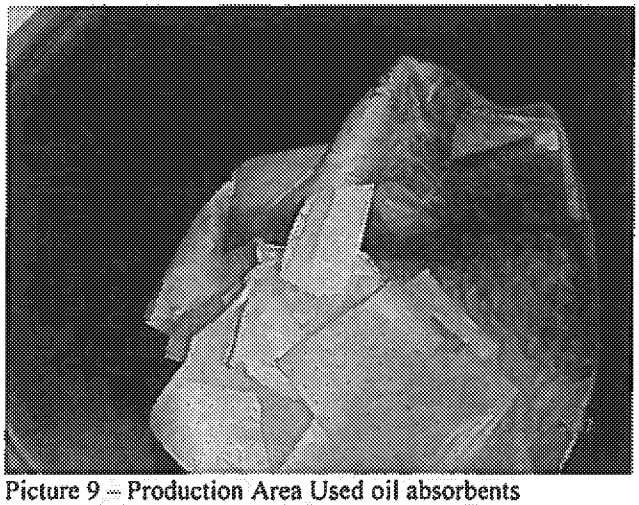


Picture 6 – Production Area Citric Acid Pickling Process

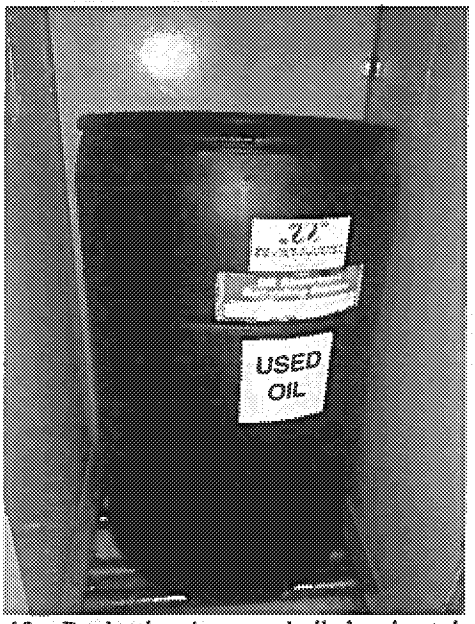
Picture 7 – Production Area Brass Bright Dip Process



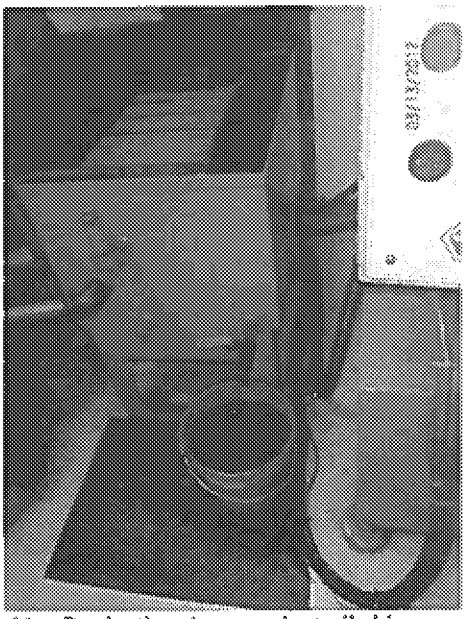
Picture 8 – Production Area Waterjet cutter sand and water separator



Picture 9 – Production Area Used oil absorbents

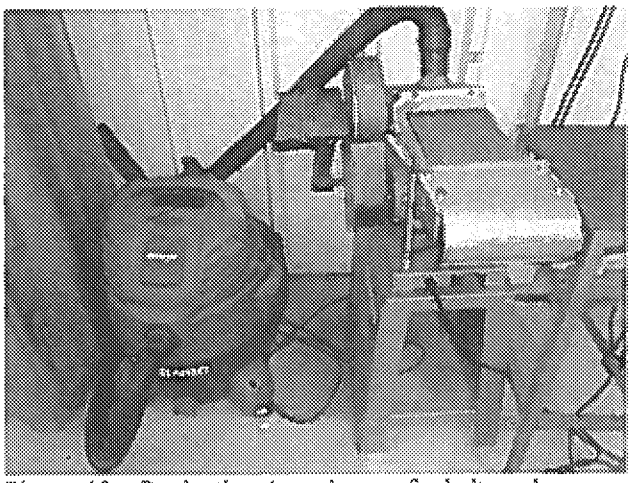


Picture 10 – Production Area used oil absorbent drum

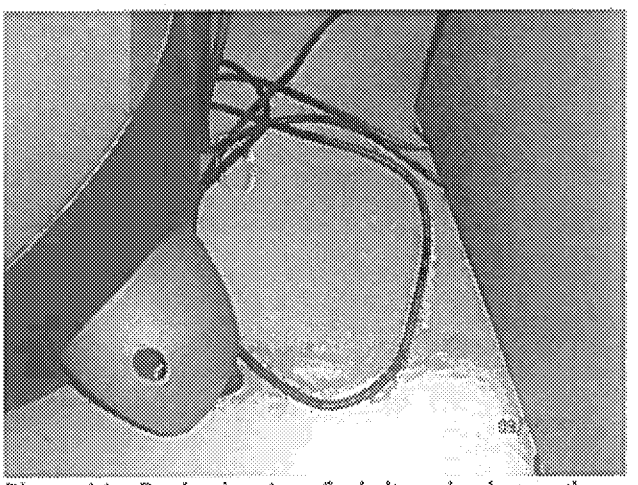


Picture 11 – Production Area coolant oil skimmer with used oil/water container

Picture 12 – Production Area open used oil/water container



Picture 13 – Production Area dry vac for belt sander



Picture 14 – Production Area for belt sander dust on the floor

Picture 15 – Oil Room recyclable oil containers

Picture 16 – Oil Room recyclable oil containers

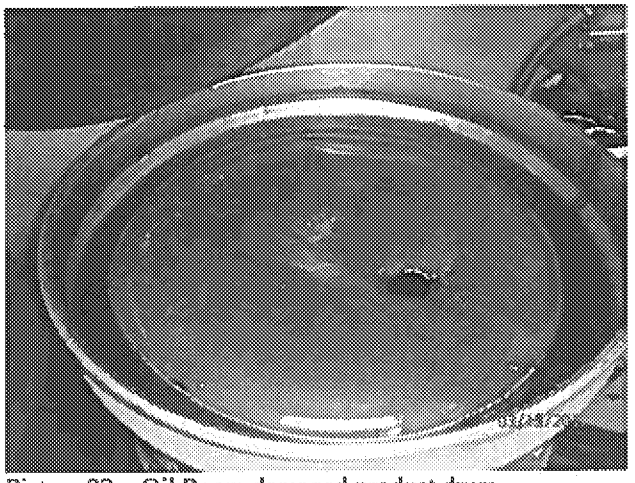
Picture 17 – Oil Room 70-gallon used oil collection tank

Picture 18 – Oil Room 70-gallon used oil collection tank

Picture 19 – Oil Room used oil collection tank pump

Picture 20 – Oil Room used oil mop bucket

Picture 21 – Oil Room

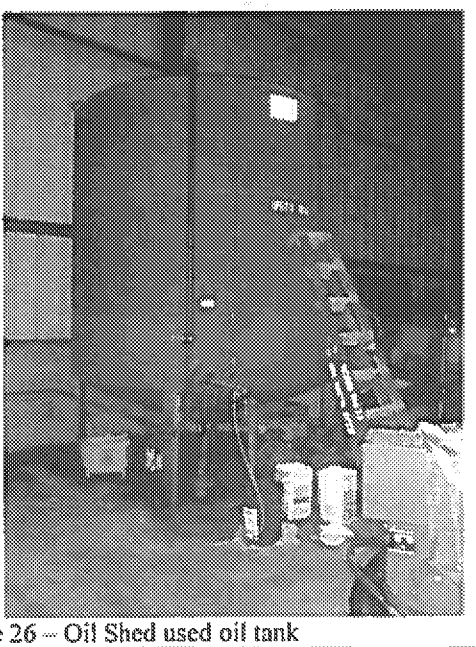


Picture 22 – Oil Room damaged product drum overpacked

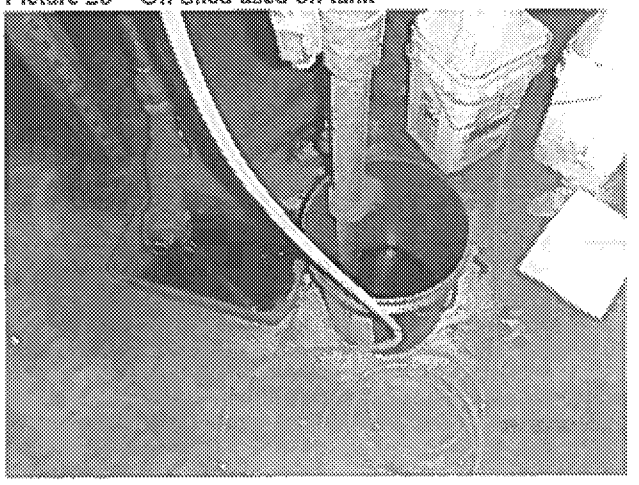
Picture 23 – Oil Room damaged product drum overpacked

Picture 24 – Chips Shed

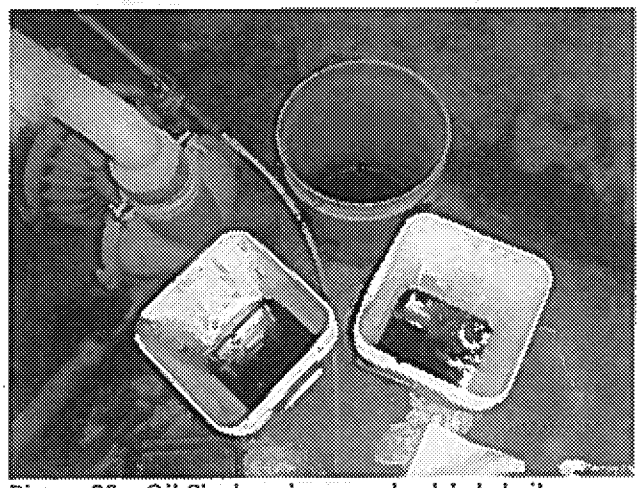
Picture 25 – Used Red Garnet Sand for disposal



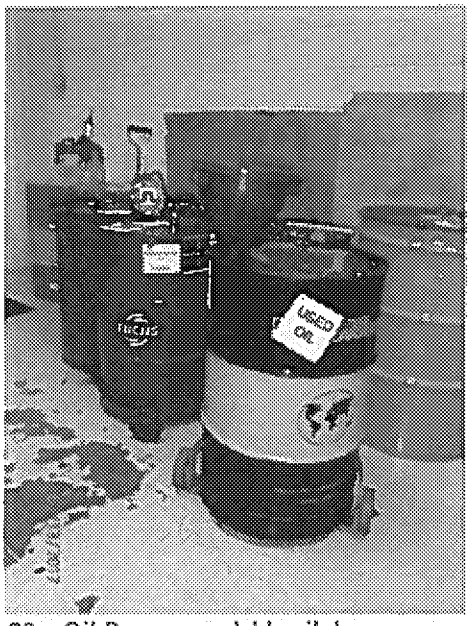
Picture 26 – Oil Shed used oil tank



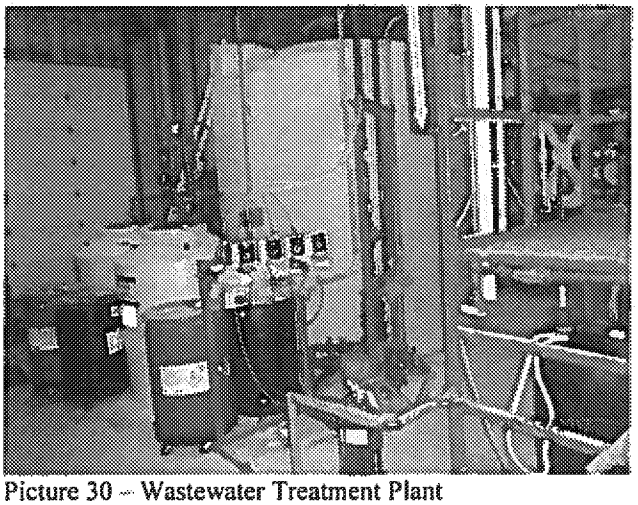
Picture 27 – Oil Shed used open and unlabeled oil containers



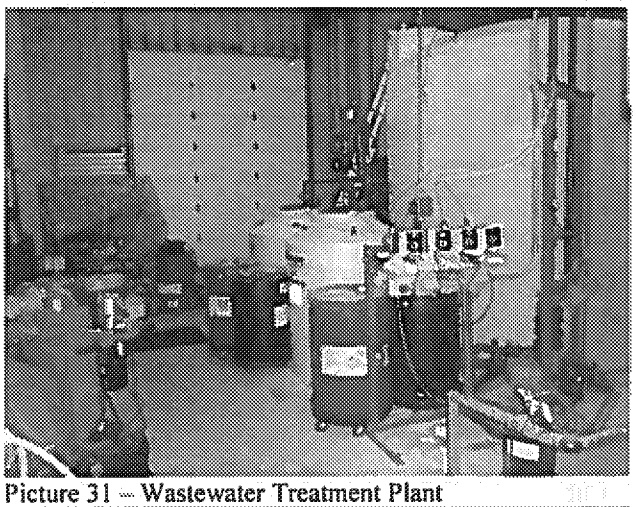
Picture 28 – Oil Shed used open and unlabeled oil containers



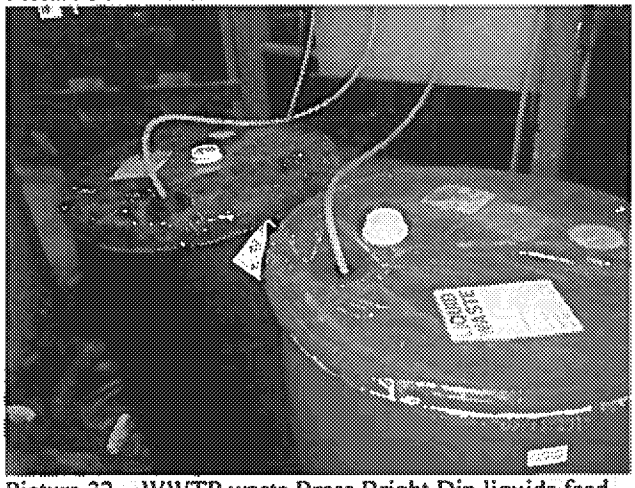
Picture 29 – Oil Room recyclable oil drum



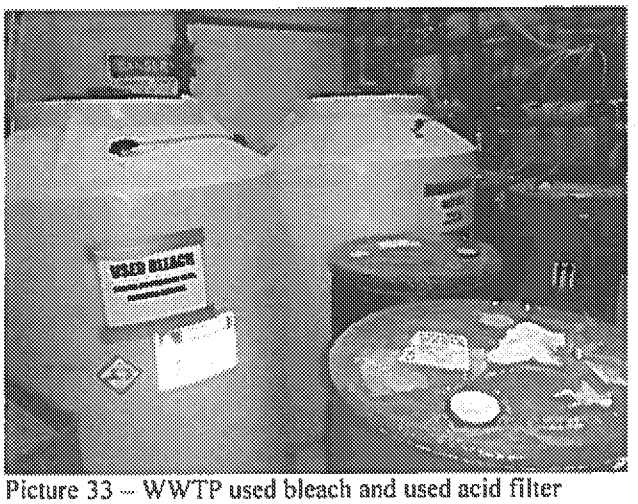
Picture 30 – Wastewater Treatment Plant



Picture 31 – Wastewater Treatment Plant



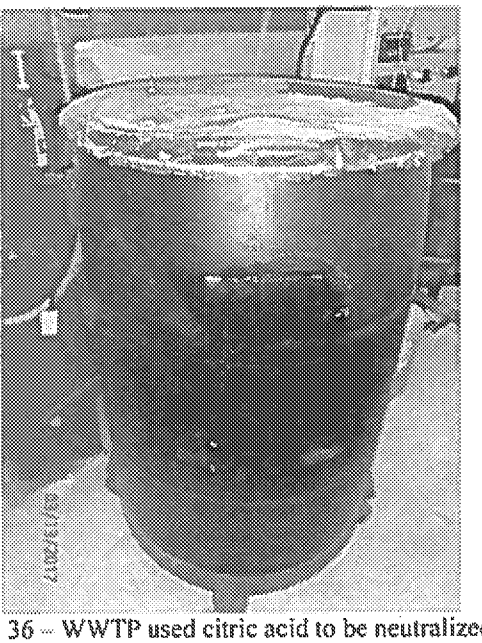
Picture 32 – WWTP waste Brass Bright Dip liquids feed into WWTP



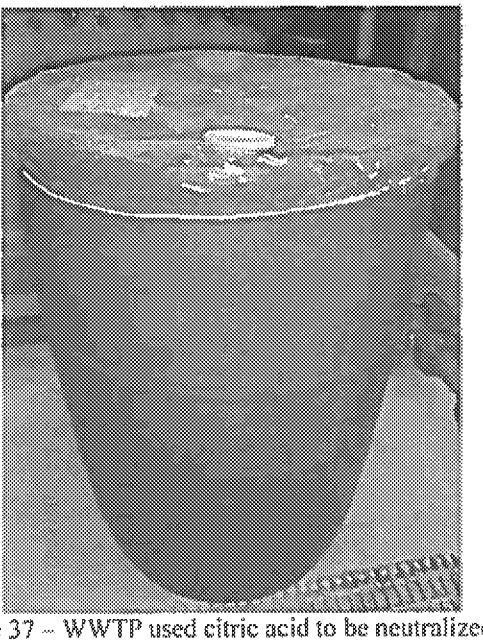
Picture 33 – WWTP used bleach and used acid filter washes

Picture 34 – WWTP hazardous waste sludge fiber board container

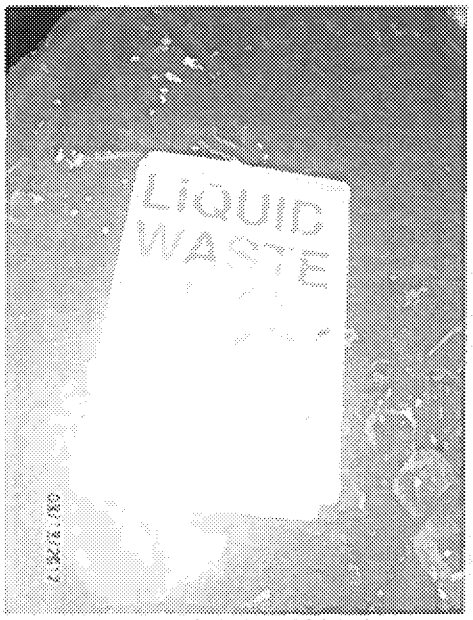
Picture 35 – WWTP hazardous waste sludge press and fiber board container



Picture 36 – WWTP used citric acid to be neutralized

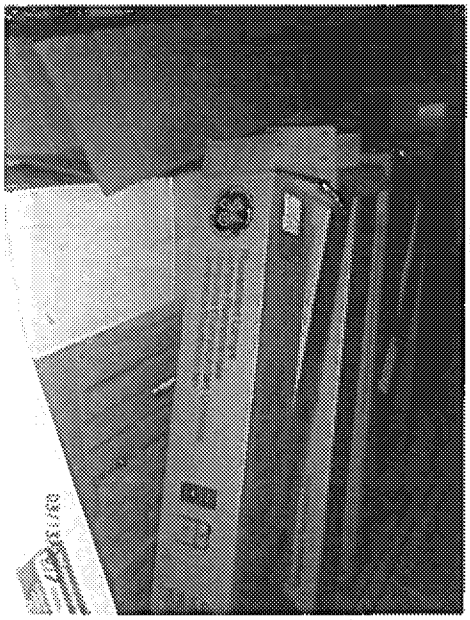


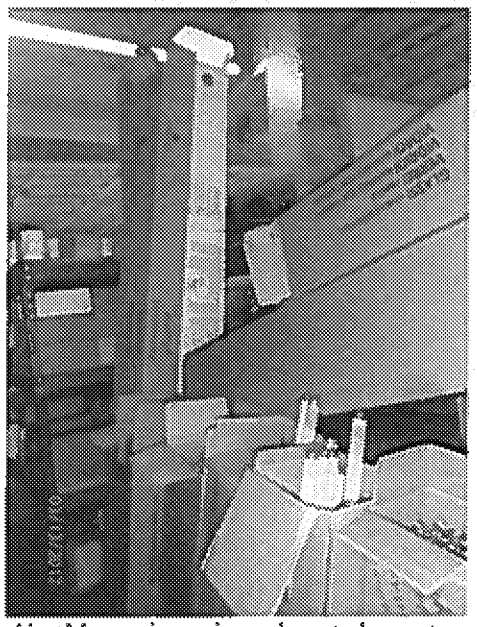
Picture 37 – WWTP used citric acid to be neutralized

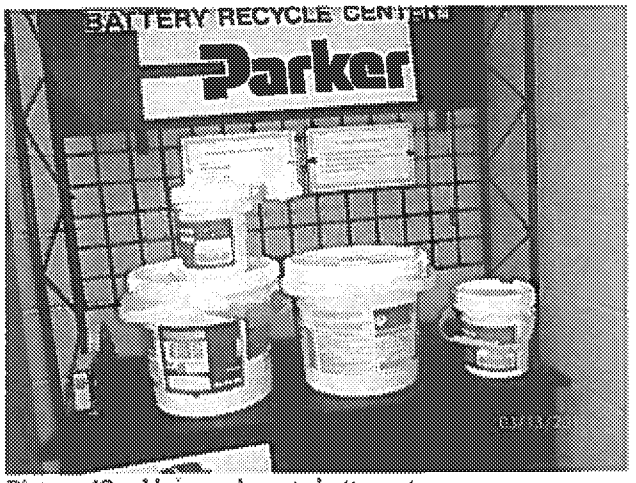


Picture 38 – WWTP used citric acid label

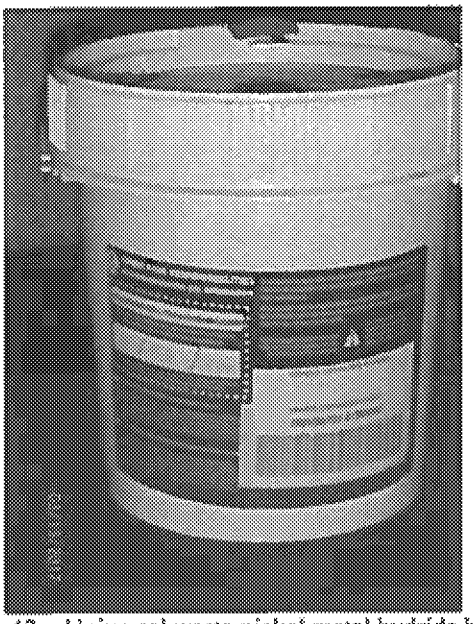
Picture 40 – Mezzanine universal waste lamp storage

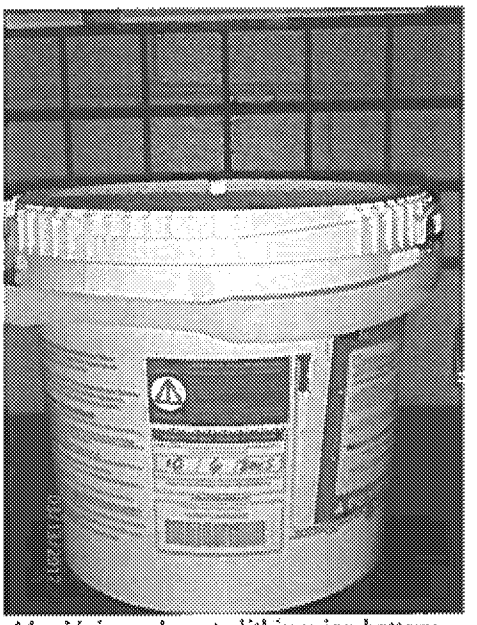

Picture 39 – Mezzanine universal waste lamp storage

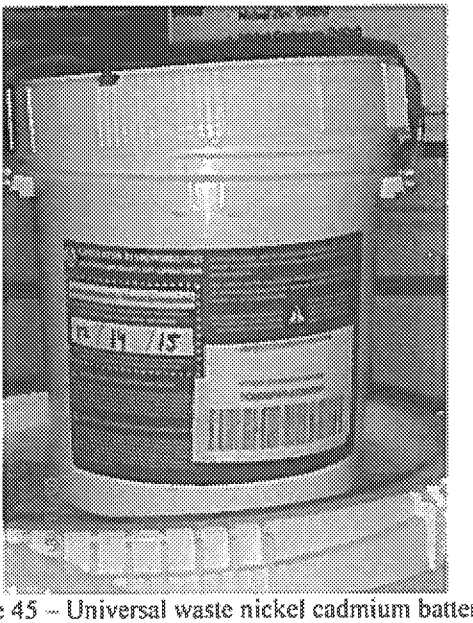

Picture 41 – Mezzanine universal waste lamp storage

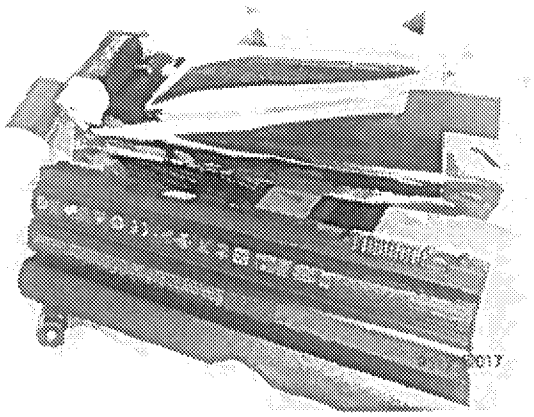


Picture 42 – Universal waste battery storage

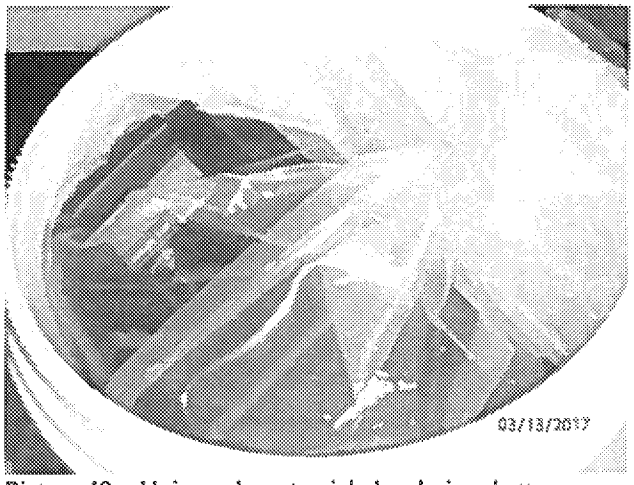

Picture 43 – Universal waste nickel metal hydride battery


Picture 44 – Universal waste lithium ion battery


Picture 45 – Universal waste nickel cadmium battery

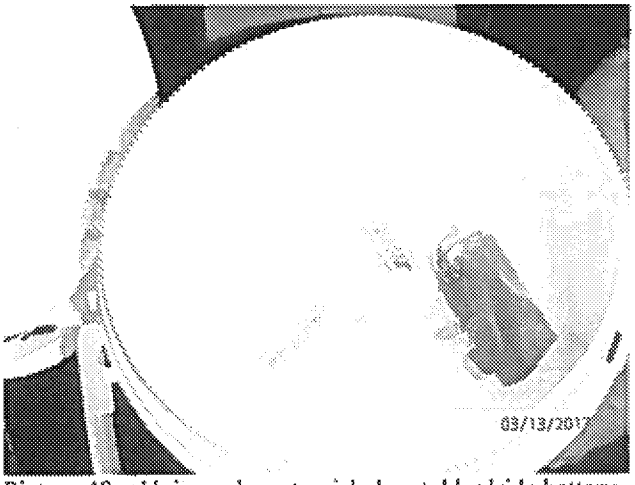


Picture 46 – Universal waste lithium ion battery



Picture 49 – Universal waste nickel cadmium battery

Picture 47 – Universal waste lithium ion battery



Picture 48 – Universal waste nickel metal hydride battery