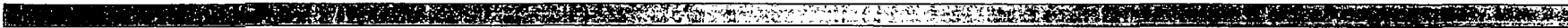

UNIVERSAL WASTE AND TRANSIT INC.

CONSTRUCTION PERMIT APPLICATION

LOCATED AT

7208 - 9th Avenue
Tampa, Florida



VOLUME 1

General
Site Information
Land Use
Operating Information
Security
Financial Responsibility
Certificates
Containers
Chemical, Physical & Biological Treatment
Closure

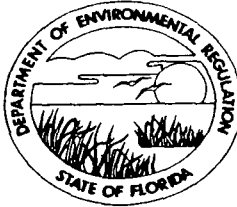
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED

DEC 04 1987

SOUTHWEST DISTRICT

4520 OAK FAIR BLVD.
TAMPA, FLORIDA 33610-7347
813-623-5561
Suncom-552-7812



Hazardous Waste

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

DR. RICHARD D. GARRITY
DISTRICT MANAGER

December 1, 1987

Mr. James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

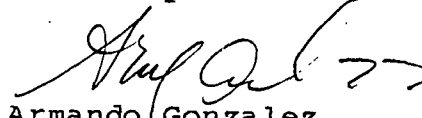
Re: Universal Waste & Transit, Inc., EPA I.D. No. applied for
Construction Permit Application HC29-141782

Dear Mr. Scarbrough:

In accordance with the Memorandum of Agreement FDER/EPA,
Section V.C., I am enclosing a permit application submitted by the
referenced facility on November 12, 1987.

For any questions, please contact me at 813/623-5561.

Sincerely,


Armando Gonzalez
Permitting Engineer
Hazardous Waste Section

AG/br

cc: Satish Kastury - DER/Tallahassee

RECEIVED

DEC 02 1987

Hazardous Waste

GENERAL INFORMATION

for

Universal Waste & Transit

located at

7208 9th Avenue

Tampa, Florida

October 1987

DEC 02 1987

NOV 13 1987

(SOUTH V. DISTRICT)
TAMPA

INTRODUCTION

Universal Waste & Transit is enclosing a completed "Application For A Hazardous Waste Permit" in accordance with Chapter 17-30 of the Florida Administrative Code.

Universal Waste & Transit intends to operate a hazardous waste storage and treatment facility at the address indicated below:

7208 9th Avenue
Tampa, Florida 33619

The intent of this facility is to temporarily store hazardous waste for subsequent shipment off-site to licensed hazardous waste treatment and/or disposal facilities. At the present time only limited treatment will be performed on site. The on-site processes will include:

- solidification

No other treatment option is currently contemplated at this location.

Universal Waste & Transit will make every effort to assist local industries in the management of their waste materials. We are placing specific emphasis on the small business sector and small quantity generators within this area who require environmentally sound waste management practices at economically affordable prices.

Included as Attachment 1 is a list of potential hazardous waste generators in the Tampa Bay area which Universal Waste & Transit anticipates servicing.

PART I - GENERAL FACILITY INFORMATION

A. GENERAL INFORMATION

All general information is included on the State of Florida, Department of Environmental Regulation, "Application For A Hazardous Waste Facility Permit" (DER form 17-30-401 (2)), effective October, 1987, which is included in this document as Attachment 2. All information included on this aforementioned form will be reiterated within this section. The UW&T facility will be used for the storage of waste in containers and for physical/chemical treatment of hazardous waste.

This application is for a construction permit only. The anticipated date for commencing construction is January, 1988.

The facility name and street address are indicated below:

Universal Waste & Transit, Inc.
7208 9th Avenue
Tampa, Florida 33615

The mailing address for UW&T is:

7217 Gulf Blvd. Suite 7
St. Petersburg, Florida 33706

The facility contact; operator and owner are:

Mr. Robert Bedore
5277 Isla Key Blvd. #118
St. Petersburg, Florida 33715
(813) 864-4076
(813) 360-9100

Universal Waste & Transit is a licensed Delaware corporation, which is also licensed to do business in Florida. The corporate charter is included as Attachment

3.

The site is currently being leased with the intent for purchase to occur in 1988. The current landowner's name is:

Ms. Mamie Von Kerik
Atlanta, Georgia

The engineer of record for the facility is :

Mr. James Winter PE., L.S.
Seminole Engineering, Inc.
14483 62 St. North
Clearwater, FL 34620

The facility is not located on Indian land.

The only pending environmental permit for UW&T is an application as a hazardous waste transporter previously submitted to the State of Florida, Department of Environmental Regulation.

B. SITE INFORMATION

Once again specific site information is included on the previously referenced application form and will be reiterated within this text.

1. FACILITY LOCATION

County: Hillsborough

Nearest Community: City of Tampa, Florida

Latitude: 27 degrees; 57 minutes; 49 seconds; north

Longitude: 82 degrees; 22 minutes; 23 seconds; west

2. SITE AREA

The site is located on vacant land having a total area of 1.4 acres (MOL). The land is currently undeveloped. No previous solid waste management units were located at this location. No current solid waste management unit is now located on site.

3. TOPOGRAPHIC MAPS

Since the site borders on the boundary of the Tampa and Brandon USGS topographic maps, both are included in this submittal as Attachment 4.

No drinking water wells are located within 0.25 miles of the proposed facility.

No intake or discharge structures are located within 1 mile of the proposed facility.

No injection wells are to be used at the proposed facility.

All surrounding land uses are industrial/commercial.

A complete site survey at a scale of 1 inch to 200 feet is included as Attachment 5. (map tube)

An aerial photograph of the site at a scale of 1 inch to 2000 feet is included as Attachment 6.

A copy of the local wind rose is included as Attachment 7.

Complete facility scale drawings are included in the map tube.

4. FLOOD PLAIN

The site is located outside the 100 year flood plain. A map outlining the area of the site has been obtained from the Federal Emergency Management Agency indicating this fact and is included as Attachment 8. This fact is also certified on the site survey by a registered surveyor.

C. LAND USE INFORMATION

1. PRESENT ZONING

The site is located within the City of Tampa and is currently zoned IH (heavy industrial). Included as Attachment 9 is a letter from the City of Tampa dated August 17, 1987 confirming that the property is zoned Heavy Industrial, in accordance Chapter 43A of the City of Tampa Code of Ordinances.

A subsequent letter from the City of Tampa dated Sept.30, 1987 (Attachment 10) further confirms that a hazardous waste storage/treatment/transport facility is a permitted use in the heavy industrial zoning district at this location. Therefore, no zoning changes are anticipated.

Meetings have been held with the various building and utility departments to insure that no major modifications to the site are required prior to construction.

The City of Tampa Municipal Code; Chapter 43a; Zoning; states specifically that the IH Zoning Districts uses shall include: "processing, packaging, bulk storage and testing of potentially noxious or hazardous materials or products such as chemicals, gases, cement, explosives...wastes, garbage or other refuse...". A copy of this document is included as Attachment 11.

2. PRESENT USE

The present land use for this site and adjacent properties is: heavy industrial; light industrial and commercial. The City of Tampa zoning ordinance states that such properties are to be maintained for the uses outlined in Attachment 11. All such uses have to do with manufacturing and similar operations. No residential areas are located in close proximity to the proposed facility. A land use map for the area is included as Attachment 12.

D. OPERATING INFORMATION

1. SIC Codes

Waste material will be generated on site. The following SIC codes are representative of this operation:

9511

8911

4953

7391

2. DESCRIPTION OF THE FACILITY

(a.) Business Activities

Universal Waste & Transit, Inc. will operate a commercial hazardous waste storage and treatment facility at the proposed location. As indicated in Attachment 13, UW&T will have the potential to store a variety of waste materials. Many of these waste materials, however, will be present in small quantities which will result from the removal of overage laboratory chemicals or waste from small quantity generators.

The largest volume of waste materials to be stored or treated will emanate from local industries.

Universal Waste & Transit will offer a complete range of waste management services which will include:

- evaluation of existing industrial waste management practices
- sampling and analysis of waste materials
- packaging and/or containerization of waste products
- labeling and manifest preparation for the waste generator
- transportation
- storage and/or treatment of the waste
- annual report assistance for the waste generator

(b.) Storage and Treatment Activities

Universal Waste & Transit proposes to operate its storage and treatment facility within a five thousand eight hundred and sixty six (5866) square foot building which will be specifically designed for hazardous waste management.

This permit application requests the following storage and treatment capacities:

- storage capacity of 33,660 gallons
- treatment via solidification of up to 2000 pounds per day.

A brief description of these storage and treatment processes are indicated below.

Universal Waste & Transit will store waste materials for either subsequent on-site treatment via solidification or for consolidation and transport to other licensed off site treatment/disposal facilities. It should be noted that even after solidification, off-site disposed will be required. No on-site disposal will be performed.

All waste materials will be stored in Department of Transportation (DOT) acceptable containers in such a manner that detrimental co-mingling will not occur.

All flammable and combustible waste materials will be stored in a separate area which will be specifically designed for this purpose. This area will contain explosion proof wiring throughout the area; both primary and secondary fire suppression systems; automatic ventilation system; on-line explosivity monitoring; blow out panels; explosion proof lighting; and similar safety and fire protection devices.

The storage facility will be specifically designed so as to insure protection of the environment. The floor will be continuous poured concrete subsequently coated with an impervious urethane coating. Up to height of four (4) feet the walls will be concrete block coated with a similar material.

The floors will be sloped to containment trenches so that any leak can be readily contained, and to prevent co-mingling of incompatible wastes.

As previously indicated the maximum storage volume requested at the facility would be 33,660 gallons. This volume is based upon a maximum storage capacity of 612 fifty-five gallon drums.

Please note that the maximum container storage can exceed 612 fifty-five gallon drums since smaller containers (5 gallon, 10 gallon, 20 gallon and 30 gallon sizes) can enter the facility. However, the maximum storage volume can never exceed 33,660 gallons.

(c.) Treatment

Universal Waste & Transit proposes to perform, at this time, only minimal treatment at the facility. Our initial intent is to service the needs of local industry while making every attempt at both waste minimization and the new land ban restrictions. The treatment process anticipated at this site will be solidification.

A treatment capacity of 2000 pounds per day is anticipated.

In an effort to reduce the quantity of waste destined for land disposal UW&T will solidify wastes using a filter press and/or solidifying agents to remove excess liquids from already containerized wastes.

This process will involve a plate and frame filter press. Into the press will be fed semi-solid waste in an attempt to perform satisfactory liquid/solid phase ^aseparation.

The filtrate will either be discharged to the sanitary sewer (if acceptable limits are met) or transported off-site for acceptable disposal.

The solid fraction will be consolidated for ultimate off-site land disposal. A more detailed discussion is included in Section J.

(d.) Hazardous Waste to be Managed on Site

Universal Waste & Transit requests the capability to manage most waste materials currently regulated by both state and federal law. Granting of this request will allow UW&T the ability to remove most wastes generated within Florida to licensed disposal facilities. This will aid not only small quantity generators but will also be of tremendous help in the successful management of household hazardous waste. It should be noted that the quantities requested for many of these wastes are quite low reflecting our estimates that only minimal quantities of certain wastes will be generated on an annual basis.

The attached listing of waste materials anticipated at the proposed facility is included as Attachment 13. These items are listed by USEPA Hazard Code Number.

(e.) Estimated Annual Quantities of Hazardous Waste

The estimated annual quantity of hazardous waste to be managed at the facility varies substantially with any particular waste material, for example UW&T anticipates managing a substantial volume of EP Toxic liquids, sludges and solids but anticipates only minimal quantities of the acutely toxic wastes.

It should also be noted that some overlap occurs when estimating quantities of hazardous waste, for example, wastes in the D-001 category overlap with those in the F-003; F-004; F-005 categories. These overlaps will be noted in the attachment addressing hazardous waste quantities. The list of USEPA Hazardous Waste Codes; their waste type and the estimated annual quantity of waste managed at UW&T is included as Attachment 14.

The quantities requested are both realistic and achievable as indicated below:

Annual total waste estimate:

- 377,100 gallons
- or 6,856 fifty-five gallon drums

Based on 260 working days/year this is only 26 drums/day entering the facility.

(f.) Waste Handling Procedures and Equipment Required

As previously described UW&T will perform storage and limited treatment only at this facility. Outlined below are the procedures and steps involved in the successful management of waste materials at UW&T from the time of initial generator contact through removal of the waste material to licensed off-site treatment or disposal facilities:

1. initial contact by waste generator
2. generator required to complete and sign a UW&T Waste Data Sheet
3. sampling of the waste and subsequent analyses can be performed by UW&T or by the generator at the generator's discretion
4. the completed UW&T Waste Data Sheet and a sample of the waste must be submitted to UW&T prior to waste approval
5. analytical data reviewed by UW&T staff chemist
6. internal decision made as to whether the waste will be accepted at UW&T
7. if accepted, a date for pickup is scheduled with the generator

8. UW&T field chemist arrives at generator's site at which time all containers are inspected to insure compliance with Department of Transportation (DOT) Regulations and quality control samples from all containers are obtained
9. if the container is unacceptable by either DOT standards or facility permit standards a decision will be made by the generator as to whether the contents will be transferred to new containers; overpacked; or left on site.
10. if visual observations of the quality control samples do not comply with the completed profile sheet (such as liquid versus solid; color change; etc.) the container will be rejected immediately.
11. all acceptable containers will be labeled and manifested in accordance with DOT regulations.
12. waste materials will be removed from the generator's site and transported via the most direct route to UW&T.
13. waste arrives at UW&T loading dock area.
14. containers reinspected to insure no damage in transit.

15. containers placed in appropriate storage locations
16. quality control samples analyzed to verify Profile Sheet analyses.
17. if off specification containers are uncovered the generator will be immediately notified and the appropriate actions taken as discussed elsewhere in this application. The original manifest will be signed and returned to the generator.
18. all appropriate data will be logged onto the UW&T computer system.
19. approval for ultimate treatment and/or disposal will be obtained.
20. the waste will scheduled for treatment and/or reshipment.
21. the waste material will be treated if deemed necessary.
22. the waste will be transported to the appropriate off-site disposal facility.
23. the waste be will removed from current inventory.

(g.) Required Equipment

The items required for the successful completion of these tasks are shown below:

computer.

- 33,660 gallon storage facility
- 2000 pounds per day solidification process
- tow motor with barrel handling attachment
- drum trucks
- drum de-header
- bung wrenches
- non-sparking tools
- drum pumps
- air powered diaphragm pump
- patay drum pump (non-sparking)
- air compressor
- empty containers (5, 20, 30, 55, 85, 110 gallon)
- personnel protective equipment
- spill cleanup equipment
- miscellaneous handtools
- straight trucks (incoming waste)
- semi-tractor trailers (outgoing waste)

3. PROCESS AND PROCESS CODES

All anticipated regulated wastes which will be managed at the facility as well as estimated annual quantities; USEPA Code Number; and process code are included on Attachment 14. Please note that it is difficult, if not impossible, to know which wastes will enter the facility in a form amenable to solidification.

PART II

A. GENERAL

1. TOPOGRAPHIC MAP

Since topographic maps at a scale of 1 inch to 200 feet are not available from the United States Geological Survey, a site survey was performed by a registered surveying company. This survey is attached to the facility's schematics enclosed in the map tube.

A complete facility drawing at a scale of 1 inch to 20 feet has also been included as Attachment 5 (page S-1 in the map tube). This survey and facility drawing show the 100 year flood plain; orientation of the map; access control; building and structures; contours; loading; drainage areas; run-off control system; ingress and egress roadways; legal description of the property and associated site data.

As previously addressed a separate flood plain map obtained from the Federal Emergency Management Agency has been included as Attachment 8.

The required wind rose has been previously addressed as being included as Attachment 7.

2. FINANCIAL RESPONSIBILITY

A. CLOSURE COST ESTIMATE

A complete Closure Plan is included as Attachment 15. Our most recent closure cost estimate for the facility is \$.

A financial guarantee bond in that amount is in the process of being negotiated with the National Union Fire Insurance Company of Pittsburgh, Pennsylvania. If these negotiations prove unfruitful a similiar guarantee bond will be obtained from other financial organizations. A standby trust fund agreement will be provided by First Florida Bank of Tampa, Florida. These financial assurance documents will be in place and the originals filed with the Hazardous Waste Financial Responsibility Coordinator at least 60 days prior to the acceptance of any waste at the facility. Copies of these documents will be filed with the Department of Environmental Regulation's Tampa office at that time.

B. POST CLOSURE COST ESTIMATE

No post closure care is required for the proposed facility.

C. LIABILITY INSURANCE

Universal Waste & Transit is now in the process of obtaining the required liability coverage. Included as Attachment 16 is a letter from Carlisle Fields and Co., a local insurance broker, indicating that UW&T is now in the process of attempting to obtain the necessary liability coverage. Also included with Attachment 16 is a copy of the application form previously filed in an attempt to obtain that coverage.

The appropriate State of Florida, DER forms will be completed and filed with the Hazardous Waste Financial Responsibility Coordinator at least 60 days prior to the acceptance of any waste material.

3. FLOOD PRONE AREAS

The UW&T hazardous waste storage and treatment facility is located in Flood Zone C as indicated on the Federal Emergency Management Agency Map included as Attachment 8. The entire site is located outside of the 100 year Flood Plane Zone.

The facility is also located outside of the hurricane storm surge zone.

4. FACILITY SECURITY

(a.) SECURITY PROCEDURES AND EQUIPMENT

As indicated in Attachment 5 (map tube), the UW&T facility will be fully fenced. A six foot high fence topped with barbed wire will encircle the active portion of the site. There will be controlled access to the site by means of a single lockable 24 foot gate. Entrance to the active portion of the facility can be accomodated only through this gate entrance.

UW&T is currently considering posting a security guard at the site during all non-working hours.

Posted at the gate and on the fence surrounding the facility will be signs with the following legend:

"DANGER- UNAUTHORIZED PERSONNEL KEEP OUT"

The legend on this sign will be written in both English and Spanish.

The facility will be monitored by an automatic alarm system for both unauthorized entry and fire. If the system is activated both the City of Tampa Police and Fire Departments will be automatically notified.

We believe that the aforementioned items meet or exceed the security criteria as specified in 40CFR Part 264.14.

B. CONTINGENCY PLAN

The UW&T Contingency Plan as required by 40CFR 264, Subpart D is included as Attachment 17.

Since this is an application for a construction permit and the UW&T Contingency Plan has not been reviewed and approved by DER personnel, UW&T has not supplied copies of this contingency plan to the required parties. After approval of the contingency plan and prior to submission of the operating permit application copies of the Contingency Plan will be supplied to the following agencies:

City of Tampa Police Dept.

City of Tampa Fire Dept.

City of Tampa Hazardous Materials Response Team

United States Coast Guard

Alternate emergency response contractor

Humana Hospital - Brandon

Centro Espanol Memorial Hospital

C. SAFETY PROCEDURES, STRUCTURES AND EQUIPMENT

(1) POWER OUTAGES AND EQUIPMENT FAILURE

UW&T will house the active portion of the storage and treatment operation within a 5876 square foot concrete and metal building. All storage (over 10 days) and all treatment of hazardous waste will occur within the confines of this building.

Based upon the proposed uses of this facility (limited treatment via solidification and storage only) there will be only a minimal effect upon our operations in the event of a power outage or equipment failure.

There are no continuous treatment processes. All treatment will be on a batch basis.

The filter press to be employed operates on a hydraulic closing basis which is pneumatically operated. There are no electrical components. Only low volumes of in plant compressed air are required for operation. The automatic feed pump control system allows the system to be automatically shutdown when the press has filled. Also incorporated into the system is a low hydraulic pressure safety shutdown device. Any time the hydraulic pressure drops below the preset limit the system will completely shutdown eliminating any possible leaking.

Other than interior lighting no electrical requirements are needed for the storage of hazardous waste at this facility. Emergency lighting will be installed as required by the National Fire Protection Association (NFPA). All fire detection devices such as smoke detectors, flame detectors, and explosivity meters will be equipped with backup battery powered electrical systems to insure their operation in the event of an inadvertant loss of power to the facility.

It is doubtful that any liquid transfer would be required in the event of a power outage, however, a manual Patay pump would be available should that need arise. No electrical equipment is required for drum movement.

The inadvertant loss of power to any portion of this facility would not cause potential harm to human health or the environment.

(2). LOADING AND UNLOADING OPERATIONS

This facility has been designed for ease in material handling. As shown on Attachment 18 (drawing S2 in map tube) both incoming and outgoing vehicles have their own separate loading and unloading areas. The south side of the building is to be used for incoming waste materials as indicated on the drawing by the 2 straight trucks. The center and north sections of the loading and unloading are to be used for outgoing wastes. Truck wells are designed to accomodate both types of vehicles. The rear of the truck is level with the floor of the building. This insures the ease of transfer of the waste materials either from the truck into the facility or from the facility into the outgoing vehicle.

Container transfer can be accomodated either manually with drum trucks or by means of towmotors equipped with barrel handling attachments. Drums will never be moved with the forks of a lift truck.

Also as noted on Attachment 18 a fork lift ramp has been designed into the building which will allow the lift truck access outside of the building should that need arise.

Any drum movement within the flammable storage area will be accomplished manually. We firmly believe that manual drum movement within the flammable/combustible storage area is much safer than movement of drums with lift trucks even if those lift trucks are specifically equipped to operate in high hazard areas.

A similiar belief is held for internal drum movement within the facility. With the small size of this facility we believe it is easier and safer to move most of the drums manually with drum trucks rather than to attempt negotiating corners and turns with a motorized lift truck.

All containers will remain sealed during storage and will only be opened as required for consolidation or treatment.

As previously discussed all containers will have been inspected prior to the transport from the generators facility by a UW&T chemist to insure that they meet all DOT and DER criteria for structural integrity and compatibility. Included as Attachment 19 is a chemical compatibility chart for plastics, metals and elastomers which will be given to all UW&T chemists during their training program. This compatibility chart will give guidance to the field chemists during their inspection of the containers at the generators site and will allow them to pre-determine whether any problems may arise during transit or storage. All transport vehicles will be equipped with drum lids; gaskets; drum bungs; bands and bolts. These items can be replaced before transport if necessary. All vehicles will also be equipped with overpack containers and spill cleanup materials should those be necessary.

Also as previously addressed the containers are once again inspected upon receipt at the UW&T facility for structural integrity.

We therefore believe we have taken every precaution possible to mitigate any hazards involved during unloading and loading operations.

(3.) PREVENTION OF PERSONNEL EXPOSURE

The prevention of employees to any exposure or unnecessary hazard is always of utmost importance. Adequate training is the first step in assuring that personnel exposure is minimized. The UW&T Training Program is included as Attachment 20. In addition to this training program however, additional requirements may be necessary.

All personnel at UW&T are supplied at least five (5) sets of work uniforms per week. They are required to change from their street clothes into their uniforms each day. Before handling any containers all employees are required to wear the following protective equipment:

- disposal tyvek suits
- safety glasses
- boots
- gloves (type of glove dependent upon activity undertaken)

When leaving the storage/treatment area it is necessary to remove all potentially contaminated clothing.

A break room/lunch area will be made available to all personnel. No eating, drinking or smoking will be tolerated inside the active portion of the facility.

At the end of each work day all employees who have been working in the storage/treatment area are required to change from their work uniform into their street clothes. No uniforms are allowed to be taken home. UW&T is responsible for cleaning all uniforms.

A wide variety of additional protective equipment will be available for tasks which require higher levels of protection. For example, all personnel handling acids or alkaline materials will wear acid resistant clothing and gloves as well as a face shield in place of safety glasses. Full body encapsulation suits; air-line respirators; full and half-face cartridge respirators as well as SCBA's are also available. A complete description of all safety equipment available and its use is included within the previously addressed training program (Attachment 20).

(4.) PREVENTION OF WATER SUPPLY CONTAMINATION

There are no potable water wells within one quarter (1/4) mile of the proposed facility.

The area immediately surrounding the active portion of the facility will be either concrete or asphalt as clearly indicated on Attachment 18 (drawing S2 in map tube).

All wastes will be stored in compatible, DOT acceptable containers which have been inspected to insure their structural integrity and which are considered primary containment.

All floors are sloped to containment sumps. The slope of the floors is away from all doorways, therefore, the movement of waste outside of the building would be impossible. The slope on the floor is 1/8 inch per foot. No drum is located further than 25 feet from a containment sump. (Attachment 22 - Drawing S-1 in map tube)

All truck wells are sloped to a containment trench as indicated on Attachment 18 (drawing S2 in map tube). This containment trench flows, by means of a sump pump, to both sand and activated carbon filtration systems. It is impossible for any entrained liquid in the containment trench to leave the trench unless the sump pump is manually activated. Since all waste enters the facility in containers (primary containment), and all floors are sloped to containment trench (secondary containment), with an outside containment trenches (tertiary containment), we feel that we have adequately addressed any potential for inadvertent contamination outside of the active portion of the site.

However, to further alleviate any fears, we will install several shallow monitoring wells both up gradient and down gradient from the facility. These wells will be of the design as indicated on Attachment 21. All wells will be installed according to accepted hydrogeological criteria. These wells, once developed, will be monitored on a semi-annual basis as part of our routine procedures. The data obtained will be maintained at the facility and copies presented to the DER during their periodic inspection of the facility. If at any time during the monitoring program unusual or excessively high values are obtained, UW&T will immediately notify the DER of that data.

Also included in Attachment 21 is the soil boring data obtained at the site. Both soil and ground water samples were analyzed and this data is also included.

It should be noted that neither state nor federal law requires monitoring wells at this facility.

By employing the criteria previously addressed we believe that UW&T has insured that no surface or subsurface contamination will occur at this site.

(5.) RUN-OFF PREVENTION

As previously noted the active portion of this facility is under roof. This also includes the trailer storage area.

As noted on Attachment 22 (drawing A-1 in map tube) the facility floor is five (5) inches of continuously poured 3000 psi concrete with 6x6, 10/10 wire mesh reinforcement throughout. The floors will be coated with one coat of sealant and two coats of a polyurethane coating. This coating will either be Glidthane 1 or Armor-thane. The specifications for both coatings are included as Attachment 23.

The walls of the facility will also be designed to prevent any run-off. The first four (4) feet of wall will be masonry block coated with the sealants previously described. The wall/floor interface will be adequately sealed to prevent any seepage of liquid.

As shown on Attachment 22 (drawing A-1 in map tube) the floor of the facility has been divided into containment areas. The general storage area is divided in four containment sections each with its own collection sump. Each collection sump has a 700 gallon capacity. These collection sumps will be pre-cast concrete, coated with sealant during construction. No seams exist on the collection sumps. The floor is sloped at a grade of 1/8 inch per foot on all four sides to the collection sump. A similiar floor design and collection sump exists in the flammable/combustible storage area.

As previously discussed the truck and trailer storage areas (loading and unloading areas) also have their own collection trench which would mitigate the impact of any transportation related incident. The truck/trailer loading area is sloped towards the collection trench. The outfall of this trench is controlled by a manually operated sump pump which discharges to a sand filter and an activated carbon filtration system. The ultimate outfall of this discharge is the retention pond. Any liquids retained in this collection trench will be analyzed prior to discharge. The interior sumps will be inspected on a daily basis. Liquids in the sumps can be easily removed with the Patay pump.

The containment trench in the loading dock area will be inspected twice daily and monitored continuously during rain events.

As required in 40CFR Part 264.175 (3) the facility can contain at least 10% of the total volume of all waste for which it is permitted. The maximum storage capacity is 33,660 gallons. Under the unlikely conditions that all waste in the facility is liquid with no solid fraction whatsoever our maximum containment capacity as required by 40CFR would be 3,366 gallons. The interior containment sumps alone have the capacity for 3,500 gallons. This does not include the liquid that would be contained by the sloped floor nor does it take into account that the containment capacity of the truck well trench. Therefore, the UW&T facility is well within legal requirements as specified by both Florida and Federal law.

(6.) PREVENTION OF ACCIDENTAL IGNITION OR REACTION

UW&T will take many precautions to insure that the accidental ignition or reaction of waste materials does not occur.

As previously indicated all flammable and combustible materials will be segregated in a specially designed area. Since there are four separate containment areas within the general storage portion of the facility it is very easy to segregate incompatible materials so that no inadvertant comingling of incompatible wastes will ever occur.

With the exception of drum pumps there will be no electrical equipment used within the building. Any transfer of flammable liquids will occur by means of a manually operated Patay pump or by air operated diaphragm pumps. No electrical equipment will be used in the flammable storage area. As previously indicated all drum movement within the flammable storage area will be performed manually; no lift trucks will be used in the flammable/combustible storage area.

The flammable storage area is designed solely for the temporary placement of ignitable wastes. It will contain the following:

- Complete firewall separation on all sides.
- Explosion proof wiring throughout the area.
- Automatic ventilation system.
- Continuous lower explosive limit (LEL) monitoring.
- Automatic activation of the ventilation system.
- Fully sprinklered.
- Secondary fire suppression system (AAAF foam).
- Halon fire extinguishers.
- Explosion proof lighting.
- Beryllium (non-sparking) tools.
- Manual or air operated pumps only.
- Flame and smoke detectors.
- Explosion proof emergency lighting, fire alarm and intercom system.

"No smoking" signs will be placed throughout the building. The entire building is sprinklered and smoke detectors are located throughout. A continuously monitored fire alarm system will also be installed.

As indicated on Attachment 24 (drawing MEP-1 in map tube) a wide variety of safety and fire protection equipment will be installed within the building. UW&T will tap into an existing 12 inch water main and place a 6 inch PVC fire line to the facility itself. This will be equipped with a fire department connection as requested by the City of Tampa Fire Department. Two fire hose cabinets will be installed each containing 50 feet of 2 inch fire hose. The sprinkler system will be attached to a separate 6 inch water line equipped with a tamper switch and which will be continuously monitored for pressure drops. Sufficient water pressure is available to adequately address any emergency situation.

As previously indicated the treatment system employed at this facility will be the filter press used for solidification. This system is fully self contained and requires only minimal compressed air for operation. No electrical connections are required. The system will not generate extreme heat or pressure; fire or explosion; violent reactions; toxic mists, fumes, dusts or gasses; or have the potential to damage the structural integrity of the facility.

We believe that the design and operation of this facility have been adequately addressed and that every effort has been made to prevent the accidental ignition or reaction of ignitable, reactive or incompatible wastes. No activity at this site should prove a threat to human health or the environment.

D. PREPAREDNESS AND PREVENTION

(1.) DESIGN AND OPERATION OF THE FACILITY

UW&T has previously discussed many design criteria which will insure that no fire, explosion, or unplanned sudden or non-sudden release will occur. These design standards have included:

- Completely segregated flammable/combustible storage area with all of the safety features mentioned in the last section (Prevention of Accidental Ignition or Reaction).
- Separate storage bins and collection sumps to insure that co-mingling of incompatible waste does not result.
- Minimal amount of electrically operated equipment necessary for the daily operation of the facility.
- Self contained solidification process which requires no electrical connections.
- On-site emergency response and safety equipment.
- Use of only DOT approved containers which have been checked to insure their structural integrity has not been compromised.

(2.) REQUIRED EQUIPMENT

In order to insure the safe operation of this facility UW&T will supply the following equipment at the facility:

- an internal communications system which will consist of a telephone system with an intercom device. The intercom/telephone system is shown on Attachment 24 (Drawing MEP-1 in map tube). Personnel will have easy access to this system regardless of their location.
- As a secondary alarm system UW&T will have available a number of air horns which can be manually activated in an emergency situation. These horns will also be equipped with a flashing light so that both audio and visual warnings can be given. Once again these warning horns with flashers are identified on Attachment 24.
- A complete set of emergency telephone numbers will be posted above every telephone/intercom system.
- Portable, multipurpose (ABC) fire extinguishers will be located throughout the facility and clearly identified with labels reading "Fire Extinguisher". Halon fire extinguishers are located in the flammable storage area similiarly marked. All of these are identified on Attachment 24.

- The entire facility will be equipped with smoke detectors and a sprinkler system throughout. Automatic continuous monitoring will be performed on a 24 hour basis. A secondary fire suppression system will be located in the flammable/combustible storage area. This is a AAAF foam system. Flame detectors and an automatic lower explosion limit monitoring system are also located in the flammable/combustible storage area. The sprinkler system will be directly attached via a riser to a 6 inch PVC water line. Fifty foot sections of two inch fire hose will be located at several stations within the facility. These locations are identified on Attachment 24. A direct tap to an existing 12 inch water main will be used to insure that sufficient water pressure is available for all firefighting apparatus at the facility at all times.
- A wide range of spill control and safety equipment will be available to Universal Waste & Transit personnel at the facility. A complete list of this equipment is include within the Contingency Plan.
- It will be company policy that at least two employees be present before entering any active portion of the facility.

(3.) TESTING AND MAINTENANCE OF EQUIPMENT

All equipment at the proposed facility will be tested and maintained in accordance with manufacturers recommendations. Since all equipment such as alarm systems, fire protection equipment, safety and personnel protective equipment will be newly purchased, UW&T will enter into maintenance agreements with those manufacturers or their representatives to insure that periodic preventative maintenance will occur. These inspections will occur at least every six months from the date of permit issuance or the date of equipment purchase. A more detailed program is outlined within the Universal Waste & Transit Inspection Plan which is included as Attachment 25.

(4.) ACCESS TO COMMUNICATIONS OR ALARM SYSTEM

As previously indicated and as shown on Attachment 24 (drawing MEP-1 in map tube) a telephone/intercom system is located at various points at the facility. All employees should have easy access to this equipment regardless of their location.

Also as previously mentioned and as shown on Attachment 24 there are located throughout the facility numerous warning horns with flashers which can be easily activated and which will give both audio and visual warning that an incident has occurred.

As previously stated it is company policy that at least two employees will be present before entering any active portion of the facility. The evacuation routes are indicated within the Contingency Plan.

(5.) REQUIRED AISLE SPACE

The design of the UW&T storage and treatment facility will lend itself easily to the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment throughout the facility.

Shown on Attachment 26 is the typical spacing which will be employed for container storage.

The general storage area will consist of twelve (12) rows of containers with two containers per row. If it is assumed that the first row of drums is on the south side of the general storage area and the twelfth row of drums on the north side of the general area the number of drums per row within the general storage area are as follows:

Row 1	40 Drums
Row 2	44 Drums
Row 3	44 Drums
Row 4	44 Drums
Row 5	44 Drums
Row 6	44 Drums
Row 7	40 Drums
Row 8	40 Drums
Row 9	34 Drums
Row 10	34 Drums
Row 11	42 Drums
Row 12	44 Drums

This is equivalent to a maximum storage capacity within the general storage area of 27,170 gallons.

Within the flammable storage area there would be a total of 3 rows of containers with each row holding 2 drums per row. Once again if the southernmost row of drums in the flammable/combustible storage area were identified as Row 1 and the northernmost row of drums in the flammable/combustible storage area identified as Row 3 the following number of containers per row would be present:

Row 1	44 Drums
Row 2	44 Drums
Row 3	30 Drums

This would mean that a total of 6,490 gallons could be present within the flammable/combustible storage area at maximum capacity.

It should be noted that in both storage areas a minimum of three feet will be allowed between rows of containers.

The aisle boundaries will be clearly marked with appropriately colored lines to clearly delineate the required aisle space.

No drums will be stored within four (4) feet of the north, south and west walls of the facility.

(6.) ARRANGEMENTS WITH LOCAL AUTHORITIES

UW&T has met with the following agencies to discuss the proposed facility:

City of Tampa Building, Zoning, and Environmental Affairs Depts.

City of Tampa Fire Department

City of Tampa Hazardous Materials Response Group

Hillsborough County Solid Waste Department

Hillsborough County Environmental Protection Commission

All of these groups have been apprised, on a general basis, of the proposed use of this site by UW&T.

Since this is a construction permit application and the State of Florida, Department of Environmental Regulation, has not reviewed the Contingency Plan to insure its acceptability we have not distributed the UW&T Contingency Plan to the required agencies. Upon issuance of the construction permit and prior to submission of an Operation Permit Application, UW&T will disseminate the Contingency Plan to all required agencies and obtain written notification that the plan has been received and reviewed.

Once in operation the local fire, police and emergency response groups will be invited to tour the facility to become familiar with the location of all items previously discussed. All such agencies are welcome to inspect the facility at any time.

E. PERSONNEL TRAINING PROGRAM

All personnel involved in any handling, transportation, storage or treatment of hazardous waste at UW&T are required to successfully complete the UW&T Personnel Training Program within 30 days of passage of their pre-employment screening physical examination. This training program includes the following:

1. Safety equipment
2. Personnel protective equipment
3. First aid and CPR
4. Waste handling procedures
5. Release prevention and response
6. Decontamination procedures
7. Facility operations
8. Facility maintenance
9. Transportation requirements
10. Recordkeeping

The UW&T personnel training program is included as Attachment 20 to this document.

We strongly urge that all personnel involved in the handling, transportation, storage or treatment of hazardous wastes actively pursue additional technical courses at either the University of South Florida, Tampa College or the St. Petersburg Junior College.

Recommended courses would include General Chemistry; Analytical Chemistry; Environmental Chemistry; Toxicology; Computer Technology; and additional Safety and Health related topics. UW&T will pay all registration, tuition and book fees for any courses which are job related. The only requirement is the successful completion of that course.

All training and related items will be handled by the UW&T training officer, Mr. Richard Powell. A brief description of Mr. Powell's credentials are included as Attachment 28 to this document and are also included within the Personnel Training Program.

All potential employees at UW&T are carefully screened prior to hiring. This includes:

- in-depth interviews
- academic and experience requirements
- medical evaluation

All potential employees are informed that they will be working with hazardous or potentially hazardous materials. All potential employees will visit the facility to determine first hand what the work environment entails. All potential employees are informed that any safety violations or improper handling of waste materials/containers will result in immediate dismissal.

A list of job related prerequisites, job titles and written job description are included as Attachment 29 as well as being included within the training program itself.

Four types of training are employed at UW&T. These include:

1. A formal training course for all new employees which encompasses the areas previously mentioned. This course is culminated by a written examination. A review of all formalized courses is performed annually. Written confirmation that the training program has been completed will be signed by each employee and verified by the training instructor.
2. An informal weekly safety meeting during which time new safety apparatus are discussed or training films/slide presentations are viewed. Alternative to this are discussions on waste handling procedures; site cleanup work; emergency response efforts; changes in regulations; etc.
3. Attendance at commercially available safety or preparedness classes. Examples include: J.T. Bakers "Management and Disposal of Hazardous Chemical Waste" or the various University of Florida TREEO Waste Management Courses. All supervisory personnel must attend these schools or similiar classes.
4. An ongoing on-the-job training program which assists new employees in familiarizing themselves with the existing working conditions and company policy. Also available to all employees is a well equipped technical library.

If an employee is not kept well informed of the company's activities they quickly loses interest and pride in his/her work. In the area of hazardous waste management this situation cannot be tolerated.

Therefore, it is also company policy at UW&T to have a weekly meeting to discuss what work is in progress; what new jobs are anticipated and to determine what questions or recommendations employees may have to operate more efficiently or safely.

Contained within the UW&T training program are various documents which are given to all new employees. These include the following:

- General safety manual

- Protective clothing guide

- Respiratory training program

- Basic emergency training guide

- Facility contingency plan

- Pocket guide to Hazardous Waste Materials

- NIOSH workers safety bulletin for hazardous waste sites

Each document is reviewed with the employee by UW&T safety officers.

All pertinent safety equipment is reviewed with all employees. This includes: Respirator; SCBA; Acid Suits; Encapsulation Suits; Fire Extinguishers and Hoses; Evacuation Horns and Routes; as well as material handling equipment.

Each employee is assigned their own respirator and fit tested as required. Cleaning and maintenance of the respirator is explained. The location and usage of safety and emergency response equipment is detailed.

All new employees are immediately informed as to the procedures involved in any spill or release at the facility. This includes:

- employee warning signals
- agencies to contact
- evacuation routes
- response actions

Finally, each new employee is shown how drums are inspected; opened; sampled; sealed; labeled; moved; and the recordkeeping and reporting requirements.

Upon completion of training program both an oral and written examination is required. An annual review of all training programs is performed.

All training records on current personnel will be kept until closure of the facility. Training records on former employees will be kept for at least three years from the date the employee last worked at the facility.

As previously indicated the UW&T personnel training program is included as Attachment 20 to this document.

5. CHEMICAL AND PHYSICAL ANALYSES OF HAZARDOUS WASTE HANDLED AT THE FACILITY

In order to comply with 40CFR Part 264.13 it will be necessary to obtain detailed analytical data on any waste material destined for the proposed facility prior to its receipt at the facility.

This information can be obtained from several sources. Those would include Material Safety Data Sheets; data obtained from waste profile sheets; or analytical data obtained from a certified laboratory. A detailed description of the procedures involved in obtaining this information is included within the UW&T Waste Analysis Plan included as Attachment 30 of this document. A brief description of each is outlined below.

In certain instances the data obtained from a Material Safety Data Sheet may be sufficient to allow approval of a waste material into the facility. For example waste solvents such as ethanol, methanol, trichloroethane and so on may be sufficiently pure that the information contained on their Material Safety Data Sheets would yield sufficient analytical data. A list of the Material Safety Data Sheets which will be available at the proposed facility are included as Table 1 of the UW&T Waste Analysis Plan.

In all cases a UW&T Request For Disposal form must be filed with the facility manager or his/her designated representative prior to shipment of the waste to the facility. Included as Table 2 in the Waste Analysis Plan is a typical UW&T Request For Disposal form. If this form is modified prior to commencement of operation at the facility it will be so addressed in the upcoming operating permit application. It should be noted that sufficient information is generated through the use this form to enable UW&T personnel the ability to adequately determine the wastes acceptability prior to its receipt at the facility.

A third alternative for the generator of the hazardous waste would be to obtain representative samples of those materials, employing acceptable sampling criteria, and subsequently submitting those samples to a certified analytical laboratory for a complete chemical analyses. The analytical data required would be that needed to complete the UW&T Request For Disposal.

In all cases a sample of the waste material must be submitted to UW&T along with the Request For Disposal so that an informed decision can be reached on the wastes acceptability at the facility.

It should be noted that the responsibility for adequately identifying the characteristics of the waste rests with the generator of that waste.

The listing of hazardous wastes which would be considered acceptable at the facility have been previously identified on Attachment 13 with their estimated annual quantities listed on Attachment 14.

TABLE OF CONTENTS

Part I

Introduction	1
General Information	2
Site Information	4
Land Use Information	8
Operating Information	10

Part II

General	22
Financial Responsibility	23
Flood Zone	26
Facility Security	27
Contingency Plan	28
Safety Procedure and Structures	29
Loading and Unloading	31
Prevention of Exposure	33
Prevention of Water Contamination	35
Run-Off Prevention	37
Prevention of Ignition or Reaction	39
Preparedness and Prevention	42
Personnel Training	50
Waste Analysis	55
Recordkeeping and Reporting	60
Operating Record	64
Containers	72
Physical Treatment	87
Closure	92
Ground Water Protection	94
Certifications	98

6. WASTE ANALYSIS PLAN

As previously indicated the UW&T Waste Analysis Plan is included as Attachment 30 to this document. A brief description of that plan will be outlined below.

The intent of the UW&T Waste Analysis Plan is to adequately identify waste materials prior to their receipt at the facility. The responsibility for generating sufficient information for that decision to be reached rests with the generator of the waste. A sample of the waste as well as one of the following must be submitted by the generator prior to receipt of the waste at the facility. Those three options include:

- Material Safety Data Sheet
- UW&T Request For Disposal form
- analytical data from a certified laboratory

Once the sample of the waste is delivered to the facility along with the required analytical information the UW&T facility manager or his/her designated representative will evaluate the sample and the data obtained. This review will determine whether the waste is acceptable for receipt at the facility. The review will answer the following questions:

- Is the facility permitted to handle the waste in question
- Is sufficient storage space available at the facility
- Can the waste be treated on site
- If on site treatment is not feasible is a suitable outlet available for the waste
- Do the physical characteristics (color, consistency, phases) match those identified on the waste profile sheet

UW&T will subcontract the majority of any required, in-depth analytical determinations, to a local certified laboratory. At this time we are proposing to use Pace Laboratory Inc., located in Tampa Florida. A copy of the state approved Quality Assurance Plan is appended to the UW&T Waste Analysis Plan.

UW&T will have available on site the following analytical equipment for use in quality control analyses. This equipment includes:

- pH/specific ion/orp meter

- flash point tester (Pensky-Martins closed cup)

- drying oven

- associated laboratory glassware

This apparatus will allow UW&T the ability to perform quality control checks on incoming waste materials.

The following information will be addressed in detail within the UW&T Waste Analysis Plan:

parameters for which hazardous waste will be analyzed

waste analysis rational

test methods employed

sampling methods

frequency of analyses

generator supplied analytical data

quality control samples

We believe that the data supplied within the UW&T Waste Analysis Plan is sufficient to comply with all requirements of 40CFR Part 264.13.

7. MANIFESTING, RECORDKEEPING AND REPORTING

A. Manifest System

All hazardous waste either entering or leaving the facility will be accompanied by a Uniform Hazard Waste Manifest which will be acceptable to the State of Florida. This document is included within the Training Program as Exhibit 1 of Chapter VI. Waste material which is shipped out of state may require a different manifest since some states have specific manifest requirements. For example waste which is shipped to Chemical Waste Management in Alabama will require an Alabama manifest for that shipment. In those cases that specific manifest will be employed.

Any hazardous waste which is scheduled to be received at the UW&T facility via licensed hazardous waste transporter other than UW&T must have a manifest accompanying that shipment. The manifest must contain, at a minimum, the same information as required on a Uniform Hazardous Waste Manifest.

All required certifications (under the new Land Ban Restrictions) will also accompany any incoming/outgoing shipments.

When a manifested shipment arrives at the facility, the facility manager or his/her designated representative will perform the following:

1. sign and date each copy of the manifest to certify that the hazardous waste described on the manifest was received.
2. note any significant discrepancies on each copy of the manifest. (These would be obvious discrepancies such as the wrong number or type of containers.)
3. Check all containers to insure that they conform to both DOT and Florida DER compatibility and structural requirements.
4. A UW&T chemist will be notified that waste has arrived and that quality control samples must be obtained in accordance with the UW&T Waste Analysis Plan.
5. If all initial evaluations are consistent with the manifest; one copy of the manifest will be given to the transporter. If manifest discrepancies are noted or if the containers do not meet DOT or DER requirements the following will be immediately contacted in an attempt to resolve the discrepancy:
 1. generator
 2. transporter
 3. DER Regional Office (Tampa)

(For additional information on manifest discrepancies please note the "Manifest Discrepancy" portion of this section.)

6. Within thirty (30) days of the date the manifest was signed the original copy of the manifest will be returned to the generator.
7. All manifests will be retained at the facility for at least three (3) years from the date of delivery. A copy will also be retained at the corporate offices.
8. It is not anticipated that any waste will be received by either rail or water shipment directly to the facility.
9. Any waste material which is generated at the facility will comply with all regulations contained in 40CFR Part 262 as well as the applicable sections in the Florida Administrative Code.

B. Manifest Discrepancies

When any manifest discrepancy is discovered it is necessary to immediately contact the generator and/or transporter in an attempt to resolve this discrepancy. If the discrepancy is not resolved within fifteen (15) days after receipt of the waste, UW&T, will notify the Florida DER in writing as to the extent of the discrepancy and what attempts were made to resolve the issue. A copy of the manifest will also be included.

A discrepancy will be defined as follows:

- A variation of more than 10% in weight for bulk wastes
- A variation of 2% in weight for batch wastes
- Any variation in piece count for containers
- Improper labeling or identification
- Irreconcilable differences between the initial and the on site waste analyses

2. OPERATING RECORD

A written operating record will be maintained at Universal Waste & Transit until closure of the facility. This operating record will contain at a minimum the following information:

1. A description, by its common name, of each waste which enters the facility.
2. The EPA/DER hazardous waste number for each of these wastes. If more than one EPA/DER number applies each will be listed.
3. The quantity of each waste.
4. The physical form of each waste (solid, liquid, semisolid, or contained gas).
5. If the waste is not a "listed waste" the description will also include the process by which the waste was generated.
6. The manifest reported weight or volume/density.
7. The methods by which the material was stored, treated or transferred off-site for disposal.

8. The dates on which this storage, treatment or transfer occurred.
9. All records and results of waste analyses.
10. Reports and details of any incident which required implementation of the Universal Waste & Transit Contingency Plan.
11. Records and results of all inspections (kept for three years only).
12. All required notices to generators.
13. All closure cost estimates.
14. A certification statement, updated annually, that a program is in place to reduce the volume and toxicity of any hazardous waste generated.

A fully computerized data management program has been developed for UW&T to aid in maintaining all required Operating Record information. A printout of all data elements is included as Attachment 27.

3. Availability, Retention & Disposition Of Records

All records and plans which are required for the operation of this facility will be furnished or made available to the Florida DER or the USEPA upon request.

4. Documents Maintained At The Facility

The following documents will be maintained at the facility until closure and certification by a registered professional engineer:

- Waste Analysis Plan
- Personnel training documents and records
- Contingency Plan
- Inspection Plan
- Operating Record
- UW&T manifest copies with certifications
- Closure Plan
- Closure cost estimate

5. Annual Reporting

Universal Waste & Transit will submit to Florida DER an annual report no later than March 1st of each year the facility is in operation. Universal Waste & Transit will also forward to each generator who used this facility as a TSDF an annual report of the types, quantities and ultimate disposition of their waste material. This report will be sent to the generators no later than February 1st of each year.

6. Unmanifested Waste Reports

Universal Waste & Transit never anticipates unmanifested waste entering the facility, however, in the unlikely event that UW&T would accept waste materials into the facility without an accompanying manifest we would file an "Unmanifested Waste Report" with Florida DER.

This report would be filed within fifteen (15) days of the date the waste was received. The report would identify the following:

- Facility EPA identification number and address.
- A description of the waste and the quantity involved.
- The method of storage, treatment or transfer.
- An explanation of why the waste was not manifested.
- An explanation of why the waste was accepted without an accompanying manifest.
- A certification signed by the operator of the UW&T facility.

7. Additional Reports Required

Universal Waste & Transit will file a report with Florida DER and the USEPA in the event that any of the items listed below would occur:

- Releases, fires or explosions [in accordance with 40 CFR Part 264.56(j)].

- Closure (in accordance with 40 CFR Part 264.115).

B..CONTAINERS

1. Basic Design Parameters

As previously discussed the design of the container storage area at UW&T is unique. The floor of the facility is five (5) inches of 3,000 psi continuously poured concrete with 6x6, 10/10 wire mesh woven throughout. No cracks or gaps will exist in the floor.

This floor will subsequently be coated with 1 coat of sealant and 2 coats of epoxy urethane. This epoxy urethane coating is specified in Attachment 23. The floor design and specifications are shown on Attachment 22 (drawing A-1 in map tube). This floor with its subsequent coatings will be impervious to the material stored at the UW&T facility.

As shown on Attachment 22 the floor of the UW&T facility is divided into containment bays. There are four such containment bays within the general storage area and one within the flammable storage area. These bays are sloped at an angle of 1/8 inch per foot of floor area to a central containment sump. This will insure that any liquids resulting from leaks or spills would be directed to a central containment area.

No drum will be more than 25 feet from the containment sump.

Since the UW&T storage and treatment facility will be located completely under roof there is no potential for accumulation of precipitation on the active portion of the site.

As previously discussed within the "General" section of this application the UW&T facility has the capacity for more than the required 10% containment of the maximum quantity of hazardous waste which may be potentially on site at any time. Our maximum storage capacity would be 33,660 gallons. If the facility were at maximum capacity and all waste present was liquid (a very unlikely situation), we would be required to contain 3,360 gallons of hazardous waste within the facility. Each containment sump has a capacity of 700 gallons. Since there are five separate containment sumps this is a total containment volume within the sumps alone of 3,500 gallons. Therefore, the containment sumps alone place us above the required 10% maximum capacity as required by Federal and State law.

As shown on Attachment 5 (drawing S-1 in map tube) the interior floor of the building is ,at a minimum, 15 inches above the exterior ground elevation. It should also be noted that all exterior drainage is away from the proposed facility. These two items will insure run-on to the facility is prevented.

In the unlikely event that a large volume of water were to enter the proposed facility, such as could result from the activation of the sprinkler system, UW&T will have on site both sand filtration and activated carbon filtration units. This water can be analyzed and pretreated with those units if necessary. Also, our alternate Emergency Response Contractor, Haztech, has available in Tampa a portable water treatment system which can be employed if necessary.

Any liquid which enters the containment sumps will be sampled and analyzed in accordance with the UW&T Waste Analysis Plan (Attachment 30). This liquid, when removed, would be analyzed to determine its hazardous characteristics. Removal of the liquids would be performed by either a manual Patay pump or by air powered diaphragm pumps. Upon removal of this liquid it will be placed into the appropriate containers and managed as a hazardous waste if required. UW&T has notified the Florida DER that it wishes to be issued an identification number as a hazardous waste generator within the state of Florida.

As indicated within the UW&T Inspection Plan (Attachment 25), daily inspections of the sumps will be performed so as to prevent overflow of the collection system.

2. Requirements for Ignitable, Reactive and Incompatible Waste

No ignitable or reactive waste will be stored within 15 meters (50 feet) of the property line as indicated on Attachment 5 (map S-1 in map tube).

All ignitable waste will be stored in a separate area specifically designed for the storage of such materials. These design criteria include:

- firewall separation on all sides
- fully sprinklered area with secondary fire suppression system
- fire hose and halon fire extinguishers
- automatic ventilation system
- automatic explosivity monitoring
- continuous monitoring of the alarm system
- use of non-sparking tools only
- no smoking throughout the area

No incompatible wastes, or incompatible wastes and materials will be placed into the same container. Included within the UW&T Training Program (Attachment 20) are tables which indicate the following:

- chemical compatibility
- hazardous waste compatibility chart
- compatibility tree

These documents, when used in conjunction with the Training Program, will aid all employees in determining chemical compatibility to insure compliance with this section.

All containers will be compatible with their contents. All containers held at the proposed facility will be made of or lined with materials which will not react with the waste contained within. All compatibility testing will be performed as specified within "USEPA Methods for Determining Compatibility of Hazardous Waste" (EPA-600/2-80-76).

No hazardous waste will be transferred to unwashed containers which previously held waste material or raw material.

The storage bins at the UW&T facility will aid personnel in complying with incompatibility requirements. No incompatible waste will be stored in the same area. For example acids will be stored in one bin while alkaline material will be stored in another. No co-mingling of incompatible waste will occur at the facility.

4. Condition of Containers

Any hazardous waste container which is scheduled to be brought in to the proposed facility will be inspected before removal from the generators site to insure compliance with DOT regulations.

All containers will be in good condition with no evidence of rust; leaks; corrosion; or structural defects. Any container which does not meet these requirements will have the contents transferred to an acceptable container, will be overpacked into a compatible container, or will be left at the generator's site. If any container begins to leak similiar action will be taken immediately.

All containers held at the UW&T facility will remain sealed during storage. These container will opened only when it is necessary to add or remove waste materials, such as at the time of treatment or during sampling. All containers will be managed and handled to insure that no damage, puncture, rupture or leakage will result. All containers will be transported either manually using drum trucks or by means of a towmotor equipped with a barrel handling attachment. No towmotors will be permitted within the flammable storage area. No drums will be moved with the forks of a towmotor vehicle.

5. Inspection Procedures

All containers in the container storage area will be inspected on a daily basis in compliance with UW&T Inspection Plan (Attachment 25). Any defects in containers noted during inspection will be corrected immediately. Any defects in the containment systems such as cracks, or other structural damage which may be noted during an inspection will be corrected within fourteen (14) days or UW&T will submit within seven (7) days a schedule to correct these defects to the Florida DER. In the event that hazard is imminent, remedial action will be taken immediately.

6. Closure

The UW&T Closure Plan is included as Attachment 15 in this document. At the time of closure all hazardous waste and residues will be removed from the containment system. Any remaining containers or contaminant items will either be removed for off-site disposal or decontaminated in compliance with the previously referenced Closure Plan.

C. TANKS

No tank storage or treatment is requested in this application.

D. SURFACE IMPOUNDMENTS

No surface impoundments are proposed at this facility.

E. WASTE PILES

No waste piles will be present at this proposed facility.

F. LAND TREATMENT

No land treatment will be performed at this facility.

G. LAND FILLS

No land fills or land disposal will be performed at this facility or on the property upon which this facility is located.

H. INCINERATORS

No incineration will be performed at this facility.

I. THERMAL TREATMENT

No thermal treatment will be performed at this facility.

J. CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT

1. General Operating Requirements

UW&T proposes to perform solidification at the storage and treatment facility. Solidification will be performed only when off-site land disposal is required. Our intention is to dispose of waste by burial only when no other acceptable alternative can be found. In an effort to comply with the Waste Minimization Program and the new Land Ban Restrictions, UW&T is attempting to reduce the volume of waste which is currently being sent out of state for land disposal by employing this solidification process. The solidification process will employ a filter press similiar to that identified in Attachment 31. The filter press will be an 800mm device having a length of 123 inches and a width of approximately 43-1/2 inches. The filter press is manufactured of structural steel and is pneumatically operated. There are no electrical components. Only low volumes of in-plant compressed air are required for operation. Leak free operation is assured. The standard gasketed, polypropylene recessed chamber plates are center feed, four cornered discharge type that are corrosion resistant and superior in performance. The filter cloth is held in place by a caulking cord driven into a groove around the outer perimeter of the plate recess. Gaskets around the sealing surface and ports of each plate provide a leak tight seal.

The process will be operated on a batch basis and no continuous feed is anticipated.

The process is intended to be used on non-flammable, non-corrosive wastes and therefore, the potential for the equipment to rupture, leak, corrode or otherwise fail before the end of its intended life will be minimal.

2. Inspection Procedures

The solidification area will be inspected on a daily basis to comply with the UW&T Inspection Plan included as Attachment 25 to this document.

As previously indicated this is a batch treatment process. The waste will be pumped into the filter press by means of an air powered diaphragm pump until the press is full. A pneumatically actuated hydraulic pump will close the press and automatically compensate for any varying temperatures or pressures that can expand or contract the polypropylene filter plate stack. An automatic feed pump control system will allow the pressure to be automatically increased in four intervals throughout the fill cycle. Continuous monitoring of the feed pump pressure allows the system to be automatically shutdown when the press has become filled. Also incorporated into this system is a low hydraulic pressure safety shutdown device. Anytime the hydraulic pressure drops below the preset limit, the system will completely shutdown eliminating any possible leaking. The filtrate will be discharged to 55 gallon drums to determine its acceptability for either discharge to the sanitary sewer or off-site disposal. The resultant filter cake will be discharged into 55 gallon drums as indicated in Attachment 31.

Because of the simple design of this process, there is no need for waste feed cutoff systems, bypass systems, or pressure release systems.

3. Waste Analysis and Trial Tests

The solidification process is designed for semi-solid waste which has the potential for ultimate land disposal. Because of the recent Land Ban Restrictions, this significantly limits the type of waste which may be acceptable for this process. It is anticipated that the majority of the waste will be metal bearing sludges and semi solids which require further filtration.

As previously indicated in subsequent sections and in the UW&T Waste Analysis Plan (Attachment 30) a sample of each waste must be sent to the facility prior to its acceptance. With this sample bench scale tests can be performed to determine the suitability of this material for filtration with the filter press. The information obtained from the initial waste analysis, and any subsequent trial tests will be placed in the operating record for the facility.

4. Requirements for Ignitable or Reactive Wastes

As previously mentioned it is not anticipated that any ignitable or reactive waste will be treated via filtration. However, in the unlikely event that this were to occur, certain precautions will be taken. As indicated, the filter press has no electrical components and therefore, is intrinsically safe for the treatment of ignitable wastes. No smoking is allowed within the facility and all ignitable wastes are kept in an area separate from flames, sparks or accidental sources of ignition. No activities will be performed at the UW&T treatment facility which during any treatment process will cause the waste to ignite or react.

5. Closure

The UW&T Closure Plan is included as Attachment 15 to this document. At the time of closure all hazardous waste and resulting residues will be removed from the filter press and managed in accordance with all local, state and federal regulations. These guidelines have been outlined in the UW&T Closure Plan.

K. CLOSURE

The UW&T Closure Plan is included as Attachment 15 to this document.

The anticipated closure date for this facility is in the year 2008.

All required items are addressed within the previously referenced Closure Plan. No post closure is required for this facility.

L. COMPLIANCE SCHEDULE

No compliance schedule is requested in this application.

M. GROUND WATER PROTECTION

As required in 40CFR Part 264 Subpart F, UW&T believes it is exempt from these regulations as specified in Paragraph 264.90 (b) (2)(iii). As previously described this facility has been designed to exclude liquid precipitation and other means of run-on and run-off. UW&T however, will install several monitoring wells (one up-gradient and one down-gradient) from the facility as indicated in Attachment 21. These wells will be monitored on an annual basis and the data included within the facility Operating Record.

N. RESEARCH, DEVELOPMENT AND DEMONSTRATION

No research, development and demonstration is anticipated at this facility.

O. EXPOSURE INFORMATION

No surface impoundment or landfill is proposed at this facility.

P. RELEASES FROM SOLID WASTE MANAGEMENT UNITS

No previous, present or proposed releases from solid waste management units have occurred or are anticipated at this facility. The completed form, however, has been signed and certified and is included as Attachment 2 to this document.

Q. CERTIFICATION STATEMENTS

The certifications for operator; facility owner; landowner; and professional registered engineer are included with Attachment 2 of this document.

CLOSURE PLAN
for
Universal Waste & Transit
9th Ave. & Orient Rd.
Tampa Florida

October 1987

TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
Introduction	03
I Facility Conditions	
A. General Information	05
B. Waste Characterization	06
C. Schedule For Final Closure	09
II Off-Site Treatment or Disposal	
A. General Information	10
B. Flammable Liquids	11
C. Reactive/Flammable Solids	12
D. Hazardous Waste Solids/Poisons	13
E. Hazardous Waste Liquids	14
F. Corrosive Liquids	15
III Decontamination	16
IV Closure Certification	18
V Closure Cost Estimate	19
VI Trust Fund	28
VII Closure Cost Adjustment	29
Appendices	
CWM Waste Profile Sheet - Attachment 1	
Certification Statements - Attachments 2 & 3	

INTRODUCTION

This closure plan has been adopted in accordance with the Code of Federal Regulations, Part 264, Subpart G, including the most recent revisions as specified in the Federal Register of May 2, 1986.

Owners Name Universal Waste & Transit

Address 7217 Gulf Blvd. Suite 7

 St. Petersburg, FL 33706

Telephone (813) 360-9100

Contact Robert Bedore

Facility Address: 7208 9th Ave.

 Tampa, FL

I. FACILITY CONDITIONS

A. General Information

UW&T operates a storage/treatment facility encompassing 6,856 square feet. Storage at the facility occurs in containers only. The maximum storage inventory is as indicated below:

<u>Process Type</u>	<u>Volume</u>
Container Storage	33,660 gallons
Solidification Area	2,000 lbs/day

No other RCRA regulated facilities are located on-site.

B. Waste Characterization

Indicated below are the types of waste material which could potentially be on hand at the time of closure.

<u>Waste Material</u>	<u>Maximum Potential Quantity on Hand</u>
Flammable Liquid Drum Storage	6,490 gallons
Other Regulated Wastes	27,170 gallons
Total Quantity	33,660 gallons

Indicated below is an identification of the physical state, chemical composition and other pertinent chemical/physical data relative to each of the previously described waste streams: The actual chemical analysis for each waste container/tank will be retained within the laboratory log books, analysis log books, treatment log books, and waste profile sheets on file at the facility as well as on computer at the corporate offices.

Waste Classification: Flammable Liquid, Combustible Liquid

Physical State

Liquid

Chemical Composition

Waste solvents or mixtures of waste solvents, as well as paints, oil, and so on.

Flash Point

<94 degrees C (<200 degrees F)

Other Pertinent Data

All flammable liquids and solids are stored in an explosion-proof area designed specifically for those materials. Disposal via incineration.

Waste Classification

Waste Poisonous Materials

Physical State

Liquid/Solid/Semi-Solid

Chemical Composition

Pesticides; chlorinated organics; cyanides; compounds containing arsenic, mercury, and lead.

Flash Point

<60 degrees C (<140 degrees F)
(usually non-combustible materials)

Other Pertinent Data

Disposal via treatment or land burial.

Waste Classification

Oxidizer/Reactives

Physical State

Liquid/Solid

Chemical Composition

Hypochlorite salts; peroxides; nitrates; chlorates; nitric acid; perchloric acid.

Flash Point

<60 degrees C (<140 degrees F)
(for liquids only if applicable)

Other Pertinent Data

Highly reactive when in contact with reducing agents or organic material. Disposal accommodated via treatment.

Waste Classification

Flammable Solids

Physical State

Solid

Chemical Composition

Alkali and alkaline earth metals; paint sludges and flammable solid residues

Flash Point

<60 degrees C (<140 degrees F)
not applicable to alkaline metals, but is employed on paint sludges and similar materials

Other Pertinent Data

Treated either by off-site treatment or land burial

Waste Classification

Waste Corrosive Materials

Physical State

Liquid/Solid

Chemical Composition

Acidic and alkaline materials (i.e. hydrochloric acid; acetic acid; chromic acid; sodium hydroxide; potassium hydroxide; etc.

Flash Point

<60 degrees C (<140 degrees F)

Other Pertinent Data

Treated via neutralization with any generated residue being disposed of by land burial

Waste Classification

Hazardous Waste Liquid/Hazardous Waste Solid

Physical State

Liquid/Semi-Solid/Solid

Chemical Composition

Chlorinated organic liquids; heavy metal sludges; plating wastes; etc.

Flash Point

<60 degrees C (<140 degrees F)

Other Pertinent Data

Liquid wastes are disposed of by treatment or incineration. Solid material are disposed of by land burial.

C. Schedule for Final Closure

Indicated below is our schedule for final closure of the Universal Waste & Transit storage/treatment facility.

1. Final date of waste acceptance: January 7, 2008
2. Date that all preprocessing will be completed: January 28, 2008
3. Date that all inventory has been removed off-site: March 3, 2008
4. Date of final facility decontamination: March 17, 2008
5. Final date of facility closure: March 31, 2008
6. Total time required to close the facility: Twelve (12) weeks (84 days).

The Regional Administrator and Florida DER will be informed of our planned closure no later than November 7, 2007 in compliance with 40CFR264.112(d).

II OFF-SITE TREATMENT OR DISPOSAL

A. General Information

A total of 33,660 gallons will be available for shipment to off-site treatment or disposal facilities. These are as indicated:

<u>Waste Materials</u>	<u>Maximum Quantity On-Site</u>
Flammable Liquids	6,490 gallons
Oxidizers/Reactives/Flammable Solids	1,320 gallons
Poisonous Wastes	3,850 gallons
Hazardous Waste Solid	9,625 gallons
Hazardous Waste Liquid	7.975 gallons
Corrosives	4,400 gallons
Total Quantity Available for Off-Site Treatment/Disposal at Time of Closure	33,660 gallons

B. Flammable Liquids

All flammable liquids on hand at the time of closure would be removed by means of vacuum tanker and transported to either Oldover Corporation or International Solvent Recovery for incineration or recycle. We estimate that 6,490 gallons of waste flammable liquids could be on hand at the UW&T storage facility at the time of closure.

Universal Waste & Transit will arrange for two 5000 gallon tankers capable of removal and transportation of flammable liquid wastes. If only 3,245 gallons of liquids are placed into each tanker, it would require two tanker loads to remove all waste flammable liquids present in storage at the time of closure. Based upon past experience, we know that we can move at least two tanker loads per day, and therefore the removal of all flammable liquid wastes at the time of closure would require no more than two (2) days of effort.

C. Oxidizer/Reactive/Flammable Solids

We are estimating that 1,320 gallons of oxidizer, reactive or flammable solid waste could be on hand at the time of closure. These would be disposed of as follows:

- 275 gallons of alkalai or alkaline earth metals; sulfides, peroxides or nitrating compounds to BDT Corporation in New Jersey, for treatment.
- 1,045 gallons of flammable solids (paint sludge etc.) to Marine Shale Processors (MSP) in Louisiana for incineration.

We estimate that one (1) week would be required for transport of the reactives to BDT Corporation. The materials which are to be transported to MSP would be combined with other waste destined for that location (see Section E).

D. Hazardous Waste Solid/Poisonous Material

The majority of the remaining wastes which are on hand at the time of closure would be disposed of via land burial at Chemical Waste Management Incorporated located in Emelle, Alabama. Samples of these waste materials would be obtained and data submitted on the enclosed Waste Profile Sheet (Attachment 1). Both samples and the completed profile sheet would be submitted to Chemical Waste Management to obtain an approval for disposal. This process generally requires 30 days from the time of sample submission.

We are estimating that 13,475 gallons of waste material could be on hand at UW&T at the time of closure.

This includes 9,625 gallons of hazardous waste solids; and 3,850 gallons of DOT listed poisonous waste and/or RCRA toxic wastes.

UW&T will arrange for two tractor trailers capable of transporting 80 drums per load to the Chemical Waste Management facility. Bases upon past experience, we would estimate that two loads per week could be transported to Alabama per truck. Therefore, a total of 2 weeks would be required for transportation of the waste. Thus, from the time of final waste acceptance until all waste material has been removed for disposal at Chemical Waste Management no more than 6-weeks would be required.

E. Hazardous Waste Liquids

A substantial volume of RCRA regulated liquid waste (7,975 gallons) could be on hand at the time of closure. These liquids would not be flammable not corrosive and would therefore fall under the generic DOT classification of "Hazardous Waste Liquid, N.O.S.".

These wastes would be transported, via tractor trailer, to Marine Shale Processors in Louisiana for incineration. Two loads would be required which would take approximately two weeks.

F. Corrosive Liquids

A total of 4,400 gallons of RCRA regulated corrosive wastes (D-002) could be on hand at the time of closure.

These wastes would be transported to Environmental Enterprises Inc., located in Cincinnati, Ohio for treatment.

One tractor trailer load would be required to transport this waste. We estimate one week for completion of this task.

III DECONTAMINATION

The Universal Waste & Transit storage/treatment facility is totally enclosed. The facility construction is concrete, concrete block and metal and therefore no subsurface soil contamination will result during any period of the facility's operation. However soil sampling will still be performed at four locations around the site.

The filter press will be cleaned with soap and water and the resultant liquid sent to Marine Shale Processors for incineration. We are estimating that no more than 275 gallons of liquid residue will be generated during the decontamination process.

All other equipment and the floors will then be steam cleaned to insure that all residue has been removed. This liquid will be analyzed to determine its acceptability for discharged to the sanitary sewer system. If the liquid waste generated from the decontamination procedure does not meet Tampa discharge standards, it will be placed into UW&T tanker and transported to Marine Shale Processors for subsequent incineration. No more than 4,000 gallons of this decontamination liquid is anticipated.

All decontamination will be performed by UW&T and no outside contractors are anticipated. As indicated in our Contingency Plan, a sufficient quantity of cleanup and decontamination material is already on hand. No additional purchases for the decontamination process are anticipated.

Once all liquid waste has been either discharged to the sewer system or transported to MSP for incineration, all tankers will be cleaned with water/industrial detergent and subsequently steam cleaned to insure that decontamination has occurred. Again, this liquid will be analyzed to determine its acceptability for discharge to the sanitary sewer system. If the first cleaning of the tanker is not acceptable to discharge to the sanitary sewer system, it will be transported to MSP for incineration. This process will continue until such time as the liquid residue in the tanker meets Tampa sewer discharge requirements. We estimate that no more than 4,000 gallons of liquid will be generated in this manner.

It is our best estimate that no more than two (2) weeks will be required to fully decontaminate all equipment and the storage facility itself.

IV CLOSURE CERTIFICATION

Universal Waste & Transit will subcontract the closure certification to a registered professional engineer licensed within the State of Florida. It is anticipated that three on site inspections by the registered professional engineer will occur during the closure period. Those inspections are indicated below:

1st. inspection: Final date of waste acceptance

2nd. inspection: Upon completion of all removal for off-site disposal

3rd. inspection: Upon completion of all decontamination

It is the intent of these inspections to insure that all materials are being handled in accordance with our Closure Plan. An independent analytical laboratory will perform swab sampling of the building interior and soil sampling on the building exterior. These samples will be analyzed for the RCRA regulated metallic ions as well as a GC/MS scan. This will insure that decontamination is satisfactory. Upon completion of the final inspection by the registered professional engineer, a certification that closure has been completed will be submitted to the Regional Administrator and Florida DER by both UW&T and the independent registered professional engineer. These certification statements are shown in Attachments 2 and 3. These certifications will be sent within 60 days of completion of closure by registered mail.

V CLOSURE COST ESTIMATE

Indicated below is our most recent closure cost estimate based upon the quantities of materials indicated in our Closure Plan and the methods indicated for treatment/disposal of those waste materials.

A. Liquid Waste for Incineration at Marine Shale Processors

9,020 gallons of non-flammable liquid waste

4,275 gallons of decontamination liquid

Total 13,295 gallons for incineration

13,295 gallons is equivalent to 3 truck loads for incineration

Based upon an average cost of \$2.73/gallon the total cost for incineration would therefore be \$36,295.35.

Transportation cost for removal and transport from UW&T to Marine Shale Processors is approximately:

\$1200/load or \$3,600.00 total cost.

13,295 gallons x \$2.73/gallon = \$36,295.35

3 x \$1,200.00/load = 3,600.00

Subtotal \$39,895.35

B. Solid Materials for Land Disposal at Chemical Waste
Management in Emelle, Alabama

13,475 gallons of hazardous waste solid,

This volume of waste can be transported in three truckloads to CWM.

13,475 gallons at disposal cost of \$1.09/gallon = \$14,687.75

Transportation cost at \$1,200/truckload = 3,600.00

Subtotal for CWM \$18,287.75

C. Treatment of Corrosive Liquids at Environmental Enterprises,
Cincinnati, Ohio

This treatment will include the following:

4,400 gallons of corrosive liquid.

This volume of waste can be transported in one truckload.

The average cost of corrosive waste treatment at Environmental Enterprises is \$1.05/gallon.

Based upon 4,400 gallons at \$1.05/gallon a total cost for treatment of corrosive liquids would be \$4,620.00. Transportation cost for one truckload would be \$1,500.00

The total cost for transportation and disposal of corrosive liquids at EEI would be \$6,120.00

D. Treatment of Reactive Waste at BDT in New Jersey

This small quantity of waste materials will be transported to BDT in New Jersey for treatment. Approximately 275 gallons could be at the facility during closure.

275 gallons at a treatment cost of \$6.00/gallon	=	\$1,650.00
Transportation of 275 gallons at a cost of \$2.00/gallon		<u>550.00</u>
Total Transport and Treatment Cost		\$2,200.00

E. Recycle/Incineration of Flammable Wastes at Oldover Corp. or
International Solvent

An estimated 6,490 gallons of flammable liquid could be on hand at the time of closure. These materials would be sent to either Oldover Corp. or International Solvent for recycle or incineration. Two truckloads would be necessary for transport to these facilities.

Based upon past experience our worst case disposal cost estimate for this waste material would be about \$.50/gallon.

6,490 gallons x \$.50/gallon	=	\$3,245.00
2 truckloads x \$500/load	=	<u>1,000.00</u>
Total cost for disposal	=	\$4.245.00

F. Decontamination

All decontamination of the facility, equipment, and vehicles will be in accordance with our Closure Plan. It is estimated that no more than \$1,000 would be required to insure complete decontamination. Removal and disposal costs for decontamination have already been accounted for separately. All labor costs are indicated in a subsequent section.

G. Professional Engineer Certification

The cost for certification by a registered professional engineer visiting the facility three times and certifying that closure is in accordance with the UW&T Closure Plan is estimated at no more than \$2,000.

H. Labor

It is our estimate that approximately 400 hours of labor will be required to insure that closure is completed as indicated in the UW&T Closure Plan. At an average rate of \$10/hour, this cost is \$4,000. It should be noted that all cost for transportation related labor have been previously addressed.

I. Closure Cost Summary

Liquid Waste Incineration	\$39,895.35
Land Disposal at CWM	18,287.75
Corrosive Liquid Treatment	6,120.00
Reactive Treatment	2,200.00
Flammable Liquid Incineration	4,245.00
Decontamination	1,000.00
Certification	2,000.00
Labor	<u>4,000.00</u>
TOTAL CLOSURE COST	\$77,748.10

VI TRUST FUND

An irrevocable trust fund will be instituted in the amount of \$77,748.10. Payments to the trust fund will be made annually during the term of the permit or over the estimated life of the facility. The first payment will be made prior to receipt of any waste at the facility. Subsequent payments will be made within 30 days of the anniversary of the first payment.

VII CLOSURE COST ADJUSTMENT

This closure cost estimate will be adjusted within 30 days after each anniversary of the date of permit issuance. The adjustment will be made by multiplying this closure cost estimate by the inflation factor. Subsequent adjustments will be made by multiplying the most recent closure cost estimate by the latest inflation factor.

THIS FORM HAS BEEN DEVELOPED BY AND FOR THE USE
OF CHEMICAL WASTE MANAGEMENT, INC. AND OTHER
WASTE MANAGEMENT, INC. COMPANIES.

SALES

CODE

COL

A 73920

WASTE PROFILE SHEET CODE



GENERATOR'S WASTE MATERIAL PROFILE SHEET

GENERAL DIRECTIONS: In order for us to determine whether we can lawfully, safely and environmentally transport, store, treat or dispose of your waste stream, we must ask certain information about your waste. All of the information we seek is necessary, for our purposes and yours. Be complete in your answers: if your response is "none," so indicate. Answers must be in ink or typewritten. Information you provide will be maintained in strictest confidence. Please make a copy of this form for your records, returning the original to the location indicated below.

THIS FORM AND ANY SUPPLEMENTAL INFORMATION SHOULD BE RETURNED TO: **SAMPLE TO:**
CHEMICAL WASTE MANAGEMENT OF ALABAMA
STATE HIGHWAY 17, MILE MARKER 103
EMELLE, ALABAMA 35459
ATTN: ED BRASHIER, CHIEF CHEMIST

CHEMICAL WASTE MANAGEMENT, INC.
 2901 KERRY RD. SUITE 220
 COLUMBUS, OHIO 43221
 (614) 457-7090

1. GENERATOR NAME: _____
 2. GENERATING FACILITY NAME/ADDRESS/USEPA FACILITY I.D. NUMBER (IF ANY): _____

3. COMPANY CONTACTS:

GENERAL _____	TITLE _____	PHONE _____
_____	TITLE _____	PHONE _____
TECHNICAL _____	TITLE _____	PHONE _____
_____	TITLE _____	PHONE _____

4. WASTE NAME: _____

5. PROCESS GENERATING WASTE: _____

6. WASTE CHARACTERISTICS:

A. PHASES/LAYERS: BILAYERED ☐ MULTILAYERED ☐ NONE ☐

B. PHYSICAL STATE AT 70°F: SOLID ☐ SEMI-SOLID ☐ LIQUID ☐
 POWDER ☐ OTHER: _____

C. SOLIDS: TOTAL (%): _____ TOTAL DISSOLVED (ppm or %): _____

D. SPECIFIC WEIGHT (AS # PER UNIT): _____

E. pH: _____ (Show the following as range of %)

AS: H₂SO₄ _____ % H₃PO₄ _____ %

HCl _____ % NaOH _____ %

HF _____ % NH₄OH _____ %

HNO₃ _____ % Ca(OH)₂ _____ %

OTHER: _____ % _____ %

_____ % _____ %

F. FLASH POINT: _____ °F (CLOSED CUP TEST ONLY)

VAPOR PRESSURE (in mm of Hg at 25°C): _____

BTU PER #: _____ ASH CONTENT _____ %

I. CHARACTERISTIC COLOR _____ DISTINCTIVE ODOR _____

J. HALOGENATED? _____ % SULFONATED? _____ %

K. ALPHA RADIATION AS pCi/l: _____

7. WASTE COMPOSITION:

A. ORGANIC COMPONENTS (WITH RANGES — INDICATE WHETHER % OR ppm)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(ATTACH ADDITIONAL PAGES IF NECESSARY)

DOES THIS WASTE CONTAIN ENDRIN, LINDANE, METHOXYCHLOR, TOXAPHENE, 2,4-D, 2,4,5-TP SILVEX, OR ANY OTHER ORGANIC COMPOUNDS LISTED BY USEPA AT 40 CFR 261.247 _____ IF SO, PLEASE NOTE ABOVE

B. HEAVY METALS (WITH ppm RANGES):

TOTAL	TOTAL LEACHABLE	TOTAL	TOTAL LEACHABLE
Ag _____	_____	Hg _____	_____
As _____	_____	Ni _____	_____
Ba _____	_____	Pb _____	_____
Cd _____	_____	Se _____	_____
Cr _____	_____	Zn _____	_____
Cu _____	_____	Other (ATTACH ADDITIONAL PAGES)	

(IF YOU HAVE DETERMINED TOTAL LEACHABLES USING USEPA'S "EP TOXICITY TEST PROCEDURE" — 40 CFR, PART 261, APPENDIX II — SO INDICATE BY MARKING "EP" AFTER THE RESULT SHOWN ABOVE

C. INORGANIC COMPONENTS (WITH % RANGES): OTHER

TOTAL CYANIDE _____ %	_____
FREE CYANIDE _____ %	_____
SULFIDE AS: _____ %	_____
BISULFITE AS: _____ %	_____
SULFITE AS: _____ %	_____

(ATTACH ADDITIONAL PAGES IF NECESSARY)

D. DOES THIS WASTE STREAM CONTAIN BIOLOGIC MATERIALS, PATHOGENS, OR ETIOLOGICAL AGENTS? _____ IF SO, ATTACH ADDITIONAL PAGES DESCRIBING SUCH MATERIALS.

E. IS THE WASTE A PESTICIDE OR PRODUCED BY A PESTICIDE MANUFACTURING PROCESS? _____ IF SO, INDICATE WHETHER IT CONTAINS:

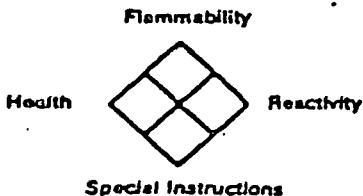
- ☐ ORGANOPHOSPHATES — CONTAINING SULFUR ☐ YES ☐ NO
☐ CARBAMATES
☐ CHLORINATED HYDROCARBONS

8. HAZARDOUS COMPONENTS AND CHARACTERISTICS

A. HAZARDOUS PROPERTIES (INSERT NUMBER CODES PER INSTRUCTIONS ON LAST PAGE)

(1) TOXICITY RATING: INHALATION _____ DERMAL _____ ORAL _____

(2) HAZARD IDENTIFICATION SYSTEM:



LIST ANY OTHER ACUTE OR CHRONIC HAZARDS ASSOCIATED WITH OR ALLEGED TO BE ASSOCIATED WITH HUMAN CONTACT WITH OR EXPOSURE TO THE WASTE: _____

CERTIFICATION OF REPRESENTATIVE SAMPLE

GENERAL DIRECTIONS: IN ORDER TO DETERMINE WHETHER WE CAN ACCEPT THE SPECIAL WASTE DESCRIBED IN THE ABOVE NUMBERED PROFILE SHEET, WE MUST OBTAIN A REPRESENTATIVE SAMPLE OF THE WASTE. WE WILL ANALYZE THE SAMPLE TO VERIFY THE INFORMATION YOU HAVE PROVIDED US, SO IT IS PARTICULARLY IMPORTANT THAT THE SAMPLE BE TRULY REPRESENTATIVE. IN MOST CIRCUMSTANCES YOU WILL BE OBTAINING THE SAMPLE. HOWEVER, IN THOSE CASES IN WHICH WE OBTAIN THE SAMPLE, WE MUST ASK THAT ONE OF YOUR EMPLOYEES BE PRESENT TO DIRECT THE PARTICULAR SOURCE TO BE SAMPLED AND TO WITNESS THE SAMPLING. IN SUCH CASE, YOUR EMPLOYEE MUST SIGN THIS CERTIFICATION AS A WITNESS.

THIS CERTIFICATION MUST BE RETURNED, WITH THE REPRESENTATIVE WASTE SAMPLE, TO:

THE UNDERSIGNED CERTIFIES THAT HE/SHE OBTAINED A REPRESENTATIVE SAMPLE OF THE WASTE MATERIAL DESCRIBED IN THE "GENERATOR'S WASTE MATERIAL PROFILE SHEET" ABOVE REFERENCED, AND THAT THE FOLLOWING REPRESENTATIONS ARE TRUE AND CORRECT:

1. HOUR AND DATE OF SAMPLING: _____
2. SOURCE FROM WHICH SAMPLE TAKEN: _____

3. EQUIPMENT AND SAMPLING METHOD USED: _____

4. AMOUNT OF SAMPLE OBTAINED: _____
5. TYPE OF CONTAINER INTO WHICH SAMPLE WAS PLACED: _____
6. THE SAMPLING EQUIPMENT USED, AND THE CONTAINER INTO WHICH THE SAMPLE WAS PLACED, WERE THEMSELVES UNCONTAMINATED BEFORE USE.
7. AT THE TIME OF SAMPLING I AFFIXED A LABEL TO THE CONTAINER IN THE FOLLOWING FORM WITH THE FOLLOWING INFORMATION (FILL IN THIS PORTION, INCLUDING YOUR SIGNATURE, JUST AS IT APPEARS ON THE LABEL YOU PREPARED):

GENERATOR:
SAMPLE HOUR/DATE:
PROFILE SHEET CODE:
SAMPLER SIGNATURE:

WITNESS VERIFICATION. I WAS PERSONALLY PRESENT DURING THE SAMPLING DESCRIBED; I DIRECTED THE WASTE SOURCE TO BE SAMPLED; AND I VERIFY THE INFORMATION ABOVE NOTED.

WITNESS: _____

SIGNATURE: _____

TITLE: _____

EMPLOYER: _____

DATE: _____

SAMPLER NAME: _____

SIGNATURE: _____

TITLE: _____

EMPLOYER: _____

DATE: _____

LABORATORY REVIEW OF SAMPLING PROTOCOL
BASED UPON MY REVIEW OF THE ABOVE PROFILE SHEET,
I CONCLUDE THAT THE ABOVE METHODOLOGY IS:
☐ ADEQUATE FOR YIELDING A REPRESENTATIVE SAMPLE
☐ INADEQUATE FOR THE REASONS NOTED HEREON.

9. REGULATORY CLASSIFICATION OF WASTE

A. IS THIS WASTE A "HAZARDOUS MATERIAL" AS DEFINED BY REGULATIONS OF THE U.S. DEPARTMENT OF TRANSPORTATION PURSUANT TO THE HAZARDOUS MATERIALS TRANSPORTATION ACT? _____
(SEE 49 CFR 172.101 AND 173 FOR "HAZARDOUS MATERIALS" LIST AND CHARACTERISTICS.) IF SO, PLEASE ADVISE OF THE FOLLOWING:

- (1) CORRECT SHIPPING DESCRIPTION: _____
(2) HAZARD CLASS(ES): _____
(3) MATERIAL I.D. NO.(S) _____

B. DOES THIS WASTE CONTAIN ANY "HAZARDOUS SUBSTANCE" AS DEFINED BY REGULATIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO SECTION 311 OF THE CLEAN WATER ACT? _____
(SEE 40 CFR 117 FOR "HAZARDOUS SUBSTANCES" AND CATEGORIES.) IF SO, PLEASE ADVISE OF THE FOLLOWING:

- (1) THE NAMES OF EACH HAZARDOUS SUBSTANCE PRESENT IN THE WASTE, THE HAZARD CATEGORY (X, A, B, C OR D) AND THE APPROXIMATE CONCENTRATION OF THE SUBSTANCE BY WEIGHT IN THE WASTE: _____

(ATTACH ADDITIONAL PAGES IF NECESSARY)

C. IS THIS WASTE A "HAZARDOUS WASTE" AS DEFINED BY REGULATIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO SECTION 3001 OF THE RESOURCE CONSERVATION AND RECOVERY ACT? _____ (SEE 40 CFR, PART 261 FOR WHAT IS A "HAZARDOUS WASTE.") IF SO, STATE:

- (1) THE USEPA HAZARDOUS WASTE NUMBER(S): _____
(2) DO YOU CLAIM TO BE A SMALL QUANTITY GENERATOR? _____ (SEE 40 CFR 261.5.)

D. IS THIS WASTE A "HAZARDOUS WASTE" AS DEFINED BY THE ENVIRONMENTAL REGULATORY AGENCY IN YOUR STATE? _____ IF SO, STATE WHY IT IS SO DEFINED AND ANY STATE HAZARDOUS WASTE CODE NUMBERS ASSIGNED: _____

10. IS THE INFORMATION PROVIDED IN SECTIONS 6-9 BASED UPON LABORATORY ANALYSIS OF THE WASTE MATERIAL? _____ IF SO, PLEASE ADVISE OF THE DATE OF THE MOST RECENT ANALYSIS: _____

11. HAVE YOU OBTAINED TOXICITY STUDIES OF THIS WASTE STREAM? _____ IF SO, PLEASE ATTACH A COPY OF THE RESULTS.

12. QUANTITY/SHIPPING REQUIREMENTS:

ANTICIPATED VOLUME IS: _____

GALLONS ☐ TONS ☐ CUBIC YARDS ☐ DRUMS ☐ OTHER ☐ _____

PER: DAY ☐ WEEK ☐ MONTH ☐ YEAR ☐ ONE TIME ☐

TRANSPORTATION EQUIPMENT REQUIRED: _____

SERVICE/SCHEDULING REQUIREMENTS: _____

GENERATOR'S

AUTHORIZED SIGNATORY: _____ TITLE _____ DATE _____

CONFIDENTIALITY AGREEMENT: _____

In consideration for the Generator's release of the above information, and any other supplemental data provided, agrees to treat such information as confidential property and will not disclose such information to others except as is required by law, and in such circumstances only after first giving notice to the Generator.

By: _____
Name

ATTACHMENT 2

I, _____, of
owner or operator

Name and address of hazardous waste facility

hereby state and certify that, to the best of my knowledge and belief,
the above named hazardous waste facility has been closed in accordance
with the attached approved closure plan, and that the closure was
completed on the ____ day of _____, 19__.

signature

date

ATTACHMENT 3

I, _____, a
certified professional engineer, hereby certify, to the best of my
knowledge and belief, that I have verified that Professional Engineer
Closure Certificates were issued for all prior closure activities at
_____ and
hazardous waste facility
that I have made visual inspection(s) of the aforementioned facility,
and closure of the aforementioned facility has been performed in
accordance with the closure plan for the facility approved by the
Regional Administrator for Region _____ of the United States
Environmental Protection Agency.

signature

date

State Professional Engineer License No., issued by the State of

business address and telephone number