Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

HAZARDOUS WASTE INSPECTION REPORT

1. **INSPECTION TYPE:** ☒Routine ☐Complaint ☐Follow-Up ☐Permitting ☐Pre-Arranged

FACILITY NAME		Atlantic Industrial Services			EPA ID #	FLR 000060301	
STREET ADDRESS		359 Cypress Road, Ocala, FL 34472					
MAILING ADDRESS							
COUNTY	Marion	PHONE	(352) 687-0688	DATE	July 13, 2001	TIME	1:15-4:00

NOTIFIED AS: ☐ N/A

☐	Non Notifier
☒	CESQG (<100 kg/mo.)
☐	SQG (100-1000 kg/mo.)
☐	Generator (>1000 kg/mo.)
☒	Transporter
☐	Transfer Facility
☐	Interim Status TSD Facility
☐	TSD Facility
	Unit Type(s):
☐	Exempt Treatment Facility
☒	Used Oil/Filter: Transporter, Transfer Facility, Processor

CURRENT STATUS:

☐	Non Handler
☒	CESQG (<100 kg/mo.)
☐	SQG (100-1000 kg/mo.)
☐	Generator (>1000 kg/mo.)
☒	Transporter
☐	Transfer Facility
☐	Interim Status TSD Facility
☐	TSD Facility
	Unit Type(s):
☐	Exempt Treatment Facility
☒	Used Oil/Filter: Transporter, Transfer Facility, Processor

2. **APPLICABLE REGULATIONS:**

☐ 40 CFR 261.5	☒ 40 CFR 262	☒ 40 CFR 263	☐ 403.087 FS
☐ 40 CFR 265	☐ 40 CFR 266	☒ 40 CFR 268	☐ 62-4, FAC
☒ 40 CFR 279	☒ 62-710, FAC	☒ 62-730, FAC	☒ 62-701, FAC

3. **RESPONSIBLE OFFICIAL(S):**

John R. Feagle – Vice President

4. **INSPECTION PARTICIPANTS:**

Leah Proffitt, FDEP; Lu Burson, FDEP; John White, FDEP; Nancy McKee, FDEP
John R. Feagle, AIS

5. **LATITUDE/LONGITUDE:** 29:04:51/82:59:28

6. **SIC CODE:** 5172 – Petroleum Products

7. **TYPE OF OWNERSHIP:** Private☒ Federal☐ State☐ County☐ Municipal☐

8. **PERMIT #:** HO06-0161967-001 ISSUE DATE: 7/25/00 EXP. DATE: 7/25/05

9. INTRODUCTION

On July 13, 2001, Leah Proffitt, Lu Burson, John White and Nancy McKee (inspectors), of the Florida Department of Environmental Protection (FDEP), conducted a routine inspection of Atlantic Industrial Services Inc. (AIS) for compliance with Used Oil and Hazardous Waste regulations. John Feagle, Vice President, accompanied inspectors.

AIS is a registered used oil transporter, transfer facility, processor and re-refinery with headquarters located in Pompano Beach, Florida. The Ocala facility is located on approximately 5.88 acres of land owned by AIS, and is also registered as a used oil filter transporter and hazardous waste transporter.

10. INSPECTION/COMPLIANCE HISTORY

This was the first inspection of AIS by the FDEP Hazardous Waste Program.

11. PROCESS DESCRIPTION & INSPECTION NARRATIVE

I. FACILITY TOUR

AIS is comprised of a main office, containing offices and labs, a two-part process building which houses the drum storage area, re-refinery unit, wastewater treatment system and process control room, and a tank farm consisting of 16 30,000-gallon tanks.

The laboratories are capable of testing oil for halogen content, BTUs, flashpoint, specific gravity and percent water content. The equipment necessary for metals testing is on site, but not yet operational. Currently, Advanced Environmental Laboratories conducts metals testing.

The drum storage area is situated on the east side of the process building. This portion is constructed on an 8" reinforced sealed concrete slab that occupies approximately 13,000 square feet. Drums are staged in labeled rows along the south and east walls of the warehouse. At the time of inspection there were 7 drums of spent clay used to polish (i.e. filter and clarify) the re-refined product, 50+ drums of uncrushed used oil filters and 35 drums of crushed filters (Figs. 1. – 3.). The spent clay is non-hazardous according to a waste analysis done by STL Precision on May 23, 2000 (see "Records Review" below). Towards the center of the warehouse there were some old empty oil tanks, three drums of AIS-generated used oil and three drums of hydraulic fluid product (Fig. 4.).

The west side of the process building houses the process control room, wastewater treatment system and actual thermal processing unit. At the time of inspection, the processing unit was down for routine cleaning. When operational, it is run 24 hours a day for 28 days. The cleaning process typically lasts 5 to 7 days. The date of inspection was the last day of that particular cleaning period.

AIS thermally cracks used No. 5 oil to a No. 2 fuel, by heating it to 335°C. Fifty percent of the volume of oil accepted at AIS is sent through this process. The remainder is shaken to remove solids, de-watered and sold as No. 5 oil. The shaker is not yet permitted (see comment on page 4) **[Permit General Condition # 2; 62-710.800(2) FAC.]**. Mr. Feagle

stated that 10% to 20% of all incoming used oil at AIS is "processed" at Mid-Florida Mining in Lowell, Florida (see enclosed inspection report).

AIS uses compartmentalized trucks for pick-ups from used oil generators (auto shops, etc.) and non-compartmentalized tankers for used oil transporters. Mr. Feagle stated that oil is tested for total halogen content in the field with a "sniffer" calibrated at 1000 ppm before acceptance. If it fails, a Dexsil Q4000 test is conducted at the customer's site. The load is tested again once it arrives at AIS before off-loading. However, in an informal meeting at DEP on August 16, 2001, involving Angelo Pousa, Justin Russell, Lu Burson and Leah Proffitt, Mr. Pousa stated that sometimes "generator knowledge" instead of sniffer or Dexsil testing is used when accepting loads from other used oil transporters. The driver accepts the customer's description of the load as being "on-spec" used oil.

Before thermal cracking, water and light solvents ("light ends") are removed from the used oil. The light ends are diverted to the hot gas burner where they provide fuel for the processing unit. The de-watered oil is fed to a dehydrated oil tank and from there to the cracking pot where thermal cracking occurs. The resulting distillate is condensed in a series of pipes cooled with ambient air. These pipes can be cascaded up or down depending on air temperature. The efficiency of the unit at the last run was 85%. Six drums of re-refined product were located adjacent to the refining unit (Figs. 7. & 8.).

A "Vacom" vacuum evaporator (Fig. 6.) is used to process oily wastewater, including water from groundwater remediation projects and oily water from the tank farm's secondary containment. The water is evaporated, then condensed, and is discharged (Fig. 5.) to a city operated wastewater treatment plant. The county tests the discharge weekly. Concentrated bottoms separated from the water are processed in the re-refinery.

The tank farm consists of 16 30,000-gallon tanks (Fig. 11.). A legend on the wall near the operations room indicated the tanks were being used as follows:

4	**3**	**2**	**1**
H_2O	H_2O	MDO	ORT??
5	**6**	**7**	**8**
H_2O	Treated H_2O	Unproc 5 Oil	Proc 5 Oil
9	**10**	**11**	**12**
H_2O	H_2O	Bunker	Centrifuge Oil
13	**14**	**15**	**16**
H_2O	H_2O	Bottoms & 5 Oil	Bottoms

According to attachment C1 to the Used Oil General Permit, tank 1 is labeled "diesel fuel" and tank 7 is designated for petroleum contact water (PCW). However, Mr. Feagle stated that AIS presently does not take PCW. It was unclear how the facility interprets the term "PCW", although permit attachment C3 clearly cites "Petroleum Contact Water as defined in Chapter 62-740 FAC."

AIS has installed a centrifuge in the tank farm for the mechanical removal of solids from the oil before it is thermally processed (Fig.10.). A permit modification to add the centrifuge and a shaker was submitted on July 25, 2001, but not yet issued. The centrifuge is therefore not yet operational, but it is anticipated that its use will lower the amount of solids going into the re-refining unit, and thereby reduce downtime due to cleaning.

Adjacent to the tank farm, a concrete waste solidification pit is being constructed for the future treatment of solid waste. AIS is in the process of applying for a solid waste permit to accommodate this structure. Currently, solid waste is sent to US Waste Logistics in Green Cove Springs.

II. WASTE MANAGEMENT PRACTICES

AIS generates mostly spent clay from the filtration process, used oil filters and coke generated during routine cleaning of the re-refinery. Both crushed and uncrushed used oil filters are sent to a foundry. The spent clay and coke tested as non-hazardous on May 23, 2000. As such, they are sent as regular solid waste to Green Cove Springs.

According to Mr. Feagle, AIS does not receive waste antifreeze or PCW (see comment above).

III. RECORD REVIEW

a) Manifests

The following manifest discrepancies were observed:

- # 144364: On July 6, 2001, 7000 gallons of used oil were accepted from DMT, 2531 Causeway Boulevard in Tampa, by truck number 2023-1168. The halogen content of this load was noted as "<1,100". The load was transported anyway. There is no indication on the used oil manifest that the rebuttable presumption under 40 CFR 279.10 was met **[40 CFR 279.44].** On July 30, 2001, Angelo Pousa faxed results from in-house testing showing that the total halogen content was 950 ppm.

- None of the manifests reviewed showed halogen test results or generator EPA ID numbers **[40 CFR 279.44 (a) & (d); 62-710.510(1)(a), FAC; Permit Specific Condition II 1 (a)].**

b) Analyticals

Mr. Feagle provided waste profiles and results from analytical testing performed on the spent clay filtration media and the coke sludge that is cleaned out of the re-refinery. According to the waste profile, the coke sludge is 82% paraffin wax and 18% oil.

The clay test results indicate a flashpoint of 130°F, however, due to its solid nature, it is not a hazardous waste.

It should be noted that the test results bear misleading handwritten designations on them: the one reading "processor bottoms from cleaning" has a lab-generated, printed sample ID of "51200 Waste"; the other which reads "spent clay from polishing filters" is identified by the lab as "51200 Clay."

12. SUMMARY OF POTENTIAL NON-COMPLIANCE ITEMS

a) Permit General Condition #2 & 62-710.800(2) FAC: - Deviation from Permit
"This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions for this permit may constitute grounds for revocation and enforcement action by the Department." Specifically, AIS utilizes a shaker for mechanical processing of used oil, without a permit modification.

Corrective Action: AIS shall immediately discontinue use of the shaker until the permit modification has been approved by the Department.

b) Regulation: 40 CFR 279.10(b) & 279.44 – Rebuttable presumption for used oil
"If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D 261 of this chapter. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste…" "Records of any analyses conducted or information used to comply with paragraphs (a), (b), and (c) of this section must be maintained by the transporter for at least 3 years." Specifically, AIS does not consistently field-test loads for total halogen content, relying on "generator knowledge" instead, in some instances. AIS also failed to note testing results on manifests (see "III Record Review").

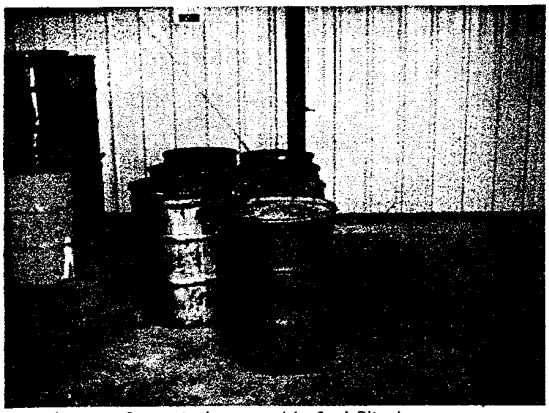
Corrective Action: AIS shall ensure that all drivers field-test loads before acceptance and record the results on the used oil manifest.

13. RECOMMENDATIONS

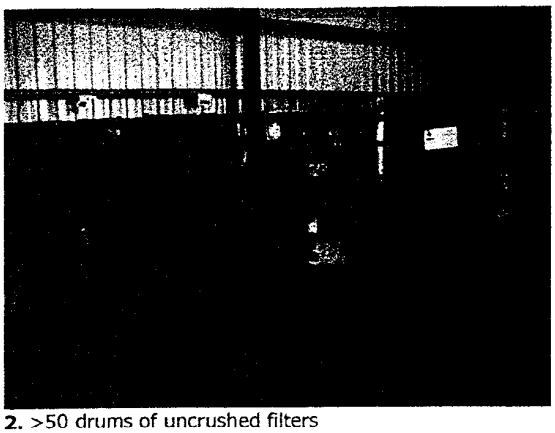
In order to comply with 40 CFR 279.44, Rebuttable Presumption for Used Oil, AIS must ensure that all drivers consistently field test loads *by the drum or tank* for halogen content, and note the results on the manifest. "Generator knowledge" is not an acceptable determination method. When a particular drum or tank fails field testing, a sample may be transported without a hazardous waste manifest to AIS for in-house testing.

Report Prepared By: _____
Leah Proffitt
Environmental Specialist II

Attachment: photos
Mlb/jnb/lp



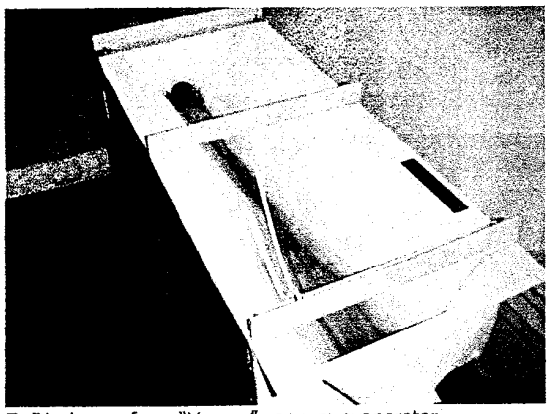
1. 7 drums of spent clay, used in fuel filtering process (non-haz per 5/23/01 test results)



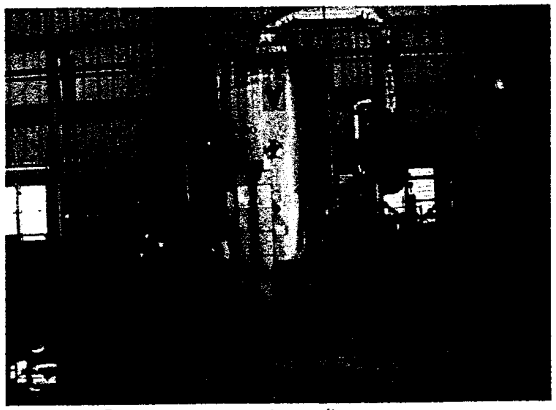
2. >50 drums of uncrushed filters

3. 35 drums of crushed filters

4. Old oil tanks, AIS-generated used oil, hydraulic fluid product

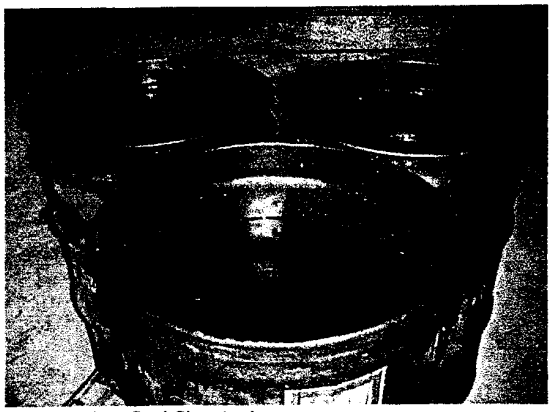


5. Discharge from "Vacom" vacuum evaporator

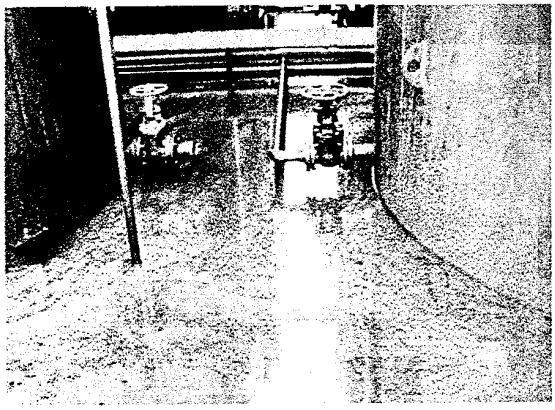


6. "Vacom" vacuum evaporator unit

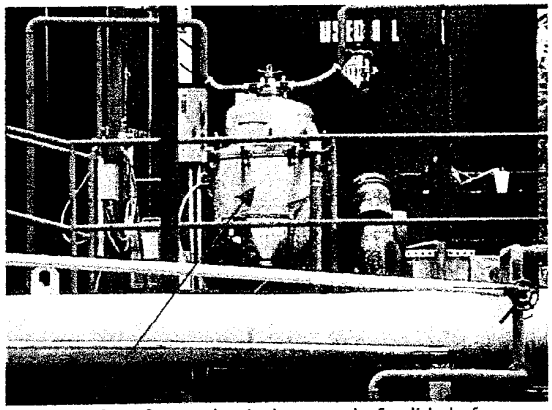
AIS
July 13, 2001
Taken by Leah Proffitt



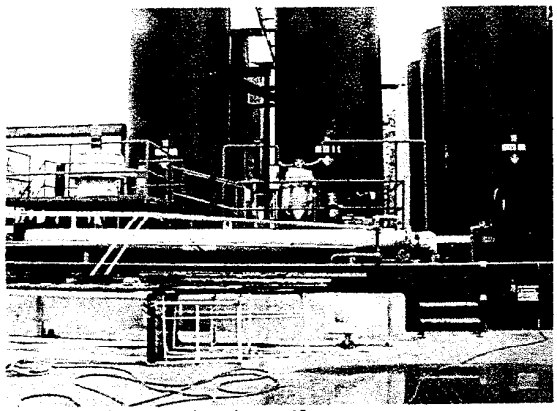
7. & 8. Six drums of processed oil product (before final filtration)



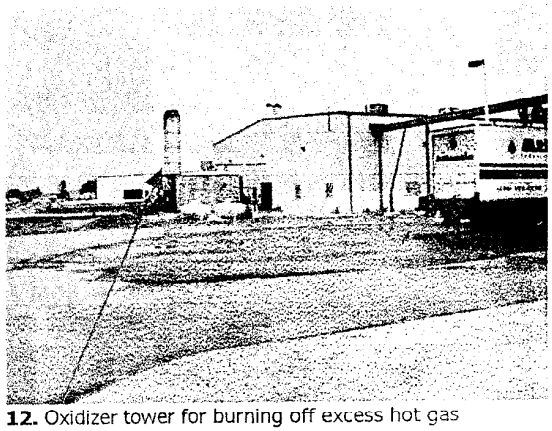
9. Oily wastewater in tankyard secondary containment



10. Centrifuge for mechanical removal of solids before thermal processing (not yet in use)



11. View of tankyard and centrifuge



12. Oxidizer tower for burning off excess hot gas

AIS
July 13, 2001
Taken by Leah Proffitt

13. Solid waste treatment pit currently under construction

AIS
July 13, 2001
Taken by Leah Proffitt