

BOBBY JINDAL
GOVERNOR



HAROLD LEGGETT, Ph.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

DEC 10 2008

RE: Notification of Final Permit Action / Response to Comments for American Advanced Technologies, LLC / Houma Oil Recovery Facility
Louisiana Pollutant Discharge Elimination System (LPDES) Permit LA0123072, AI 115847

Dear Sir or Madam:

Thank you for your interest in the above referenced matter. The Louisiana Department of Environmental Quality (LDEQ) has received and considered public comments submitted regarding this permit action. Please be advised that the action has been approved.

A Response to Comments is attached and addresses public comments received regarding the draft permit. Changes to the permit have been outlined in the Statement of Basis Addendum also attached. The permit and related documents are available for review at the LDEQ Public Records Center, 602 North Fifth Street, Room 127, Baton Rouge, Louisiana. Viewing hours are from 8:00a.m. to 4:30 p.m. Monday-Friday (except holidays).

If you would like to obtain copies of these documents, you may request them from LDEQ Public Records Center at the location above, or call (225) 219-3168. Your request will be processed pursuant to LDEQ procedures for public records request, LAC 33:12301, *et seq.*, and a copy fee will be charged.

Pursuant to La. R.S. 30:2050.21, an aggrieved person may appeal a final permit action only to the Nineteenth Judicial District Court for the Parish of East Baton Rouge. A petition for review must be filed in the district court within thirty days after notice of the action has been given.

If you have any questions, please contact Mr. Todd Franklin of the Office of Environmental Services, Water Permits Division, at (225) 219-3102.

Sincerely,

A handwritten signature in black ink, appearing to read "CSN", followed by a horizontal line.

Cheryl Sonnier Nolan
Assistant Secretary

Attachments: Statement of Basis Addendum and Response to Comments

**STATEMENT OF BASIS
ADDENDUM**

- I. THE APPLICANT IS: American Advanced Technologies, LLC
Houma Oil Recovery Facility
2266 Denley Road
Houma, Louisiana 70363
- LPDES Application received: August 1, 2007
- II. PREPARED BY: Todd Franklin
DCL-A
- DATE PREPARED: August 18, 2008
- III. PERMIT TYPE: Issue LPDES permit LA0123072 to discharge treated oily wastewater, treated sanitary wastewater, and non-process area stormwater from a non-hazardous used oil recovery facility
- IV. ADDITIONAL INFORMATION / REQUIREMENTS:
- A chloride limitation of 4,539 mg/l daily maximum has been included in the permit based on Best Professional Judgement (BPJ) because the facility may accept wastewaters which may contain a high amount of chlorides. (Calculation of the chloride limitation is attached)
 - The discharge from American Advanced Technologies, LLC is located approximately 3 miles from the nearest drinking water source (Houma Water Treatment Plant). Due to the variable nature of the incoming waste streams into the facility and due to the close proximity to the drinking water intake, the permittee shall monitor for toxic substances once per 6 months.
 - Due to the proximity to the drinking water intake, in the event that an unauthorized discharge occurs, the permittee shall notify the Terrebonne Parish Consolidated Waterworks District #1 and the Lafourche Parish Water District No. 1 immediately, but in no case later than one hour after learning of the discharge.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL SERVICES**

BASIS FOR DECISION

LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. LA0123072

AGENCY INTEREST (AI) NO. 115847

**AMERICAN ADVANCED TECHNOLOGIES, LLC
HOUMA OIL RECOVERY FACILITY
HOUMA, TERREBONNE PARISH, LOUISIANA**

The Louisiana Department of Environmental Quality (LDEQ), Office of Environmental Services (OES), issued a Louisiana Pollutant Discharge Elimination System (LPDES) Permit, Number LA0123072 to American Advanced Technologies, LLC (AAT), for the Houma Oil Recovery Facility.

This facility will be located in Houma, Terrebonne Parish, Louisiana.

Because AAT is classified as a minor facility, they were not required by environmental regulatory law to submit an official response to the IT Requirements. In fact, AAT was exempted by statute La. R.S. 30:2018(E)(2) from an environmental assessment that included an IT Response. Nevertheless, AAT submitted an environmental assessment statement, based on the public comments that indicated a high degree of interest from the public. Therefore, for the AAT / Houma Oil Recovery Facility, the LDEQ finds that as a part of the "IT Requirements," adverse environmental impacts have been minimized or avoided to the maximum extent possible. Save Ourselves v. La. Env'tl. Control Commission, 452 So. 2d 1152, 1157 (La. 1984). To make this determination, the LDEQ finds that the permit applications for AAT / Houma Oil Recovery Facility, complied with all applicable federal and state statutes and regulations and have otherwise minimized or avoided the environmental impacts to the maximum extent possible. Additionally, the LDEQ finds that AAT met the alternative projects, alternative sites, and mitigation measures requirements of Save Ourselves. Id. at 1157.

After the LDEQ determined that adverse environmental impacts had been minimized or avoided to the maximum extent possible, it balanced social and economic factors with environmental impacts. Notably, the Louisiana Constitution does not establish environmental protection as an exclusive goal, but instead, requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Id. Accordingly, the LDEQ finds that the social and economic benefits of the proposed project will outweigh greatly its adverse environmental impacts.

The details of the LDEQ's reasoning are set forth below:¹

¹Any finding of fact more appropriately designated as a conclusion of law shall be considered also a conclusion of law; and any conclusion of law more appropriately designated as a finding of fact shall be considered also as a finding of fact.

FINDINGS

I. BACKGROUND

On August 1, 2007, AAT submitted an LPDES water discharge permit application for a proposed wastewater treatment facility located on the west side of Denley Road at the intersection of Denley Road and Shaffer Road, ¼ mile west of LA Highway 57 in Houma, Terrebonne Parish. AAT proposed to discharge treated oil industrial wastewater, sanitary wastewater, and non-process area stormwater from its oily recovery facility. The source of the oily industrial wastewater will be from a variety of customers (see attached Table 1 for list of sources). The facility will include three outfalls: Outfall 001 will be for the discharge of the treated industrial oily wastewater, Outfall 002 will be for the non-process area stormwater, and Outfall 003 will be for the small sewage treatment plant.

The facility does currently exist as an oil recovery facility. AAT receives, processes, stores, and sells recovered non-hazardous used oil and scrap metal from various clients and types of materials including, but not limited to, spent oil filters, spent absorbent pads, booms, rags, spent engine maintenance fluids, wash waters, secondary containment waters, and vessel bilge waters. Currently, the oily wastewater is trucked offsite for disposal.

AAT acquired 7 acres adjacent to the current facility and is proposing to expand its operations. AAT proposes to expand its storage capacity for oily water and to design and construct a wastewater treatment plant to treat the oily water to acceptable levels for discharge into waters of the state.

II. PUBLIC COMMENT:

The draft permit was issued on October 17, 2007. A notice requesting public comment was published in *The Courier*, Houma on November 1, 2007, and through the LDEQ Public Notice Mailing List and e-mail Mailing List on October 29, 2007. An extension to the public comment period was published in *The Courier*, Houma on December 13, 2007, and through the LDEQ Public Notice Mailing List and e-mail Mailing List on December 12, 2007. A public hearing was scheduled for February 14, 2008. Notice of the public hearing was published in *The Advocate*, Baton Rouge and *The Courier*, Houma on January 7, 2008, and through the LDEQ Public Notice Mailing List and e-mail Mailing List on January 3, 2008. The public hearing was rescheduled for March 11, 2008, due to requests from the public. An extension to the public comment period was published in *The Advocate*, Baton Rouge and *The Courier*, Houma on April 3, 2008, and through the LDEQ Public Notice Mailing List and e-mail Mailing List on April 2, 2008. The official public comment period ended on May 20, 2008.

III. PUBLIC COMMENT RESPONSE SUMMARY:

A "Response to Comments" was prepared for all significant comments and is attached and made a part of this Basis for Decision.

IV. ALTERNATIVE SITES: Are there alternative sites, which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?

While the LDEQ recognizes that the concepts of alternative sites, alternative projects, and mitigative measures are closely interrelated and overlap, each concept is addressed separately in this document for purposes of emphasis and clarity. However, the LDEQ stresses the interrelation of the three; for example, the choice of a particular site could involve mitigative factors and possibly alternative project considerations; likewise, selection of an alternative project could invoke mitigative factors and impact site selection. Apparently, the Louisiana First Circuit Court of Appeal has also recognized this interrelationship and now considers the three requirements as one. Matter of Rubicon, Inc., 95-0108 (La. App. 1 Cir. 2/14/96); 670 So. 2d 475, 483.

Therefore, because of this interrelationship, the LDEQ adopts any and all of its findings on all of the three factors under each of the specific designated areas -- alternative sites (Section IV), alternative projects (Section V), and mitigative measures (Section VI). Additionally, the assessment and findings set forth below in Section VII (Avoidance of Adverse Environmental Effects) also interrelate and have been considered relative to these facts.

According to information submitted to LDEQ on August 14, 2008, from AAT and as accepted by the LDEQ, AAT considered various sites for the proposed wastewater treatment facility before locating it at 2266 Denley Road in Houma. Other sites in Terrebonne Parish and Lafourche Parish were considered. Those other sites "were rejected because they were located within the 100-year flood plain, the cost of the land was higher than the chosen site, and the receiving bodies of water were more tidally influenced than the chosen site."²

The information submitted on August 14, 2008, from AAT stated, that, "AAT chose 2266 Denley Road because of the property's characteristics, as follows:

- It is located in an Industrial Park
- It is located within an area that has like industries
- It is not considered a wetlands per the US Corps of Engineers
- It is not located within the 100-year flood plain
- It is located near a receiving body of water (Munson Slip) that was not as tidally influenced as the other sites considered
- It is reasonably far from schools, residences, and recreational parks. The nearest resident is over a quarter mile away.
- It has sufficient land to develop the wastewater treatment plant project at a reasonable cost

² See EDMS Document 37515447, pages 5 of 8, dated 8/14/2008.

- It has existing AAT infrastructure to allow workers to manage and operate the wastewater plant."³

CONCLUSION: For the foregoing reasons, the LDEQ finds there were no alternative sites which would have offered more protection to the environment than the proposed site without unduly curtailing nonenvironmental benefits.

V. ALTERNATIVE PROJECTS: Are there alternative projects, which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

The LDEQ finds that the permit, as proposed, offers more protection to the environment than any other possible alternative without unduly curtailing nonenvironmental benefits. Additionally, the LDEQ recognizes that selection of the most environmentally sound project also serves as a mitigative measure because the two considerations overlap considerably.

Based on information submitted to LDEQ on August 14, 2008, from AAT, and accepted by the LDEQ, the alternative projects were considered. Projects identified to handle the industrial oily wastewater are: deep well injection, evaporation ponds, and no action.

Deep Well Injection

Based on the expected customer base for AAT, "the majority of wastewater that AAT will accept contains little or no chlorides. Chlorides are needed for most deep well injection facilities because they are developed in a salt environment and would need the specific gravity associated with the salt to be able to inject into the well.

A deep well injection facility disposes of the wastewater by simply pumping the wastewater under high pressure into the lower strata of the earth (5,000 to 10,000 feet deep). The composition of the wastewater remains the same, and consequently, so do its characteristics. AAT chose not to install deep well injection because it does not offer a long-term solution for industrial and commercial customers who are trying to dispose of non-hazardous wastewater that contains little or no salts in the safest way possible."⁴

Evaporation Ponds

"Some parts of the country have employed evaporation ponds as a means of reducing wastewater. However, this method simply releases many of the hydrocarbons into the atmosphere through evaporation. This method was not considered as a viable option for AAT because it is less environmental friendly than conventional wastewater treatment systems. Such a project would also be land intensive."⁵

No Action

"The oil and gas industry generates wastewater from a variety of sources and must properly dispose of the wastewater in a LDEQ acceptable manner. Discharge overboard is not an option."⁶

³ See EDMS Document 37515447, pages 5 and 6 of 8, dated 8/14/2008.

⁴ See EDMS Document 37515447, pages 4 of 8, dated 8/14/2008.

⁵ See EDMS Document 37515447, pages 4 and 5 of 8, dated 8/14/2008.

⁶ See EDMS Document 37515447, pages 5 of 8, dated 8/14/2008.

Currently, AAT trucks any process wastewater to an approved wastewater treatment facility. However, AAT has acquired seven acres adjacent to the existing three acre facility. With the acquisition of this adjacent property, AAT desires to construct the wastewater treatment facility to treat not only the process wastewater from the current used oil recovery facility but also from other outside sources. This will allow AAT and other nearby industries to save on fuel consumption associated with transporting wastewater to other areas.

CONCLUSION: For the foregoing reasons, the LDEQ finds there are no alternative projects which would offer more protection to the environment than the proposed project without unduly curtailing nonenvironmental benefits.

VI. MITIGATIVE MEASURES: Are there mitigating measures, which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

The following mitigative measures will be taken by the facility:

- AAT will recover and recycle any oil from the incoming wastewater.
- AAT is proposing a "batch" process for the discharge of the treated wastewater. Most facilities discharge on a continuous basis. However, AAT proposes to store the effluent in holding tanks. These tanks will not be discharged until effluent samples are taken and the effluent limitations are met. This sampling technique has been incorporated into the LPDES permit.

The following mitigative measures are part of the LPDES permit:

- If any violation of the permit is found by the permittee, the facility is required to immediately inform the Terrebonne Parish Consolidated Waterworks District #1 and the Lafourche Parish Water District No. 1 so that appropriate action can take place to ensure the safety of the drinking water supply.
- Development of a Stormwater Pollution Prevention Plan (SWPPP) is required by the permit. The SWPPP will identify sources of pollution that may affect the quality of stormwater and identify controls to reduce pollutants. This will help assure compliance with the terms and conditions of the permit. The SWPPP must be prepared and in place within six months from the effective date of the permit.

CONCLUSION: For the foregoing reasons, the LDEQ finds there are no mitigating measures, which would offer more protection to the environment than the facility as proposed, without unduly curtailing nonenvironmental benefits.

VII. AVOIDANCE OF ADVERSE ENVIRONMENTAL EFFECTS: Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

As part of the permitting process, potential and real adverse environmental impacts of pollutant discharges from the facility are assessed to ensure that they are minimized to the maximum extent possible.

Comparatively minimal potential or real adverse environmental impacts of this permit have been identified. The purpose of the permit is to discharge treated oily wastewater, treated sanitary wastewater, and non-process area stormwater from a non-hazardous used oil recovery facility. The issuance of the permit will allow for discharges that are protective of human health and the environment through the establishment of permit limits and conditions. Compliance with the permit limits will ensure general and numerical water quality criteria are maintained and thus, the discharge will comply with Louisiana's antidegradation policy.

LAC 33:IX.1109.A. provides the state's antidegradation policy as follows: "State policy is that all waters of the state, whose existing quality exceeds the specifications of the approved water quality standards or otherwise supports an abundance and diversity of fish and wildlife resources, such as waters of national and state parks and refuges, will be maintained at their existing high quality. The state may choose to allow lower water quality in waters that exceed the standards to accommodate justifiable economic and/or social development in the areas in which the waters are located, but not to the extent of violating the established water quality standards. Appropriate use attainability analyses will be required before any lowering of water quality will be allowed. No such changes however, will be allowed if they interfere with or become injurious to the existing water uses. No lowering of water quality will be allowed in waters where standards for the designated water uses are not currently being attained."

To ensure the discharge complies with the antidegradation policy, the LDEQ has considered the Subsegment of the receiving stream, the designated uses of the Subsegment, the degree of support for the designated uses, causes and sources of impairment for the Subsegment, and water quality standards for the Subsegment.

Subsegment

Subsegments are hydrologic units used to define the borders of a watershed or drainage basin. Each Subsegment has water quality standards unique to its location and designated uses. This project is located within the boundaries of Subsegment 120509, Houma Navigation Canal-from Houma to Bayou Pelton.

Designated Uses

The designated uses for this Subsegment are:

Primary Contact Recreation – defined in LAC 33:IX.1111.A as "any recreational or other water contact activity involving prolonged or regular full-body contact with the water and in which the probability of ingesting appreciable amounts of water is considerable. Examples of this type of water use include swimming, skiing, and diving."

Secondary Contact Recreation - defined in LAC 33:IX.1111.A as "any recreational or other water contact activity in which prolonged or regular full-body contact with the water is either incidental or accidental and the probability of ingesting appreciable amounts of water is minimal. Examples of this type of water use include fishing, wading, and boating."

Fish and Wildlife Propagation - defined in LAC 33:IX.1111.A as "the use of water for aquatic habitat, food, resting, reproduction, cover, and/or travel corridors for any indigenous wildlife and aquatic life species associated with the aquatic environment. This use also includes the maintenance of water quality at a level that prevents damage to indigenous wildlife and aquatic life species associated with the aquatic environment and contamination of aquatic biota consumed by humans."

Drinking Water Supply - defined in LAC 33:IX.1111.A as "the use of water for human consumption and general household use."

Degree of Support

Biannually, the LDEQ assesses whether or not water quality standards are being met for each Subsegment's designated uses. The "degree of support" for each designated uses is analyzed with respect to ambient water quality data, total maximum daily load (TMDL) surveys, and other information related to the subsegment. This data can be found in the Louisiana Water Quality Inventory: Integrated Report, which is also commonly known as the "305(b) report". According to the 2006 "305(b) report", the Subsegment is fully meeting all the designated uses.

Causes and Sources of Impairment

The 2006 "305(b) report" also identifies suspected causes and sources of impairment to water quality standards for each Subsegment. However, for Subsegment 120509, no impairments exist; therefore, there are no sources of impairment.

Water Quality Standards

According to LAC 33:IX.1113, criteria are elements of the water quality which set general and numerical limitations on the permissible amounts of a substance or other characteristics of state waters. General and numerical criteria are established to promote restoration, maintenance, and protection of state waters. General criteria specifically apply to human activities; they do not apply to naturally occurring conditions. General water quality criteria include: aesthetic consideration; color; floating, suspended or settleable solids; taste and odor, toxic substances; oil and grease; foaming or frothing materials; balance of the nitrogen-phosphorus nutrient ratio; turbidity; alteration of flow characteristics; radioactive materials; and the maintenance and protection of the biological and aquatic community integrity. Numerical criteria for Subsegment 120509 (Houma Navigation Canal-from Houma to Bayou Pelton) are listed below:

Chlorides:	500 mg/l
Sulfates:	150 mg/l
Dissolved oxygen:	5.0 mg/l
pH:	6.0-8.5
Bacterial criteria	400 colonies/100 ml (May to October) 2,000 colonies/100 ml (November to April)
Temperature:	32°C
Total Dissolved Solids:	1,000 mg/l

Permit Limits

Outfall 001

The effluent limits in the permit are based on Effluent Guidelines found at 40 CFR Part 437, promulgated under Sections 301, 304, 306, 307, 308, 402, & 501 of the Clean Water Act. This is consistent with LAC 33:IX.2707.A.1. which dictates permit limits and conditions are 1) technology-based effluent limitations and standards based on effluent limitations and standards promulgated under Section 301 of the CWA, or 2) new source performance standards promulgated under Section 306 of CWA, or 3) on case-by-case effluent limitations determined under Section 402 (a)(1) of the CWA, or 4) on a combination of the three, in accordance with LAC 33:IX.3705. Part 437 established technology-based effluent limitations for wastewater discharges associated with discharges from a centralized waste treatment (CWT) facility that results from the treatment and recovery of hazardous or non-hazardous industrial metal-bearing wastes, oily wastes and organic-bearing wastes received from off-site.

The pollutants of concern for Outfall 001 are based on 40 CFR Part 437. Specifically, the pollutants of concern are based on 40 CFR Part 437.24, new source performance standards for Subpart B-Oil Treatment and Recovery. These pollutants of concern are: oil & grease, pH, TSS, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Tin, Zinc, Bis(2-ethylhexyl) phthalate, Butylbenzyl phthalate, carbazole, n-Decane, Fluoranthene, and n-Octadecane. The limitations for each of these pollutants of concern were based on the technology-based limitation derived from the Code of Federal Regulations, the water quality-based limitation derived from actual water characteristics of the receiving waterbody, and the LDEQ Empirical Limitations. The most stringent limitation has been applied to the permit. BOD₅ and chloride limitations have been established in the permit to further ensure the receiving water body will remain in compliance with the water quality criteria.

Outfall 002

The effluent limitations for Outfall 002 are established through Best Professional Judgement (BPJ) based on limitations imposed on similar stormwater discharges. These limitations are also in accordance with the LPDES Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities, Sector N: Scrap Recycling and Waste Recycling Facilities. Also, AAT must develop a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will identify sources of pollution that may affect the quality of stormwater and identify controls to reduce pollutants. This will help assure

compliance with the terms and conditions of the permit. The SWPPP must be prepared and in place within six months from the effective date of the permit.

Outfall 003

The effluent limitations for Outfall 003 are based on the Statewide Sanitary Effluent Limitations Policy (SSELP). The SSELP states that discharges of sanitary wastewater less than 25,000 gallons per day (GPD) must meet effluent limitations of 30 mg/l BOD₅ monthly average and 30 mg/l TSS monthly average. Fecal coliform limitations have been established in the permit at the numerical criteria defined in LAC 33:IX.1113. The limitation for pH is established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.2645.C.

Additional Information

Based on information submitted to LDEQ on August 14, 2008, from AAT, and accepted by the LDEQ, the following measures will be taken by the facility to avoid adverse environmental effects:

"The facility will recover any oil from the incoming wastewater.

The facility will individually store in tanks with secondary containment a variety of non-hazardous wastewater to ensure that each batch is properly treated.

The facility will utilize state-of-the-art technology to reduce pollutants in the wastewater to meet or exceed the LPDES permit limits

The facility will have discharge holding tanks to allow for monitoring of any treated wastewater prior to discharge to prevent the likelihood of exceedances of the permit limits.

The facility will provide a cost-effective means for treating and disposing wastewater for companies associated with the oil and gas industry and commercial facilities within the general geographical region."⁷

"AAT will not excavate beyond 5 feet below the surface for the proposed storage tanks associated with the wastewater treatment system. AAT will use shallow footings consisting of gravel pads and post-tensioned slabs in lieu of conventional timber piles for the foundation of its tanks and wastewater treatment system. Therefore, there will be no disturbance of the ground below 5 feet deep and a groundwater certification would not be necessary for the equipment.

AAT's facility is located in an industrial park that was designed to attract businesses such as AAT. The services offered by AAT are in demand by industries along the Gulf Coast in that it conserves an energy resource (oil) and manages industrial and commercial wastewater in an environmental friendly manner. Treatment of wastewater from the industries will reduce the amount of wastewater currently being disposed of by deep well injection or landfill solidification. The wastewater that is currently being generated at AAT's oil

⁷ See EDMS Document 37515447, page 6 of 8, dated 8/14/2008.

recovery process is sent offsite for treatment. By treating the wastewater on-site, AAT and other industries will be able to save on fuel consumption associated with transporting the wastewater to facilities located in other areas."⁸

The following avoidance measures are part of the LPDES permit:

- The permit was written to be both protective of the human health and the environment.
- The industrial oily wastewaters will be treated by a wastewater treatment facility consisting of oil/water separation, filtration, air floatation, centrifugation, and biological treatment. These treatment methods are sufficient for the treatment of these types of wastewaters at the effluent limitations established in the permit.
- The sanitary wastewater will be treated by a mechanical sewage treatment plant consisting of aeration, clarification, and post chlorination. This treatment method is sufficient for the treatment sanitary wastewater at the effluent limitations established in the permit.
- For the majority of the parameters listed in the permit, the measurement frequency is "1/batch". A batch is defined in the permit as:
 1. A quantity of material that is isolated from either outflow or inflow from the time it is identified as a batch, i.e. a batch accumulated for direct discharge shall be an accumulation of treated material that is then isolated from any further inflow.
 2. A batch must not be discharged over a period of time in excess of 48 hours.
 3. Batch contents must be adequately represented by the sample or samples taken to characterize the batch analytically. No discharges are permitted without first obtaining the necessary analytical results within outfall limits. In addition to complying with the discharge limitations prior to commencing the discharge, the discharge must also be in compliance with the discharge limitations for the duration of the discharge event.
 4. Copies of the treated water analysis shall be available at the treatment site at all times. Should the permittee choose to discharge with verbal results from the laboratory, the formal laboratory report must be on file at the outfall facility no later than three (3) work days of the verbal transaction.
- Monitoring for Toxic Substances is required by the permit. The permittee is required to test for a majority of the toxic substances listed under LAC 33:IX.7107. Table II and Table III. Monitoring will be required once per six months. The permit lists a maximum quantitative level (MQL) for each

⁸ See EDMS Document 37515447, page 2 of 8, dated 8/14/2008.

parameter. If any parameter exceeds the established MQL, the facility must take appropriate actions to get the levels below the MQL.

CONCLUSION: Accordingly, the LDEQ finds that AAT has avoided, to the maximum extent possible, adverse environmental impacts without unduly curtailing non-environmental benefits.

VIII. COST/BENEFIT ANALYSIS (BALANCING): Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

The social and economic benefits of the proposed facility will greatly outweigh the adverse environmental impacts. Notably the Louisiana constitution requires balancing, not protection of the environment as an exclusive goal. Save Ourselves, 452 So. 2d at 1157.

A. Environmental Impact Costs

Potential pollutants of concern from AAT and other similar types of facilities include the following: BOD₅, TSS, Oil & Grease, pH, Chloride, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Tin, Zinc, Bis(2-ethylhexyl) Phthalate, Butylbenzyl Phthalate, Carbazole, n-Decane, Flouranthene, and n-Octadecane. AAT will be required to meet the more stringent of the technology based effluent limitation and the water quality based effluent limitation.

The discharge from AAT will flow into Munson Slip; thence into the Houma Navigation Canal. The Houma Navigation Canal will flow north occasionally; due to tidal influence, wind, and storm surges towards the Houma Water Treatment Plant. AAT will be required to meet effluent limitations, which are protective of the water quality standards for human health for drinking water. Also, if AAT were to have a discharge at a level higher than the permit limitations, the Houma Water Treatment Plant must be contacted immediately so that proper action may be taken.

The LDEQ finds that AAT's proposed facility, under the terms and conditions of the LPDES permit, will meet or exceed all applicable state and federal regulations and guidelines. The proposed facility is not expected to cause water quality impacts that would adversely affect human health or the environment in Terrebonne Parish and surrounding parishes.

B. Social and Economic Benefits

According to information submitted to LDEQ on August 14, 2008, from AAT, "the facility currently has 7 workers, but will employ as many as 15 permanent workers. These workers are/will be local tax-paying residents of Terrebonne Parish. Using a standard economic multiplier of 3.78 and an average annual salary including benefits of \$46,400, the facility creates 57 jobs in the community with an annual payroll of \$2,644,800. The annual payroll is estimated to turn over at least 2.5 times, thus providing an annual economic benefit of \$6.6 million to the local economy."⁹

CONCLUSION: Based on the reasoning above, the LDEQ finds that the social and economic benefits outweigh the environmental impact costs.

⁹See EDMS Document 37515447, page 2 and 3 of 8, dated 8/14/2008.

IX. ENVIRONMENTAL JUSTICE CONSIDERATIONS

EPA's Office of Civil Rights in the Michigan Select Steel Title VI Complaint (EPA File No. 5R-98-R5, The Office of Civil Rights dated October 30, 1998) determined as follows in "Allegation Regarding Air Quality Impacts" Pages 25 and 26:

The environmental laws that EPA and the states administer do not prohibit pollution outright; rather, they treat some level of pollution as "acceptable" when pollution sources are regulated under individual, facility-specific, permits recognizing society's demand for such things as power plants, waste treatment systems, and manufacturing facilities. In effect, Congress—and, by extension, society—has made a judgment that some level of pollution and possible associated risk should be tolerated for the good of all, in order for Americans to enjoy the benefits of a modern society—to have heat in our homes, and the products we use to clean dishes or manufacture our wares. The expectation and belief of the regulators is that, assuming the facilities comply with their permit limits and terms; the allowed pollution levels are acceptable and low enough to be protective of the environment and human health.

EPA and the states have promulgated a wide series of regulations to effectuate these protections. Some of these regulations are based on assessment of public health risks associated with certain levels of pollution in the ambient environment....

Title VI and EPA's implementing regulations set out a requirement independent of the environmental statutes that all recipients of EPA financial assistance ensure that they implement their environmental programs in a manner that does not have discriminatory effect based on race, color, or national origin. If recipients of EPA funding are found to have implemented their EPA-delegated or authorized federal environmental programs in a manner which distributes the otherwise acceptable residual pollution or other effects in ways that result in a harmful concentration of those effects in racial or ethnic communities, then a finding of an adverse disparate impact on those communities within the meaning of Title VI, may, depending on the circumstance, be appropriate.

Importantly, to be actionable under Title VI, an impact must be both "adverse" and "disparate". The determination of whether the distribution of effects from regulated sources to racial or ethnic communities is "adverse" within the meaning of Title VI will necessarily turn on the facts and circumstances of each case and nature of the environmental regulation designed to afford protection. As the United States Supreme Court stated in the case of *Alexander v. Choate*, 469 U.S. 287 (1995), the inquiry for federal agencies under Title VI is to identify the sort of disparate impacts upon racial or ethnic groups which constitute "sufficiently significant social problems, and [are] readily enough remediable, to warrant altering

the practices of the federal grantees that had produced those impacts." *Id.* at 293-94 (emphasis added).

[Reference: Letter from Ann E. Goode, Director of EPA's Office of Civil Rights to Father Phil Schmitter and Sister Joanne Chiaverni, Co-Directors, St. Francis Prayer Center, G-2381 East Carpenter Road, Flint Michigan 48909-7973].

Also note that the United States Supreme Court held in Alexander v. Sandoval, (532 U.S. (2001) [No. 99-1908, decided April 24, 2001], that there is no private cause of action to enforce Section 602 of Title VI of the Civil Rights Act of 1964, 78 Stat. 252, as amended, 42 U.S.C. §2000d *et. seq.*

LDEQ accepts the EPA's assessment and reasoning. Under the permit terms and conditions, AAT's discharges to the receiving waterbody are not expected to cause or contribute to an impairment of the waterbody. Since these permit terms and conditions are protective of human health and the environment, there will be no "adverse" and "disparate" impact in the surrounding area.

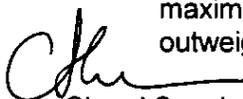
X. CONCLUSION

The LDEQ, Office of Environmental Services, Water Permits Division, has conducted a review of the information submitted and has determined that LPDES Permit LA0123072 should be issued to American Advanced Technologies, LLC / Houma Oil Recovery Facility.

The permit for American Advanced Technologies, LLC will require that the discharges be controlled to meet or exceed the requirements of all applicable regulations and defined permit conditions.

The local economy benefits from the operations of the wastewater treatment facility. The proposed wastewater treatment facility will help sustain the existing positive aspects, such as providing personal income for the facility's permanent and contract employees; increasing the tax revenues for Terrebonne Parish, surrounding parishes, the State of Louisiana and the federal government; and facilitating the purchase of goods and services by the facility and its employees from other businesses. These benefits are major, significant, and tangible. They outweigh the environmental impact costs of operation of AAT's Houma Oily Recovery Facility.

Based on a careful review and evaluation of the entire administrative record, which includes the permit applications, submitted August 1, 2007, and revised on March 20, 2008, the draft permit, the Environmental Impact Supplementary Information provided by AAT on August 14, 2008, and all public comments, the permit for American Advanced Technologies, LLC / Houma Oil Recovery Facility will comply with all applicable federal and state statutes and regulations and will comply with the requirements of Save Ourselves v. La. Env'tl. Control Commission, 452 So. 2d 1152, 1157 (La. 1984). Particularly, the LDEQ finds that the permit will minimize or avoid potential and real adverse environmental impacts to the maximum extent possible and that social and economic benefits of the proposed project outweigh adverse environmental impacts. *Id.*



Cheryl Sonnier Nolan
Assistant Secretary
Office of Environmental Services

8 Dec 2008

Date

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL SERVICES**

WATER PERMITS DIVISION

PUBLIC COMMENTS RESPONSE SUMMARY

**LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT
NUMBER LA0123072**

**AGENCY INTEREST (AI) NUMBER 115847
AMERICAN ADVANCED TECHNOLOGIES, LLC (AAT)
HOUMA OIL RECOVERY FACILITY
HOUMA, TERREBONNE PARISH, LOUISIANA**

The Louisiana Department of Environmental Quality (LDEQ or DEQ), Office of Environmental Services, Water Permits Division, issued a Public Notice of a draft permit for AAT on November 1, 2007, in *The Courier* of Houma. An Extension to the Public Comment Period was published in *The Courier* on December 13, 2007. On March 11, 2008, a Public Hearing was held at the Terrebonne Parish Council Meeting Room, Government Tower Building, 2nd Floor, 8026 Main Street, Houma, LA 70360. The Public Comment Period was further extended on April 3, 2008, and was published in *The Advocate* of Baton Rouge and *The Courier*. The official Public Comment Period ended on May 20, 2008.

The public comment period and the public hearing afforded the public an opportunity for comments on the LPDES water discharge permit for the proposed facility.

The following public comments, together with the Office of Environmental Services, Water Permits Division's responses, are relevant to the LPDES water discharge permit at issue here. The LDEQ received oral and written comments on the proposed permit during the public hearing, by email, and by mail.

The application, draft permit, and statement of basis were available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

The Water Permits Division conducted a review of the permit application and related submittals and prepared a proposed permit decision.

This document responds to pertinent statements (questions and/or comments) received regarding the LPDES water discharge permit for AAT.

Because of the large number of comments, comments addressing the same issue from the public hearing transcript and the written comments have been grouped and summarized. Documents containing the commenters' complete statements are located in EDMS.¹ The issues have been numbered in this document for reference. The LDEQ has responded to the issues relevant to the LPDES water discharge permit for American Advanced Technologies, LLC / Houma Oil Recovery Facility.

¹ EDMS stands for Electronic Document Management System, the LDEQ's electronic repository of official records that have been created or received by LDEQ. Employees and members of the public can search and retrieve documents stored in the EDMS via this web application. (See <http://edms.deq.louisiana.gov/app/doc/querydef.aspx>).

Comments from American Advanced Technologies, LLC (AAT):

1. **Comment:** AAT submitted a revised permit application on March 20, 2008, which indicated that the limited availability of spent Triethylene Glycol (TEG) for recycling and the high cost for treatment makes this project economically infeasible at the present time. Consequently, TEG used by the oil and gas industry primarily for dehydration will continue to be disposed of at approved hazardous waste disposal facilities in other locations of the state.

Response: The removal of the TEG recycling will not change any of the conditions of the draft permit. Therefore, the permit will not be altered due to this change in operations.

2. **Comment:** AAT has requested that Outfall 003 be removed from the permit. There is only one stormwater outfall located at the facility. This outfall will be the combined stormwater from the existing facility and expansion, including any uncontaminated secondary containment waters.

Response: The changes have been included in the final permit. Please note that the Outfall number for the sanitary wastewater has been changed from Outfall 004 to Outfall 003.

Comments from the public:

1. **Comment:** What will be the impacts of the discharge to nearby wetlands?

Response: The discharge from American Advanced Technologies, LLC (AAT) will flow into Munson Slip, a canal connected to the Houma Navigation Canal. The discharge should not negatively impact the surrounding wetland areas. The watershed in which the discharge flows into is Subsegment 120509 (Houma Navigation Canal-Houma to Bayou Pelton). This watershed includes much of the surrounding wetlands which will flow into the Houma Navigation Canal. The pollutants of concern established in the permit are based on the Code of Federal Regulations, Title 40, Part 437 (The Centralized Waste Treatment Point Source Category). In particular, these pollutants were based on Subpart B - Oils Treatment and Recovery, 40 CFR 437.24-New source performance standards (NSPS). Effluent limitations were established for each of these "pollutants of concern" based on the NSPS standards, the LDEQ Empirical Numbers, or the calculated water quality based limit (WQBL), whichever was more stringent. In some cases, no WQBL was calculated because the State has not adopted a numerical criterion for that parameter. In those cases, the NSPS technology based limit was applied in the permit.

The limits established in the permit will ensure this discharge will not cause the receiving waterbody, Munson Slip, to exceed the water quality standards established in LAC 33:IX.1113. By ensuring that this discharge will not cause or contribute to any water quality standard exceedances, the Department believes the permit will protect the surrounding wetlands.

2. **Comment:** What will be the impacts of the discharge to the drinking water intake?

Response: To address the discharge of wastewater near drinking water intakes, the State adopted water quality standards for human health protection for drinking water supplies. These standards are found in LAC 33:IX.1113. The effluent limitations established in the permit are designed so that the discharge will not cause the receiving waterbody (the drinking water source) to exceed the water quality standards for a drinking water supply. In fact, in all cases in this permit, where the water

quality based limit was more stringent than the technology based limit, the WQBL established in the permit was even **more protective** than the human health drinking water supply standard. This is because the aquatic life criteria were more stringent than the human health criteria. Therefore, the Department believes the permit will not negatively impact the Houma Water Treatment Plant.

3. Comment: What will be the impacts of the discharge to the nearby estuaries?

Response: The discharge is into Munson Slip; thence into the Houma Navigation Canal in Subsegment 120509 of the Terrebonne Basin. The effluent limits have been established in the permit to protect all the designated uses of this Subsegment, which are primary contact recreation, secondary contact recreation, propagation of fish & wildlife, and drinking water supply. Therefore, a discharge which meets the effluent limits established in the permit should not negatively impact the nearby estuaries.

4. Comment: What will be the impacts of the discharge to the seafood industry?

Response: To protect the designated use of propagation of fish & wildlife, acute and chronic aquatic life criteria have been developed. The effluent limitations established in the permit are designed so that the discharge will not cause the receiving waterbody to exceed the water quality standards for acute and chronic aquatic life. Therefore, the Department believes the permit will not negatively impact the seafood industry.

5. Comment: This facility is prone to hurricane tidal surges and many other natural disasters. What impacts could occur from a direct hit by a hurricane?

Response: In Part II, Section B of the permit, the permittee is required to establish a Storm Water Pollution Prevention Plan (SWP3). The SWP3 establishes that the permittee must ensure that "all diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area." Under extreme times, such as during hurricanes, the permittee should take whatever precautions necessary to ensure that there is a minimum chance for an unauthorized discharge. However, the permit cannot address all issues relative to a natural disaster.

6. Comment: There is a concern that once the facility receives its initial water discharge permit, the facility will be able to grow as much as desired with little or no input from the public.

Response: The permit establishes the permit conditions and effluent limitations based on the average production/flow of the facility. In this case, according to the application, the average flow from Outfall 001 is 80,000 gallons per day (GPD). If the facility were to increase its average flow, the Department would be required to be notified. If the increase would change any conditions in the permit, a modification would be required. In this particular permit, an increase in average flow would require a modification because some of the effluent limitations established in the permit are based on water quality. One of the factors of a water quality based limit is the flow from the facility. Therefore, if AAT desires to expand its operations by increasing its average discharge flow, a permit modification would be required.

7. Comment: Who/How is the monitoring of the facility going to be handled?

Response: The permittee must sample its discharge once per batch. A batch is defined as a quantity of material that is isolated from either outflow or inflow from the time it is identified as a batch, i.e. a batch accumulated for direct discharge shall be an accumulation of treated material that is then isolated from any further inflow. Once the batch is established, it must be tested by a laboratory certified by the Louisiana Environmental Laboratory Accreditation Program (LELAP). The sampling and testing is coordinated by the permittee and the certified laboratory. The LDEQ will perform unannounced inspections to ensure that the facility is operating properly and to review past data concerning the discharge from the treatment plant.

8. **Comment:** What assurances does the public have that self-reporting will be done correctly? If an independent lab is employed to track water and air discharges, who is going to pay for the testing? If the company is allowed to hire an independent lab, couldn't that be considered a conflict of interest?

Response: As mentioned previously, the LDEQ will perform inspections to ensure that the facility is operating properly. Also, the LDEQ will respond to all citizen complaints. This has been proven to be an effective method of oversight. The permittee will hire and pay an independent lab to monitor and sample its discharges. The labs certified by LELAP have proven to be reputable and the LDEQ would not consider this a conflict of interest.

9. **Comment:** Will LDEQ require an Environmental Assessment Statement (EAS) from this facility concerning the water discharge permit?

Response: As per La R.S. 30:2018.A., the applicant for a new permit or a major modification of an existing permit that would authorize the discharge of water pollutants in sufficient quantity or concentrations to constitute a major source shall submit an environmental assessment statement as part of the permit application. According to La. R.S.30:2018.E.2., an application for a facility or activity which is not a major facility for water discharges is exempt from La R.S.30:2018.A. AAT is not considered a major facility. A major facility is any LPDES facility or activity classified as such by the EPA Administrator, or in the case of approved state programs, the EPA Regional Administrator in conjunction with the state administrative authority. Therefore, AAT is not required by statute to submit an environmental assessment statement as part of the permit process.

Nevertheless, AAT submitted an environmental assessment statement, based on the public comments that indicated a high degree of interest from the public. Therefore, LDEQ accepted the information for the preparation of this Response to Comments and Basis for Decision.²

10. **Comment:** The Consolidated Waterworks District No. 1 disagrees with Item XIII of the Statement of Basis which states that "The nearest drinking water intake is located upstream from the discharge point(s)..." The flow of water in the Houma Navigation Canal is influenced by tidal and weather conditions and at times flows north toward the intake of Consolidated Waterworks District No. 1's Houma Water Treatment Plant. This proposed discharge will be located within three miles of the intake and would be in conflict with the DEQ Source Water Protection Program for Drinking Water.

Response: After review of the hydrology of the receiving waterbody, the LDEQ agrees that the flow of the Houma Navigation Canal is influenced by tidal and weather conditions and will, at times, flow towards the drinking water intake. Please note, however, that the effluent limitations established in the

² See EDMS document # 37515447

permit ensure that the receiving waterbody will have no adverse impacts to the drinking water intake (See Response to Comment #2). Also, the discharge would be located within the surface water protection area for the Houma Water Treatment Plant; however, there are no regulations prohibiting a discharge from within the surface water protection area. This facility would be considered a significant potential source of contamination (SPSOC). Please note that according to the Terrebonne Parish Consolidated WWs Dist. #1-Houma Service Area Source Water Assessment completed in November 2002, there were 271 SPSOCs identified within the critical area. The critical area is defined as the upstream portion of the watershed within 5 miles of the intake. Of the 271 SPSOCs, 133 were identified as high risk SPSOCs. To ensure that there is sufficient time to take appropriate actions with respect to the drinking water intake, a provision has been placed into the permit which will require the permittee to contact the Terrebonne Parish Consolidated Waterworks District #1 and the Lafourche Parish Water District No. 1 immediately, should an unauthorized discharge occur.

11. **Comment:** Article IX in the Statement of Basis of the application for permit states discharge limits for several effluent characteristics which exceed the maximum contaminated levels (MCL) allowed in drinking water. Examples: The MCL for total arsenic is 0.010 mg/l, total cadmium is 0.005 mg/l, total chromium is 0.1 mg/l, and total lead is 0.015 mg/l.

Response: The MCLs are the maximum contaminant levels required for drinking water. These MCLs must be met at and/or after the drinking water treatment plant. Although some of the parameters listed have effluent limits that are higher than the MCLs, the limits are established so that the **receiving waterbody**, thus the drinking water source, will not exceed the established MCLs. As per LAC 33:IX.1113.C.6.c, "criteria applied to water bodies designated as drinking water supplies are developed to protect that water supply for human consumption, including protection against taste and odor effects, to protect it for primary and secondary contact recreation, and to prevent contamination of fish and aquatic life consumed by humans." This criteria was considered in the calculation of the water quality based limits discussed in the Response to Comments #1 and 2.

12. **Comment:** The LDEQ policy sets up a regulated space called a surface water protection area within a 5-mile radius of a drinking water intake where potential sources of contamination are prohibited.

Response: As noted previously, there are no regulations prohibiting a discharge within the surface water protection area. In fact, according to the Terrebonne Parish Consolidated WWs Dist. #1 – Houma Service Area Source Water Assessment, November 2002, there are an estimated 271 SPSOCs within the critical area of the intake. A Significant Potential Source of Contamination (SPSOC) is defined as any facility or activity that stores, uses, or produces, as a product or by-product, the contaminants regulated under the Safe Drinking Water Act and has a sufficient likelihood of releasing such contaminants at levels that could pose a concern relative to drinking water sources. Many of these SPSOCs have water discharge permits from the LDEQ.

13. **Comment:** The drinking water intake at the Houma Water Treatment Plant has become more important to Terrebonne Parish in future years because of the rapid growth and the fact that the contract in the Lafourche freshwater district has only six years left before it expires.

Response: As mentioned previously, the discharge from the AAT facility should not negatively impact the Houma Water Treatment Plant.

14. **Comment:** Why would the State want to allow this type of discharge without some strong guidelines and testing procedures to ensure that they meet the requirements? The State should be the ones doing the sampling and testing, not an independent lab that is paid by the owner

Response: The effluent limitations derived in the permit are considered "strong guidelines" for the protection of the receiving waterbody. Also, the facility will be performing "batch" testing. A batch cannot be discharged until all effluent limitations are met and verified through laboratory testing. This differs from a "continuous" discharge in that, once an effluent violation is discovered, the wastewater has already been discharged and has reached the receiving waterbody. Implementing the batch discharge allows the safety of ensuring compliance with the permit before the discharge occurs.

The State of Louisiana does not have the resources available to perform the sampling and testing. There are, however, a large number of reputable certified laboratories which provide the sampling and testing. The environmental laboratories must be certified by the State in order for the Department to accept any lab results.

15. **Comment:** There is a concern about the validity of the treatment process.

Response: According to the application, AAT's wastewater treatment process will consist of oil/water separation, air floatation, centrifugation, and biological treatment. These methods are commonly used to treat the oily wastes defined in the permit. Also, as mentioned previously, the facility must discharge the effluent in batches. Therefore, before any wastewater can be discharged, it must be verified that it meets all the effluent limitations within the permit. If there is any exceedance, the batch shall not be discharged.

16. **Comment:** In the public notice, it states that "it has been determined that this discharge will have no adverse impact on the existing uses of the receiving waterbody. As with any discharge, however, some change in existing water quality may occur." If changes in existing water quality occur, because of the discharge of this waste product, then this should not be permitted.

Response: The discharge from the AAT facility flows into Munson Slip; thence into the Houma Navigation Canal in Subsegment 120509 of the Terrebonne Basin. According to LAC 33:IX.1123.E.Table 3, the designated uses for Subsegment 120509 are primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply. The permit establishes limitations and other requirements which protect these uses. The public notice language is established so that the public is aware of the possibility of changes in existing water quality. However, the existing uses must be maintained.

17. **Comment:** There is a question/concern of the build up of heavy metals and other chemicals in the water and sediment in the area. How will the buildup of these heavy metals affect human health and the aquatic life, both plants and animals?

Response: The effluent limitations placed into the permit are in accordance with the LDEQ regulations and the *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*. These limits are protective of the designated uses of the receiving waterbody. The effluent limits should ensure that there are no long term effects to the receiving waterbody. However, please note that the waterbodies throughout the state are assessed every two years to determine if the waterbody meets the water quality standards. A Total Maximum Daily Load (TMDL) will be

developed for each waterbody, which is determined to be "impaired". The results of the TMDLs must be implemented in water discharge permits, where applicable. Therefore, if, in the future, the Houma Navigation Canal is determined to be impaired, a TMDL would be performed. If the result of the TMDL required more stringent limits to be placed on AAT or any other point source discharge, the TMDL would be implemented in the permit(s).

18. **Comment:** There is a concern that the current "acceptable" standards may not be "acceptable" in the future. An example brought out in the public hearing is that currently there are no standards for discharges of pharmaceuticals; however, there is some concerns that these pollutants are creating a problem in the environment.

Response: The water quality standards are not static. They may change for a variety of reasons. The LDEQ reviews the standards every three years and will make changes as appropriate. The Water Permits Division must ensure that these new standards are applied in new and renewed permits. Also, permits contain a reopener clause which will allow the Department to modify or revoke and reissue the permit to address any water quality standards change.

19. **Comment:** AAT is a Limited Liability Corporation. There is a concern with what effect it would have with limited liability upon their responsibility and ability to correct any damages caused by any failure at their facility or its processes.

Response: Should the permittee fail to meet the requirements of the permit, it will be subject to the same enforcement action as any other type of permittee.

20. **Comment:** Because the facility plans on receiving and treating bilge water, saltwater should be limited in the permit.

Response: A wasteload allocation for chloride was calculated using the harmonic mean flow of 1 cfs, in accordance with LAC 33:IX.1115.C.8, and the numerical criteria of 500 mg/l, in accordance with LAC 33:IX.1123.Table 3. The result of the calculation indicates that the facility may discharge up to 4,539 mg/l of chlorides without causing a violation of the water quality criterion for chlorides. Therefore, a daily maximum limitation of 4,539 mg/l chlorides has been placed into the final permit. This permit limitation is in accordance with LAC 33:IX.1115C.8 and the *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, Water Quality Management Plant, Volume 3*, April 16, 2008. The calculation is attached to this Response to Comments as Attachment A.

21. **Comment:** The BOD₅ should be monitored on a frequency of once per batch rather than once per month. Also, a limit for Triethylene glycol should be placed into the permit for Outfall 001. Also, a limit for BOD₅ and TEG should be required for the stormwater outfalls.

Response: The results for a BOD₅ cannot be obtained for several days (the BOD₅ is a 5 day test). It is typically not feasible for a company to be able to hold the effluent for that amount of time; therefore, the monitoring frequency for BOD₅ was placed at once per month.

AAT has submitted a revised application removing the acceptance of TEG from the facility; therefore, a limit for TEG will not be required. Please note that TEG was never intended to be part of the wastewater treatment stream. The BOD₅ limit was placed into the permit as an indicator of TEG

possibly entering the receiving waterbody should there be a spill or tank failure. Even though TEG is not being accepted at the facility, the Department has decided to keep the BOD₅ limit in place at a frequency of once per month.

Because of the removal of TEG from the permit application, the stormwater outfall will not contain requirements for BOD₅ and TEG.

- 22. Comment:** The permit should require limits for individual volatile organic chemicals (VOCs) with monitoring of once per batch for Outfall 001 and Outfall 002.

Response: This facility, for Outfall 001, is eligible under the guidelines for the Centralized Waste Treatment Point Source Category found in 40 CFR437. Specifically, this facility falls under the guidelines in 40 CFR 437.24, new source performance standards for Subpart B – Oils Treatment and Recovery. These guidelines were implemented in the discharge permit. The permittee will be required to monitor for toxic substances once per six months. If it is found that any toxic substance, including VOCs, is being discharged at a level which could cause the receiving waterbody to exceed water quality standards, the permit may be reopened and an appropriate limit may be placed into the permit. Since VOCs are not required for Outfall 001, they are not required for Outfall 002.

- 23. Comment:** A limit for barium should be placed into the permit for Outfall 001 based on barium being a major component in drilling muds and could be present in waste from production/drilling mud tanks.

Response: Barium is a component in these types of wastes. However, these types of wastes are considered exploration and production (E&P) wastes, which are prohibited in the permit (see Part II, Section A, Paragraph 12). Therefore, a limit for barium will not be placed into the permit. Please note, however, that barium is one of the toxic pollutants that AAT must monitor for once per six months.

- 24. Comment:** Oilfield fluids will have Lignosulfonate, which cannot be removed. These fluids will also contain bromides, calcium chlorides, and other salts. There is no way to remove these salts during the treatment process.

Response: The pollutants described above are components of E&P Waste which is prohibited in the permit (see Response to Comment #23). Please note, however, that the LDEQ has placed a limitation for chlorides in the final permit (see Response to Comment #20).

- 25. Comment:** Why not put the wastewater into an injection well?

Response: The DEQ would have no objection to injecting the wastewater into an approved injection well. However, the facility has proposed an alternative approach. The DEQ has received and reviewed the information provided and has issued a permit which complies with all regulations and which protect the water quality standards of the receiving waterbody. Also, the majority of wastewater that AAT will accept contains little or no chlorides. See Part V, Page 4 of the Basis for Decision for additional information regarding the alternative project of deep well injection.

- 26. Comment:** The permit should establish monthly and weekly discharge loading limits for the chemicals monitored in the effluent from Outfall 001. Without loading limits, the facility will be able

to discharge large quantities of wastewater without being in violation of their permit limits and without consideration of the impact the effluent will have on the receiving waterbody.

Response: In accordance with Part III, Section D.1.b, the permittee shall notify the LDEQ of any alteration or addition that could significantly change the nature or increase the quantity of pollutants discharged. Therefore, if the permittee desires to increase its operations, the LDEQ should be made aware and the appropriate actions would take place, i.e. a modification of the permit.

27. **Comment:** The potential for spills, leaks from vessels and tank overflows pose a sufficient reason to require more frequent monitoring of the stormwater outfall.

Response: The monitoring frequency in the permit is consistent with other similar types of operations within the state. Also, the permittee is required to develop and implement a Stormwater Pollution Prevention Plan (SWP3) to minimize the potential for pollutants to enter the stormwater outfall. Therefore, the monitoring requirements shall remain at once per quarter.

28. **Comment:** The non-process area stormwater and uncontaminated tank secondary containment waters from the tank batteries is only proposed to have the oil collected from the secondary containment waters. Then the water will be discharged through the stormwater outfall. The application did not indicate how contaminated secondary waters from the tank batteries would be treated. In order to ensure that contaminated stormwater and secondary containment waters would not be discharged and contaminate the receiving waters, additional treatment measures must be added to the waters destined for the stormwater outfall.

Response: Outfall 002 only allows for the discharge of non-process area stormwater and uncontaminated secondary containment waters. If any of these waters becomes contaminated, it is NOT allowed to discharge through Outfall 002, with or without treatment. The contaminated water must be treated and discharged in another manner. According to the application, this water would go into the wastewater treatment plant for Outfall 001.

29. **Comment:** It is believed that LDEQ does not issue permits for waste facilities until all local laws are complied with. Terrebonne Parish has its own hazardous waste ordinances and AAT has never been issued a local permit for their facility.

Response: The LDEQ is not required to ensure that all local ordinances and permits are in order prior to the issuance of a water discharge permit. However, the LDEQ will certainly work with the local governments to address issues pertaining to local laws. Please bear in mind that AAT must be in compliance with all local, state, and federal regulations to operate legally. In other words, even if the LDEQ issues a water discharge permit, the facility may not be able to discharge if there are any local ordinances prohibiting the act. Also, please note that, currently, AAT is not regulated as a hazardous waste facility.

30. **Comment:** A Representative of the Terrebonne Parish Consolidated Government (TPCG) stated that they will not consider any permit until all state and federal approvals have been secured including any approvals necessary from the LDEQ. The TPCG will also procure the services of an independent third party environmental specialist to review any associated permit application and to review information regarding the proposed activities and discharges from the facility as provided to LDEQ to determine if

those discharges trigger the provisions of the Terrebonne Parish waste facility ordinance which includes hazardous waste or any other parish ordinance.

Response: The LDEQ has no issues with the approach that TPCG is taking with respect to AAT. The LDEQ has reviewed the materials and determined that the permit limitations established in the final permit will protect water quality. Therefore, LPDES Water Discharge Permit LA0123072 has been issued.

- 31. Comment:** There could be a lot of contaminants or toxic chemicals that the facility won't know about or the process may not filter out of the water.

Response: Due to the nature of this type of facility being able to accept a wide variety of wastewaters from multiple sources, the LDEQ has included monitoring for toxic substances into the permit (see Part II, Section C). This monitoring will be required semi-annually. If a sample test results in a toxic substance being above the listed MQL, the permittee must take appropriate action to discover the cause of the exceedance and take the necessary steps to bring the sample into compliance with the MQLs. Please note that the MQLs listed in Part II, Section C are NOT effluent limitations. They are meant as effluent goals for the facility to attain and maintain. This monitoring requirement is consistent with municipalities which discharge near a drinking water intake.

- 32. Comment:** AAT is currently operating without a DEQ wastewater and stormwater discharge permit. The facility is also currently operating without a solid waste permit to process solid waste. The facility is currently operating with a DEQ minor source air permit. How is this company allowed to operate without securing all of the necessary permits?

Response: As noted in an inspection report dated January 25, 2008, the facility did have a minor air permit and a modification to the air permit was submitted in December 2006. Also, the facility did not have a solid waste permit. A solid waste permit application was submitted in June 2007, but no permit has been issued. Also, at the time of the inspection, AAT had no authority to discharge treated sanitary wastewater or stormwater. These matters were all referred to the Enforcement Division. On March 12, 2008, an Order to Upgrade was issued to AAT which allows the facility to continue operations while the solid waste permit application is being reviewed. On April 18, 2008, the LDEQ issued a Multi-Sector General Permit for the discharge of stormwater. On June 27, 2008, the LDEQ issued a Consolidated Compliance Order & Notice of Potential Penalty (CCONPP) to AAT. The CCONPP stated specific limitations and monitoring requirements if AAT chooses to continue discharging sanitary wastewater into waters of the state. It also stated specific limitations and monitoring requirements for continued air emissions.

- 33. Comment:** There is concern with DEQ's Enforcement Division. The facility has operated under a minor air quality permit. Concerned citizens reported 38 violations. No fine was given. They were simply given 90 days to correct the problem.

Response: The Surveillance Division does perform periodic inspections of all facilities permitted under the LPDES program. Also, they are charged with investigating all citizen complaints. If a concern is found, the information is referred to the Enforcement Division for appropriate action.

- 34. Comment:** There seem to be some inconsistencies pertaining to the number of tanks within the water and air permit applications. The LDEQ should ensure the accuracies of the applications prior to issuance of a permit.

Response: On March 20, 2008, AAT submitted a revised water discharge permit application. According to this application, there will be 40 tanks at the facility (diagram on page 26 of 42 and narrative on page 33 of 42 in EDMS document # 36687822). On May 28, 2008, a revised air permit application was submitted to the Department. According to this application there will be 40 tanks at the facility (page 4 of 28 in EDMS document # 36939201). Therefore, it appears that the applications are now consistent.

- 35. Comment:** In the water discharge permit application, under Section II. C. Outfall Identification, AAT identifies four outfalls. However, within the same application, only three outfalls are described in detail. A stormwater outfall was omitted. How many outfalls are at the facility?

Response: On March 20, 2008, AAT submitted a revised permit application to the Department along with comments to the draft permit. The application corrected the inconsistency of the original permit application. There will be three outfalls at the facility: Outfall 001 – effluent from the new wastewater treatment plant, Outfall 002 – all facility non-process area stormwater, and Outfall 003 – effluent from the sewage treatment plant.

- 36. Comments:** Additional information on the Triethylene Glycol (TEG) dehydration process and handling of the processed wastewater is needed to be submitted, reviewed and included in the draft permit.

Response: AAT submitted a revised permit application stating that the facility will no longer be accepting TEG at its facility. Therefore, no further requirements are needed to address TEG.

- 37. Comments:** There is a need to prohibit marine vessel bilge water and marine vessel wash water from being received by the AAT facility due to the potential of bringing in invasive species which will impact the water body in surrounding areas.

Response: The regulations pertaining to the transportation of invasive species into the state of Louisiana is governed by the Department of Wildlife and Fisheries under LAC 76:VII.1101. These regulations prohibit the importation and transportation of specific invasive species without first obtaining an Invasive Noxious Aquatic Plant permit. Because regulations have already been established through LAC 76:VII.1101, the final LPDES permit did not contain specific requirements pertaining to invasive species.

- 38. Comment:** There is a great concern regarding a reference to a “pilot study” pertaining to the water discharge permit. There was nothing in the public record concerning a “pilot study”.

Response: The Water Permits Division never approved a “pilot study” for the discharge of the treated wastewater described in the application. The reference to the “pilot study” came from an interview with an LDEQ official who used the term “pilot study” for the solid waste program. The fact is LDEQ never approved a “pilot study” of any kind to AAT. The reference was made regarding an Order to Upgrade that was issued to the facility within the Solid Waste Division.

- 39. Comment:** Should AAT be required to set up a bond for a certain amount of dollars to remediate any problems which may arise from their discharge?

Response: There are currently no regulations concerning water discharge permits which would require a bond to be established by the company. Therefore, no bond will be required for the water discharge permit.

- 40. Comment:** At the public hearing and in a subsequent revised permit application submitted with comments concerning the draft permit, the permittee has made the decision to no longer accept, treat, or process Triethylene Glycol (TEG). Therefore, the water application, as well as the air and solid waste permit applications, should be rejected. A new public comment period and public hearing should be considered for the new application.

Response: AAT did submit a revised application along with other comments within the public comments period. The Water Permits Division has reviewed the application and determined that a new public comment period for the water discharge permit application was not necessary. AAT is no longer planning on receiving, treating, and storing TEG. Since the facility is only proposing to remove a process and because the removal of this process does not change any of the conditions of the permit, a new public comment period is not warranted. Please note that TEG was never intended to enter the wastewater treatment facility. Only if there was a tank failure would there be a potential for the TEG to enter the facility.

Also, there was a change request in the revised permit application that combines the two stormwater outfalls from the facility. The removal of an outfall which will no longer be discharging does not warrant a new public comment period.

- 41. Comment:** In the statement of basis, it states that the facility will discharge "treated oily wastewater from various used oil shipments including, but not limited to oil filters, absorbent pads, spent engine maintenance fluids, vessel bilge waters, etc." The expressions "but not limited" and "etc." are vague and should be made more definitive.

Response: An appendix has been added to the final permit which specifically states the waste types accepted by the facility. There is a statement in Part II of the permit which states that if the company desires to accept another waste type, approval must be received from the Department. Please note that if the request would change any condition in the permit, a modification of the permit would be required.

- 42. Comment:** It would be in the best interest for the Terrebonne Parish community, the company involved, and the LDEQ to suspend this permit until all issues are resolved. The Terrebonne Parish residents, who will be most likely exposed to the wastewater discharge, should be taken into consideration and given serious weight in the permit decision.

Response: The public participation process, including a public hearing, are ways to allow the public to speak for or against the water discharge permit **prior** to the issuance of a permit. AAT has had no authorization to discharge process wastewater prior to the issuance of the final permit. Therefore, there was no permit to suspend. Since the public comment period, the LDEQ has been preparing this Response to Comments and resolving any issues related to this facility.

43. **Comment:** Why couldn't the discharge from AAT go to the City's Wastewater Treatment Plant before being discharged into the Houma Navigational Canal?

Response: The LDEQ would have no objection if AAT tied into the City's wastewater treatment plant. However, according to the information submitted to LDEQ on August 14, 2008, from AAT, connecting the wastewater to the City's Wastewater Treatment Plant was not identified as an alternative project.

44. **Comment:** Why not haul the wastewater out of the parish instead of discharging it into the Munson Slip?

Response: The LDEQ would have no objection should the permittee find alternative methods of disposal that was within the state regulations. See Part V, Page 5 of the Basis for Decision regarding AAT trucking the wastewater offsite.

45. **Comment:** What is the low flow rate in the Houma Navigation Canal? The average flow is 3,160 CFS; therefore, the low flow in the Houma Navigation Canal is not enough to dilute the amount of increasing contaminants levels discharged.

Response: The low flow rate of the discharge point on Munson Slip was determined to be 0 cfs. Therefore, in accordance with the *Permitting Guidance Document For Implementing Louisiana Surface Water Quality Standards*, the default low flow of 0.1 cfs was used in calculating the water quality based effluent limits in the permit. Water quality based effluent limits will become more stringent into receiving waterbodies with lower critical flows. In this case, the lowest possible critical flow was used in limits determination.

46. **Comment:** How will the discharge affect the Bayou Grand Caillou and Bayou Chauvin areas if a diversion canal is built?

Response: These waterbodies include Subsegments 120501 (Bayou Grand Caillou-from Houma to Bayou Pelton), 120502 (Bayou Grand Caillou-from Bayou Pelton to Houma Navigation Canal), and 120507 (Bayou Chauvin-from Ashland Canal to Lake Boudreaux).

Subsegments 120501 and 120502 were previously listed on the 303(d) List; however, they have been removed because the Total Maximum Daily Loads (TMDLs) have been developed. Subsegment 120501 was listed as impaired for nutrients, organic enrichment/low DO, and phosphorus. The *Bayou Grand Caillou Watershed TMDL for Biochemical Oxygen Demanding Substances and Nutrients* states that no point source load reductions were required to meet the 5.0 mg/l dissolved oxygen standard. Based on the low amount of effluent from AAT that may be diverted to this Subsegment, the Department has determined that the discharge is not expected to have an impact on the watershed. Subsegment 120502 was only listed as impaired for pathogen indicators. Typically, only sanitary wastewater is of concern when addressing pathogen indicators. AAT proposes to discharge approximately 300 gallons per day with fecal coliform limitations of 200 cfu/100 ml monthly average / 400 cfu/100 ml weekly average. Based on the small size of the discharge and the limitations being placed at the current standard, the discharge is not expected to have an impact to the watershed.

Subsegment 120507 is currently impaired for organic enrichment/low DO, nitrate and nitrite, and phosphorus; however, a TMDL was recently completed to address these impairments. According to

the *Bayou Chauvin Watershed TMDL for Biochemical Oxygen Demanding Substances and Nutrients*, no point source load reductions were required to meet the 4.0 mg/l dissolved oxygen standard. The Subsegment was previously listed as impaired for fecal coliform; however, the TMDL for this impairment has been completed. As stated in the above paragraph, the small sanitary discharge with fecal coliform limitations is not expected to have an impact to the watershed.

47. Comment: How will the discharge affect other nearby waterways that are already impaired?

Response: The nearby watersheds that were not discussed in the previous response are Subsegments 120304 (Intracoastal Waterway-from Houma to Larose), 120403 (Intracoastal Waterway-from Bayou Boeuf Locks to Bayou Black in Houma; includes segments of Bayous Boeuf, Black, and Chene), and 120508 (Houma Navigation Canal-from Bayou Pelton to one mile south of Bayou Grand Caillou). An effluent that meets the permit limitations established in the final permit is not expected to have an adverse affect on the receiving waterbody; therefore, not expected to have any adverse affect on the nearby watersheds.

48. Comment: According to TMDL personnel, they check water bodies on the 303(d) list every 4 years on a rotating basis. What happens if the heavy metals start showing up in these waterbodies?

Response: If the receiving waterbody is found to be exceeding a water quality standard, a Total Maximum Daily Load will be performed and the results of the TMDL will be implemented into the affected permits.

49. Comment: How does this permit affect the pair of Bald Eagles nesting around the Houma Navigation Canal and the diversion area?

Response: The permit limitations are designed to protect the acute and chronic aquatic life and human health criteria. If, after discharge, the aquatic life criteria are met within the waterbody, the discharge is not expected to have an effect on the Bald Eagles within the area.

50. Comment: According to DEQ personnel, there is no lab in the State of Louisiana certified to test for heavy metals. How can the owners, treat and test 5 tanks a day? How can the owners get a correct sample to the lab? How can they get the samples tested and the results back in time to meet the batch discharge requirements?

Response: There are a large number of certified labs in the State of Louisiana which can test for heavy metals, including several in and around the City of Houma. These labs should be able to process several of these samples in a relatively short amount of time. A list of certified labs can be found on the LDEQ website at www.deq.louisiana.gov.

51. Comment: If a batch does not meet the criteria, does that mean the company has to retreat it? Please define the quantity of water in a batch and define what is meant by a batch. How does DEQ know which batch did not meet the requirements?

Response: Part II, Section A, Paragraph 16 (see below) answers the above questions.

16. Batch discharges are defined as:

1. A quantity of material that is isolated from either outflow or inflow from the time it is identified as a batch, i.e. a batch accumulated for direct discharge shall be an accumulation of treated material that is then isolated from any further inflow.
2. A batch must not be discharged over a period of time in excess of 48 hours.
3. Batch contents must be adequately represented by the sample or samples taken to characterize the batch analytically. No discharges are permitted without first obtaining the necessary analytical results within outfall limits. In addition to complying with the discharge limitations prior to commencing the discharge, the discharge must also be in compliance with the discharge limitations for the duration of the discharge event.
4. Copies of the treated water analysis shall be available at the treatment site at all times. Should the permittee choose to discharge with verbal results from the laboratory, the formal laboratory report must be on file at the outfall facility no later than three (3) work days of the verbal transaction.

52. Comment: According to TMDL personnel, samples must be in a specific container with the lid on and be obtained and handled in a specific manner. Please explain the specific way the sample is obtained and how large the sample is. Define a grab sample. Define the container and lid. Who keeps the logs and who signs the log books, regarding the samples taken? What type of records does the lab keep? Can concerned citizens examine or get a copy of these records? Does the employee taking the sample sign the log book? Does DEQ notify an owner before an inspection? Will Enforcement accept a sample from a concerned citizen if taken from the discharge site? Will they accept videos or photos?

Response: To address the questions concerning the sampling procedures, Part III, Section C, Paragraph 5.c., states "general sampling protocol shall follow guidelines established in the Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982, USEPA."

A grab sample is defined in Part III, Section F as "an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge."

To address questions related to record keeping, Part III, Section C, Paragraph 4 lists the monitoring information that must be recorded, which includes:

1. The date, exact place, and time of sampling or measurements
2. The individual(s) who performed the sampling or measurements
3. The date(s) analyses were performed
4. The time(s) analyses were begun
5. The individual(s) who performed the analyses
6. The analytical techniques or methods used
7. The results of such analyses
8. The results of all quality control procedures

To address the question concerning inspections, Part III, Section C, Paragraph 1.a. states, "most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty minutes after the time the inspector present his/her credentials and announces the purpose of the inspection."

On a case-by-case basis, the Office of Environmental Compliance may accept certain information from concerned citizens. Any materials would have to be verified to be accurate prior to being included in the public record.

- 53. Comment:** With the use of synthetic oils, AAT cannot test for every type of oil that the generators might send in for recycling and inevitably, this will end up in the processed discharged water.

Response: An Oil & Grease limitation of 15 mg/l Daily Maximum was placed into the permit. An oil & grease test will capture all forms of oil & grease, including synthetic oils.

- 54. Comment:** There have been several complaints of foul odors coming from the facility.

Response: The following information was taken directly from the LDEQ website, www.deq.louisiana.gov. The Department will investigate all complaints in a timely manner.

Single Point of Contact (SPOC) 225-219-3640 or Toll Free 1-888-763-5424

Citizens are encouraged to first contact their local authorities (police, sheriff, fire department, etc...) in the event of an environmental emergency. Otherwise citizens and the regulated community can also contact the SPOC line to report environmental concerns during business hours, 8 a.m. - 4:30 p.m., Monday through Friday at the number listed above. To report a concern outside of business hours call 225-342-1234 or the toll free number. Concerns include spills, releases, odors, fish kills, open burning, waste tires and any other types of environmental incidents. Citizens can **report the incident online**.

A review of the files revealed two complaints were filed against this facility made at approximately the same time. The complaints were that a pitch black toxic smelling smoke was coming from the facility. A LDEQ inspector went out to the facility to investigate. Mr. Farmer, Operations Manager for AAT told the representative that the unit had electrical problems with the air blower circuit during startup in the morning and resulted in the unit being shut down. On a follow-up inspection, the repairs appeared to be repaired and no smoke was detected at the time of the follow-up inspection.

Please note that the wastewater treatment facility has not yet been constructed. Therefore, the above-mentioned complaints were not due to the wastewater treatment plant.

- 55. Comment:** According to Mr. Laynie Barrilleaux, in a phone conversation with Mr. Glenn Vice, the owner of AAT; Mr. Vice indicated that the LDEQ was "in a bit of a quandary" because it was the DEQ's oversight that caused AAT to not yet have a permit it needed to operate a new piece of equipment which would shred the waste material. Therefore, there is a concern about the potential environmental hazard to the Barrilleaux property and their tenants in light of the fact that the LDEQ questioned the operation of this facility – yet there is some implication that the LDEQ may be obligated to AAT in some way.

Response: The LDEQ issues permits that are in accordance with the state regulations and are protective of the environment. In particular, the water discharge permit contains limitations that are protective of both acute and chronic aquatic life and human health and will ensure the protection of the nearby drinking water intake and wetlands. These permit limitations are in accordance with the state water quality regulations.

56. Comment: Was the proposed wastewater treatment plant reviewed and approved by the reviewing authority? If so, were the plans stamped, signed and dated by a registered professional engineer, licensed to practice in the State of Louisiana?

Response: There are currently no DEQ regulations which require that the design of the treatment plant be approved by a registered professional engineer. However, the treatment processes described in the application are common methods for this type of wastewater.

57. Comment: Does the proposed wastewater treatment plant include measures to mitigate any adverse impacts to the watershed associated with plant failure or upset beyond the monitoring of effluent quality written into the draft permit?

Response: The permit contains a number of mitigating measures including the following:

- A Storm Water Pollution Prevention Plan (SWP3).
- AAT will be a batch discharger. This will ensure that no chemicals should pass through the treatment plant untreated. The batch must be tested prior to commencement of discharge. If a chemical is found out of compliance with the permit, the water shall not be discharged.
- Language has been included in Part II, Section A of the permit requiring the permittee to notify the Department and the Terrebonne Parish Consolidated Waterworks District No. 1 in the event that an unauthorized discharge has occurred. This notification will be required immediately upon discovery of the unauthorized discharge.

58. Comment: Was an emergency spill response plan developed in the event of plant failure or upset, or other man-made events associated with the facility which may affect water quality? Situations that should be addressed include actions to be taken in the event that chemicals pass through the wastewater treatment plant untreated. The Plan should include notification of the water system as well as a listing of options and alternatives for containing, collecting and/or treating the chemical release.

Response: According to LAC 33:IX.Chapter 9, this facility is required to develop and implement a Spill Prevention and Control Plan (SPCP). The SPCP will address all the above mentioned concerns. Also, please note that the requirements listed in the previous response to comment (Comment #60) address some of these issues.

59. Comment: A request for a public hearing was requested prior to any issuance of any air discharge permits or any solid waste permits to AAT.

Response: The Air Permits Division and the Solid Waste Permits Division have been made aware of the request for a public hearing. During the public comment period for the respective permits, the administrative authority will make a determination as to whether a public hearing will be held.

60. Comment: The revised application lists the combined non-process area storm water runoff from the existing and new proposed expansion areas and uncontaminated secondary containment waters from the new tank batteries as flowing into Outfall 002. The storm water runoff will not be subject to any treatment.

Response: Although the stormwater runoff will not be treated, the runoff must meet effluent limitations defined in Part I of the permit. The SWP3 requirements will include practices to ensure that the stormwater that discharges through Outfall 002 is uncontaminated. However, should the stormwater become contaminated, AAT must collect and treat this wastewater and route this water through Outfall 001.

61. **Comment:** In the original application the wastewater from the secondary containment was to be collected and the oil removed. In the revised application, that oil collection and removal from the secondary waters is no longer included in the treatment process. Please explain why this may be allowed. Is there not a need to check and contain this storm water with all the oily materials handled in this facility's area?

Response: AAT must develop a SWP3 which will include that "all diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area." Also, as mentioned in the previous response, the stormwater runoff must meet the effluent limitations.

62. **Comment:** Why did AAT pull the TEG but continue to show the same amount of tanks in the revised application as was proposed with the TEG?

Response: The additional tanks will be used for storage of wastewater waiting for treatment or as holding tanks waiting for discharge after treatment.

63. **Comment:** How will the oily water discharge be removed from the water if during equipment failure or if human mistakes are made as appears in their past history of business?

Response: As mentioned previously, the discharge will be done in batches. Therefore, an unauthorized discharge, i.e. one that does not meet the effluent limitations, should never occur. The wastewater must be "locked down" and held until results of the monitoring have been completed and the wastewater meets all requirements. If there was some sort of tank failure, the SWP3 requirements found in Part II, Section B requires that the tanks "be constructed so that a secondary means of containment is provided for the entire contents...plus sufficient freeboard to allow for precipitation." The contaminated water from the secondary containment area would then be required to be treated and discharged according to the permit requirements.

64. **Comment:** What kind of long-term and meaningful contribution does an oil recovery waste site provide for Terrebonne Parish that heavily relies on tourism and the fishing industry?

Response: The LDEQ Water Permits Division does not make local decisions pertaining to what types of businesses operate within the parish. The Water Permits Division is charged with issuing or denying a permit based on the water quality regulations and an environmental assessment through the analysis of the "IT Questions" (see Basis for Decision). The permit requirements in the final discharge permit will ensure the protection of the water quality standards and are in accordance with the water quality regulations. In the Basis for Decision, the LDEQ has determined that adverse environmental impacts had been minimized or avoided to the maximum extent possible and the facility balanced social and economic factors with environmental impacts.

- 65. Comment:** Why does AAT have a right to continue to operate with faulty and substandard equipment?

Response: The facility has been issued an air permit, an Order to Upgrade to continue operations under the solid waste regulations, a Multi-Sector General Permit for the discharge of stormwater, and a Compliance Order and Notice of Potential Penalty that lays out other specific requirements pertaining to all media. The facility must be able to comply with all permit requirements.

- 66. Comment:** What confidence does LDEQ have that AAT will comply with their permits when they appeared to be ignorant of their past methods of disposals and permit procedures as seen in the DEQ CEI report?

Response: Based on the information provided in the permit application, in particular the type of treatment described in the application relative to the types of wastewaters received, the Department believes the effluent limitations can be achieved. The Enforcement Division is currently working with representatives of AAT to correct the current problems found with the facility. Appropriate action has been taken and will continue to be taken to ensure that the permittee is fully aware of the regulations and the importance of getting into and maintaining compliance.

- 67. Comment:** How can an A6 flood zone be permitted as a C zone? Is this a mistake?

Response: The LDEQ does not classify the flood zones within the state. Also, LPDES water discharge permits do not specifically prohibit discharges in flood zones.

- 68. Comment:** Have the owners of AAT ever operated this type of business before? Are they qualified to do this business in such a sensitive area? What kind of professional certificates do they hold?

Response: Currently, the LDEQ does not have regulations requiring particular certifications or degrees to receive industrial wastewater discharge permits. Therefore, this information was not requested of the permittee.

- 69. Comment:** Which agency has control over the transportation of oily waste water into Terrebonne Parish over the roads and highway and through the residential and commercial areas?

Response: The Solid Waste Permits Division does have regulations pertaining to the transportation of oily wastes and wastewaters.

- 70. Comment:** How much oily liquid waste is brought into the facility per year, month, and day?

Response: According to AAT, this oily waste water treatment facility is proposed to discharge a maximum of 80,000 gallons of treated water a day. Currently, AAT is processing and shipping out approximately 15,000 gallons of water per day from the used oil processing plant, which could be sent to the proposed wastewater processing facility. This water has a percentage of 1 to 3% of recoverable used oil still in suspension, which still needs further processing before it can be discharged. Given an average of 21 working days per month, the monthly volume is estimated to be 315,000 gallons and the yearly estimated volume is 3,780,000 gallons of oily wastewater that is currently being shipped off-site to other facilities for further treatment.

71. Comment: How is the waste to be treated transported to the site and are manifest kept on all the transported shipments? Is the incoming waste monitored?

Response: The facility is planning to receive the material in truckload quantities. The incoming waste will be accompanied by a manifest and a waste profile. The wastewater will be profiled in advanced before coming on site to verify that the wastewater is non-hazardous and to determine the appropriate treatment process.

72. Comment: How long in hours does the containment, treatment, testing, verification of the testing, and eventual discharge take?

Response: According to AAT, the design of the wastewater treatment plant is still in the engineering phase and, therefore, particular time data is currently not available. The final engineering designs will be completed upon issuance of the final permit to ensure that all parameters and final effluent limitations are accounted for in the design. Please note, however, that AAT will have a sufficient number of holding tanks to allow for sampling and analysis of treated batches before being discharged through the permitted outfall.

There were several comments pertaining, specifically, to the Air and Solid Waste Permit Application. Those comments were not responded to in this Response to Comments, unless the response was essential to a response to the Water Discharge Permit. Comments pertaining to the Air and Solid Waste Permit Applications should be made to the appropriate divisions as outlined in their respective public notices.

ATTACHMENT A

Chlorides LIMIT CALCULATION AT THE EDGE OF THE MIXING ZONE for Subsegment 120509

Facility Name	American Advanced Tech.
LA Number	LA0123072
Facility Flow (MGD)	0.08 MGD
Harmonic Mean Flow (cfs)	1 cfs
Average Limitation Chlorides	4539.38 mg/l

Calculation:

$$[Cr \div (Qe \div (Qe + (0.6463 \times Fs \times Qr)))] = \text{Average mg/l}$$

Cr = Numerical Criteria (mg/l)

Qe = Facility Flow (MGD)

Qr = Receiving Stream Flow (MGD)

Fs = MZ (1)