

Memorandum

Florida Department of Environmental Protection

PERMIT COVER MEMO

TO: X RICK GARRITY, Director of District Management

FROM/THROUGH:

William Kutash, ENVIRONMENTAL ADMINISTRATOR
Bill Crawford, SUPERVISOR *DCE 5/16/96*
Roger Evans, ENGINEER *RE*

DATE: May 16, 1996

FILE NAME: Universal Waste & Transit PERMIT #: HO29-263213
PROGRAM : Hazardous Waste COUNTY : Hillsborough

TYPE OF PERMIT ACTION: ISSUE DENY MODIFY
 TRANSFER OWNER NOD
 PUBLIC NOTICE X INTENT TO ISSUE

PUBLIC NOTICE PERIOD CLOSED? N/A PETITION FILED? N/A

PERMIT SUMMARY: UWT operates a hazardous waste treatment and storage facility. The principal operation at the facility is storage of hazardous waste in containers, primarily in 55-gallon drums. Some waste is recontainerized or consolidated in containers of similar size or larger. This application is for the renewal of the operating permit with an increase to their hazardous waste storage capacity (from 33,600 gallons to 50,000 gallons) and the addition of 58 new hazardous waste codes. UWT also manages non-RCRA regulated waste, household hazardous waste, used oil and filters, mercury containing lamps and TSCA exempt and limited quantity exempt PCB and asbestos wastes.

PROFESSIONAL RECOMMENDATION: X APPROVE DENY

EVALUATION SUMMARY: This permit authorizes UWT to renew their operating permit, increase their storage capacity and add new waste codes. This renewal constitutes a Class 3 Major permit modification which by law requires a public notice in a radio announcement and a newspaper of general circulation. Attached is the language for broadcast and publication to satisfy FDEP regulations.

This application was deemed complete on: March 25, 1996

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Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

CERTIFIED - RETURN RECEIPT

MAY 17 1996

Universal Waste & Transit, Inc.
7202 East Eight Avenue
Tampa, Florida 33619

Attention: Terry M. Muse, General Manager

Re: Universal Waste & Transit, Inc.
State Operating Permit No.: HO29-263213
Federal Operating Permit No.: FLD 981 932 494
Hazardous Waste Facility - Hillsborough County

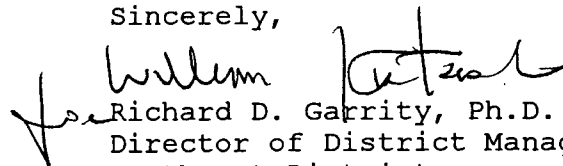
Dear Mr. Muse:

Pursuant to Section 403.815, Florida Statutes, and Rule 62-730.220(6), Florida Administrative Code, (F.A.C.), the Department requires you to publish and broadcast, at your own expense, this Notice of Proposed Agency Action. Attached are the Intent to Issue language for the newspaper publication and radio announcement, and the proposed draft operation permit.

Pursuant to Rule 62-730.220(6), F.A.C., the notice must be published one time only in the legal advertisement section of a major local newspaper of general circulation in Hillsborough County, and broadcast one time only over a local radio station within thirty (30) days of receipt of this letter. Proof of publication and broadcast must be provided to the Department within fourteen (14) days of publication and broadcast of the notice.

Failure to publish this notice and provide proof of publication and broadcast within the allotted time may result in denial of the operation permit without any further notice or hearing.

Sincerely,


for Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

Attachments

cc: Alan Farmer, EPA Region IV w/Attachments
Satish Kastury, FDEP/Tallahassee w/Attachments
Hooshang Boostani, HCEPC

CERTIFICATE OF SERVICE

This undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on MAY 17 1996 to the listed persons.

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(10), Florida Statutes,
with the designated Department,
Clerk, receipt of which is
hereby acknowledged.



Clerk

MAY 17 1996

Date

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF AN
APPLICATION FOR A PERMIT:

MAY 17 1996

DEP FILE NUMBER: HO29-263213
EPA FILE NUMBER: FLD 981932494

Universal Waste & Transit, Inc.
7202 East Eight Avenue
Tampa, Florida 33619

Attention: Terry M. Muse, General Manager

INTENT TO ISSUE

The Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (EPA) hereby gives notice of their Intent to Issue, and requests the publication and notice for the above referenced joint permits. Upon issuance of these permits, the Department and EPA will authorize the permittee to operate a hazardous waste treatment and container storage facility on property located at 2002 North Orient Road, Tampa, Hillsborough County, Florida.

The waste authorized for storage at this facility includes materials with the following EPA Waste Identification Codes:

D001-D012, D013-D024, D025-D036, D037-D043
F001, F002-F005, F006-F012, F019, F020-F028, F032-F035, F037-F039
K001-K011, K013-K052, K060-K062, K064-K066, K069, K071,
K073, K083-K088, K090-K091, K093-K118, K123-K126,
K131-K132, K136, K140-K145, K147-K151, K156-K161,
K162-K166
P001-P018, P020-P024, P026-P031, P033-P034, P036-P051, P054,
P056-P060, P062-P078, P081-P082, P084-P085, P087-P089, P092-P099,
P101-P106, P108-P116, P118-P123, P127-P128, P185,
P187-P205
U001-U012, U014-U039, U041-U053, U055-U064, U066-U099
U101-U103, U105-U112, U113-U139, U140-U174, U176-U194,
U196-U197, U200-U211, U213-U223, U225-U228, U234-U240,
U243-U244, U246-U249, U271, U277-U280, U328, U353,
U359-U411

The Department is taking this action under the authority of Section 403.722, Florida Statutes (F.S.), and Florida Administrative Code Chapters 62-4 and 62-730, (F.A.C.), which provide for issuance of permits to facilities that treat, store, or dispose of hazardous wastes. The issuance of this permit is based on the applicant's demonstration that this facility is in compliance with the technical and procedural requirements established in Chapter 62-730 F.A.C. and the appropriate Sections of 40 CFR Parts 260 through 266, which were adopted by reference in Chapter 62-730 F.A.C. This demonstration was made in the approved application and related attachments filed with DER Form 17-730.900(2) on January 3, 1995, and amended on June 19, 1995, August 21, 1995, November 9, 1995, January 9, 1996 and February 28, 1996.

Pursuant to Sections 403.815 and 403.722, F.S., and 62-730.220(6), F.A.C., you are required to publish at your own expense the joint notice for the Department's and EPA's Intent to Issue hazardous waste operating permits to Universal Waste & Transit to operate the existing hazardous waste treatment and container storage facility located at the above mentioned location.

Pursuant to Section 62-730.220(6), F.A.C., the attached notice must be published one time only in the legal ad section of a major local newspaper of general circulation in Hillsborough County and broadcast over a local radio station within thirty (30) days from receipt of this letter. Proof of publication and broadcast must be provided to the Department within fourteen (14) days of publication of the notice.

Failure to publish the notice and provide proof of publication and broadcast within the allotted time may result in denial of the permit.

The Department and EPA shall issue their respective permits with the attached conditions unless an appropriate petition is filed for a hearing pursuant to the provisions of Section 120.57, F.S. At a formal hearing under Section 120.57(1), F.S., all parties shall have an opportunity to present evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of fact and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. At an informal hearing under Section 120.57(2), F.S., the Department will provide affected persons or parties an opportunity to present evidence or a written statement in opposition to the agency's action.

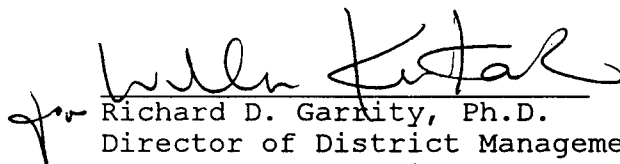
Petitions for hearing must comply with the requirements of Section 28-5.201 F.A.C., and be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant must be filed within forty-five (45) days of receipt of this letter. Petitions filed by other parties, or requests for public meetings by persons, must be filed within forty-five (45) days of publication or broadcast of the public notice.

Any interested person may submit comments on the draft federal permit and may request a hearing pursuant to 40 CFR 124.11. The hearing request must be in writing and should be addressed to

Mr. Alan Farmer, U.S. EPA, at 345 Courtland Street, N.E., Atlanta, Georgia 30365 within 45 days of this notice. Petitions or requests for meetings which are not filed in accordance with the above provisions are subject to dismissal.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


for Richard D. Garnity, Ph.D.
Director of District Management
Department of Environmental
Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318

This is to certify that this NOTICE OF INTENT TO ISSUE was mailed before the close of business on the date indicated on the return request form.


Signature

JOINT PUBLIC NOTICE OF PROPOSED AGENCY ACTION
Newspaper Publication

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
3804 Coconut Palm Drive
Tampa, Florida 33619-8138
813/744-6100

In conjunction with the
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, RCRA
345 Courtland Street, N.E.
Atlanta, Georgia 30365
404/347-3555

DEP FILE NUMBER: HO29-263213 EPA FILE NUMBER: FLD981932494

INTENT TO ISSUE

THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) GIVES NOTICE OF THEIR INTENT TO ISSUE JOINT PERMITS UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), AS AMENDED BY THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984 (HSWA), SECTION 403.722, FLORIDA STATUTES (FS), AND CHAPTERS 62-4 AND 62-730 OF THE FLORIDA ADMINISTRATIVE CODE (FAC) TO Universal Waste & Transit, Inc., for the operation of the existing hazardous waste treatment and container storage facility located at 2002 North Orient Road, Tampa, Hillsborough County, Florida, having assigned facility I.D. number FLD 981 932 494. The two permits, if issued, will constitute the RCRA permit required by Florida DEP and the U.S. EPA.

The State of Florida has been granted authorization for those portions of the RCRA Hazardous Waste Program that were in effect prior to the passage of the Hazardous and Solid Waste Amendments of 1984. The Federal Environmental Protection Agency will administer the applicable portions of the Hazardous and Solid Waste Amendments of 1984 until the State receives authorization for these provisions.

A draft permit, prepared in accordance with the provisions of Chapter 62-730 FAC, contains the conditions for the operation of a hazardous waste treatment and container storage facility at Universal Waste & Transit.

Those wastes authorized for storage at the facility includes materials having the following EPA Waste Identification Codes:

D001-D012, D013-D024, D025-D036, D037-D043
F001, F002-F005, F006-F012, F019, F020-F028, F032-F035,
F037-F039
K001-K011, K013-K052, K060-K062, K064-K066, K069, K071,
K073, K083-K088, K090-K091, K093-K118, K123-K126,
K131-K132, K136, K140-K145, K147-K151, K156-K161,
K162-K166
P001-P018, P020-P024, P026-P031, P033-P034, P036-P051,
P054, P056-P060, P062-P078, P081-P082, P084-P085, P087-P089,
P092-P099, P101-P106, P108-P116, P118-P123, P127-P128, P185,
P187-P205
U001-U012, U014-U039, U041-U053, U055-U064, U066-U099
U101-U103, U105-U112, U113-U139, U140-U174, U176-U194,
U196-U197, U200-U211, U213-U223, U225-U228, U234-U240,
U243-U244, U246-U249, U271, U277-U280, U328, U353,
U359-U411

The application and a copy of both the State and Federal proposed permits are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at either:

Florida Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8318
(813) 744-6100

OR

Florida Department of Environmental Protection
Hazardous Waste Permitting Section
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0300.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, FS, and Chapters 62-103, and 28-5, FAC. Petitions must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida 32399-3000, within forty-five (45) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the time of filing. Failure to file a request for hearing within this time frame shall constitute a waiver or any right such person may have to request a hearing under Section 120.57, FS, or a meeting under Section 403.722(10), FS.

A petition for formal or informal administrative hearing pursuant to Section 120.57, FS, shall contain the following information: (a) The name, address, and telephone number of each petitioner. If the petitioner challenges a Department action or proposed action on a permit application, the application's name and address, the Department Permit File Number and the county in which the project is proposed, shall also be included; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of those material facts (i.e., those facts upon which the Department's action or proposal is based) disputed by petitioner. If no facts are disputed, petitioner shall so state; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition on the Department's permit is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests have been affected by any decision of the Department have the right to intervene in the proceeding. A petition for intervention must be filed pursuant to Section 28-5.207, FAC, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administrative, 2009 Appalachian Parkway, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, FS.

The Federal draft permit contains conditions requiring the facility to investigate prior/continuing releases of hazardous waste or constituents from solid waste units. FDEP and U.S. EPA have made a preliminary determination that the proposed permits will comply with applicable state and federal regulations.

The proposed U.S. EPA permit and statement of basis are available for public inspection Monday through Friday, except legal holidays, from 8:00 a.m. to 5:00 p.m. at the U.S. EPA Library. All data submitted by the applicant to the U.S. EPA is available as part of the administrative record at:

U.S. Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365.

Any interested person may submit comments on the draft federal permit and may request a hearing pursuant to 40 CFR (p)124.11. The hearing request must be in writing and should be addressed to Mr. Alan Farmer, U.S. EPA, at the above address within 45 days of this notice.

A copy of the proposed U.S. EPA permit may be obtained by contacting Mr. Alan Farmer, U.S. EPA at the above address. A nominal fee for copying may be charged.

Any interested person may submit written comments on this proposed State agency action to the Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8138, or the proposed U.S. EPA action to the U.S. Environmental Protection Agency, Region IV, 345 Courtland Street, N.E., Atlanta, Georgia 30365 Attention: Mr. Alan Farmer, within forty-five (45) days of publication of this notice. All comments on the facility will be considered by the Department in formulating a decision on issuing this permit.

JOINT PUBLIC NOTICE OF PROPOSED AGENCY ACTION
Radio Announcement

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
3804 Coconut Palm Drive
Tampa, Florida 33619-8138
813/744-6100

In conjunction with the
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, RCRA
345 Courtland Street, N.E.
Atlanta, Georgia 30365
404/347-3555

DEP FILE NUMBER: HO29-263213 EPA FILE NUMBER: FLD981932494

INTENT TO ISSUE

The Florida Department of Environmental Protection (FDEP) and the U.S. Environmental Protection Agency (EPA) gives notice of its Intent to Issue Joint permits under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), Section 403.722, Florida Statutes (FS), and Chapters 62-4 and 62-730 of the Florida Administrative Code (FAC) to Universal Waste & Transit, Inc., for the operation of the existing hazardous waste treatment and container storage facility located at 2002 North Orient Road, Tampa, Hillsborough County, Florida, having assigned facility I.D. number FLD 981 932 494. The two permits, if issued, will constitute RCRA permit required by FDEP and EPA.

The State of Florida has been granted authorization for those portions of the RCRA Hazardous Waste Program that were in effect prior to the passage of the Hazardous and Solid Waste Amendments of 1984. The Federal Environmental Protection Agency will administer the applicable portions of the Hazardous and Solid Waste Amendments of 1984 until the State receives authorization for these provisions.

A person whose substantial interests are affected by the Department's proposed permitting decision may request a hearing in accordance with Section 120.57, Florida Statutes. If a petition on the Department's permit is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final agency action may be different from the position taken in this preliminary statement. Additionally, persons who support the proposed agency action may also wish to intervene in the proceeding.

For more information concerning the applicable requirements of the petitioning process and the necessary time frames for filing, please contact the Tampa District Office at (813) 744-6100. The application and a copy of the State permit are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at either:

Florida Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8318
(813) 744-6100.

OR

Florida Department of Environmental Protection
Hazardous Waste Permitting Section
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0300

Any interested person may submit comments on the draft federal permit and may request a hearing pursuant to 40 CFR (p)124.11. The hearing request must be in writing and should be addressed to Mr. Alan Farmer, U.S. EPA at 345 Courtland Street, N.E., Atlanta, Georgia 30365, within 45 days of this notice.



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

PERMITTEE:

Universal Waste & Transit, Inc.
7202 East Eight Avenue
Tampa, Florida 33619

Attention:

Mr. Terry M. Muse
General Manager

PERMIT/CERTIFICATION:

I.D. Number: FLD 981 932 494
Permit No.: HO29-263213
County: Hillsborough
Issue Date: **DRAFT**
Expiration Date: **DRAFT**
Latitude / Longitude:
27°57'49"N / 82°22'23"W
Section / Township / Range:
14 / 29S / 19E
Project: Operation of a
Hazardous Waste Treatment
and Container Storage
Facility

This permit is issued under the provisions of Chapter 403.722, Florida Statutes (FS), and Florida Administrative Code (FAC) Rules 62-730. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To operate a hazardous waste container storage facility and treatment unit (filter press) located at 2002 North Orient Road in Tampa, Hillsborough County, Florida.

The container storage facility which occupies a 5,866 square feet totally enclosed building consists of three separate bays. Each bay is separated by an eight-inch wide concrete block wall and fire doors, and features a floor which is five inches of continuously poured 4,000 psi concrete coated with a chemical resistant sealant and two layers of chemical resistant polyurethane coating. Bays 1 and 3 are at opposite ends of the building and have identical dimensions of approximately 48-feet by 50-feet. Bay 2 is in the center and has been specifically designed and built for the storage of ignitable and reactive hazardous wastes. The dimensions of Bay 2 are approximately 22-feet by 50-feet.

There are five separate containment sumps with a capacity of 1,001-gallons each at the hazardous waste storage building. Two sumps are in Bays 1 and 3, and one sump in Bay 2.

Physical treatment (solidification of semi-solid wastes requiring further filtration) will be performed on a batch basis. The batch treatment of hazardous waste utilizing the filter press machine will occur in Bay 1. The filter press is built of steel, pneumatically operated, and does not utilize electrical components. Dimensions for the filter press are approximately 2.6-feet by 10.25-feet by 3.6-feet.

Recontainerization activities occurring at the facility includes paint can crushing, aerosol can recycling, fluorescent bulb crushing, drum crushing and rag compacting, loading to roll-offs, and loading to tanker truck (detailed on Attachment I and II).

Waste accepted and stored at this facility are as follows:

D001-D012, D013-D024, D025-D036, D037-D043
F001, F002-F005, F006-F012, F019, F020-F028, F032-F035,
F037-F039
K001-K011, K013-K052, K060-K062, K064-K066, K069, K071,
K073, K083-K088, K090-K091, K093-K118, K123-K126,
K131-K132, K136, K140-K145, K147-K151, K156-K161,
K162-K166
P001-P018, P020-P024, P026-P031, P033-P034, P036-P051,
P054, P056-P060, P062-P078, P081-P082, P084-P085,
P087-P089, P092-P099, P101-P106, P108-P116, P118-P123,
P127-P128, P185, P187-P205
U001-U012, U014-U039, U041-U053, U055-U064, U066-U099,
U101-U103, U105-U112, U113-U139, U140-U174, U176-U194,
U196-U197, U200-U211, U213-U223, U225-U228, U234-U240,
U243-U244, U246-U249, U271, U277-U280, U328, U353,
U359-U411

Transfer Station

The permittee shall be authorized to operate a transfer facility on-site in accordance with Chapter 62-730.171, FAC, and shall be authorized to store manifested hazardous waste on-site not to exceed ten days as allowed for transfer facilities. UWT shall not utilize the transfer facility for any waste where UWT is the designated facility on the manifest or originated at the facility with UWT listed as the generator. Current notification indicates that the storage of transfer facility waste is located anywhere on the paved lot within the facility boundary.

Other Activities

UWT has registered as a used oil and used oil filter transporter and transfer facility in accordance with Chapter 62-710 FAC.

UWT has registered as a transporter and storer of mercury containing lamps and devices which are regulated in accordance with Chapter 62-737 FAC.

UWT manages household hazardous waste (HHW) at the facility. This waste in general is considered as a solid waste not regulated by RCRA, but if designated by the receiving HHW collection center (generator) as being hazardous it will then be managed as hazardous waste.

The following submittals were utilized in the preparation of this document and are considered a part thereof:

- Operating permit application filed on DEP Form 17-730.900(2) and related Attachments submitted on January 3, 1995.
- Submittals dated June 19, 1995 in response to Department's First Notice of Deficiency letter.
- Submittals dated August 21, 1995 in response to Department's Second Notice of Deficiency letter.
- Submittals dated November 9, 1995 in response to Department's Third Notice of Deficiency (by formal meeting).
- Submittals dated January 10, 1996 in response to Department's Forth Notice of Deficiency (by formal meeting).
- Submittals dated February 28, 1996 in response to Department's Fifth Notice of Deficiency (by formal meeting).

Replaces Permit No.: HO29-171163 originally issued on 7/3/90

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, FS. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), FS, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS: (cont'd)

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purposes of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:

- (a) a description of and cause of non-compliance; and
- (b) the period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Section 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

GENERAL CONDITIONS: (cont'd)

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.
- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;

GENERAL CONDITIONS: (cont'd)

- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

16. In the case of a hazardous waste facility permit, the following permit conditions shall also apply:

- a. The permittee will submit the following reports to the Department:
 - (1) Manifest discrepancy report: If a significant discrepancy in a manifest is discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within 15 days after receiving the waste, the permittee shall immediately submit a letter report including a copy of the manifest to the Department.
 - (2) Unmanifested waste report: The permittee shall submit an unmanifested waste report to the Department within 15 days of receipt of unmanifested waste.
- b. Notification of any non-compliance which may endanger public drinking water supplies, or the occurrence of a fire or explosion from the facility which could threaten the environment or human health outside the facility, shall be verbally submitted to the Department within 24 hours and a written submission provided within 5 days. The verbal submission within 24 hours shall contain the name, address, I.D. number and telephone number of the facility and owner or operator, the name and quantity of materials involved, the extent of injuries (if any), an assessment of actual or potential hazards, and the estimated quantity and disposition of recovered material. The written submission shall contain the following:

GENERAL CONDITIONS: (cont'd)

- (1) a description of any cause of non-compliance; and
 - (2) if not corrected, the anticipated time the non-compliance is expected to continue and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.
- c. Reports of compliance or non-compliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- d. All reports or information required to be submitted to the Department by a hazardous waste permittee shall be signed by a person authorized to sign a permit application.

SPECIFIC CONDITIONS:

Part I. General

1. The permittee shall operate the herein permitted facility in accordance with the Code of Federal Regulations (CFR), 40 CFR Part 264 (\$264), Subparts A through I, the conditions of this permit, and the permit application.
2. The permittee shall notify the Department in writing four weeks prior to receipt of hazardous waste from a foreign source, and comply with the other requirements of \$264.12.
3. The permittee shall store only those wastes identified in Attachment 2 of the application and page 2 of this permit. Prior to acceptance of new hazardous waste for storage, the permittee shall submit to the Department, for approval, waste analysis of the proposed new waste. This analysis shall also be incorporated in the general waste analysis plan which is retained on site. Compliance with this condition shall be in accordance with \$264.13.
4. The permittee shall prevent unauthorized entry of persons into the hazardous waste units to comply with the security requirements of \$264.14, and shall maintain the security equipment and procedures as described in Section 3 of the application.
5. The permittee shall inspect the facility operating, emergency and safety equipment in accordance with the schedule approved in Section 5 of the application. Changes, additions, or deletions to the schedule must be approved in writing by the Department. The schedule must be maintained as part of the operating record at the facility. Inspection program, schedule and records shall be followed in accordance with \$264.15.
6. The permittee shall comply with the training requirements of \$264.16. Facility personnel shall successfully complete the approved training program within six months of their assignment to hazardous waste operations or to a new position in hazardous waste operations as indicated in Section 6 of the application. Verification of this training must be kept with the personnel training records and maintained on-site. Personnel shall not work unsupervised until training has been completed.
7. The facility shall be operated and maintained to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment as per \$264.31.

SPECIFIC CONDITIONS:

Part I. General (cont'd)

8. The contingency plan must be amended and distributed to the appropriate agencies if any criteria of §264.54 are met. Amendments to the plan must be submitted and approved in writing by the Department.
9. The permittee shall comply with the required notice of §264.12(c) in accordance with Florida Administrative Code Rule 62-730.300(2), before transferring ownership or operation of the facility during its operating life.
10. The permittee shall follow the emergency procedures described in Section 8 - Contingency Plan & Emergency Procedures of the application. The permittee shall give proper notification if an emergency situation arises and must submit to the Department within 15 calendar days a written report which includes all information required under §264.56(j).
11. The permittee shall post at conspicuous locations information on emergency equipment and evacuation procedures in accordance with §264.52(e) and (f).
12. The permittee shall operate the hazardous waste facility in accordance with the preparedness and prevention procedures outlined in Section 7 of the application and the requirements of §264, Subpart C. The permittee shall test and maintain all facility communication, or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment as necessary to ensure its proper operation in time of emergency.
13. The permittee shall comply with the use of manifest system requirements of §264.71, and the manifest discrepancy requirements of §264.72. The permittee shall submit a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper to the Department within 15 days.
14. The permittee, when shipping hazardous waste off-site, shall comply with the requirements of §262, Subpart B, and in accordance with Section 9 of the application.
15. The permittee shall keep close to the telephone from where emergency calls will most likely be made, a list containing the names and telephone numbers of the emergency coordinators required in §264.55, and of the emergency response institutions and agencies as described in §264.52(c).

SPECIFIC CONDITIONS:

Part I. General (cont'd)

16. The permittee shall comply with the requirements of §264.73 and 264.74, and as described in Section 9 of the application. The permittee shall keep written operating records at the facility that include:

- Movement and holding times of RCRA-regulated containers situated outside the permitted container storage building (for 3 years);
- The description and quantity of each hazardous waste;
- The location of each hazardous waste within the facility and quantity at each location;
- The results of the waste analysis;
- A summary report and details of incidents that require implementation of the Contingency Plan;
- Copy of manifests (for 3 years);
- Operation logs;
- Notice to generators;
- The results of monitoring and inspections (for 3 years);
- Closure plan and updated closure cost estimates;
- Annual certification of hazardous waste minimization;
- Current Biennial report.

These records must be maintained at the facility until completion and certification of closure.

17. The permittee shall apply for permit renewal at least 180 days before the expiration date of this permit, and comply with all other requirements of Rule 62-730.300, FAC.

18. The permittee shall apply for a closure permit at least 180 days prior to beginning closure at the facility as required by Rule 62-730.260, FAC.

19. The permittee shall notify the Department of any Solid Waste Management Units (SWMU) that are not listed in Subpart P of DEP Application Form Number 62-730.900(2).

20. The permittee shall maintain compliance with the financial requirements of §264 Subpart H. All submittals in response to this Specific Condition shall be submitted to:

Financial Coordinator
Bureau of Solid and Hazardous Waste
Florida Department of Environmental Protection
2600 Blair Stone Road, MS #4565
Tallahassee, Florida 32399-2400

SPECIFIC CONDITIONS:

Part I. General (cont'd)

21. All documents submitted pursuant to the conditions of this permit shall be accompanied by a cover letter stating the name and date of the document submitted, the number(s) of the specific condition(s) affected, and number and project name of the permit involved.

22. The permittee shall submit three copies of any correspondence resulting from compliance with permit conditions or any other permit related activities to the following parties: (Each copy shall specify its distribution to other parties).

a. One copy to:

Hazardous Waste Supervisor
Hazardous Waste Section
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8218

b. One copy to:

Chief, Waste Management Division
United States Environmental Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

c. One copy to:

Environmental Administrator
Hazardous Waste Regulation Section
Bureau of Solid and Hazardous Waste
Florida Department of Environmental Protection
2600 Blair Stone Road, MS #4560
Tallahassee, Florida 32399-2400

23. The Department may modify the conditions of this permit if any of the conditions of Rule 62-730.290(1), FAC apply.

24. The Department may modify, revoke, reissue, or terminate for cause this permit. The filing of a request for a permit modification, revocation, reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition. The permittee may submit any subsequent revisions to the Department for approval. Should this revision constitute a major modification to the permit, the permittee shall meet the requirements of 62-730.290, FAC.

SPECIFIC CONDITIONS:

Part I. General (cont'd)

25. Pursuant to Rule 62-730.290, FAC, this permit may be modified if additional information becomes available indicating that the provisions of Section 3004(u) of the Hazardous and Solid Waste Amendments of 1984 (HSWA) apply to this facility. At that time, this permit may be modified to address the requirements of Section 3004(u) of HSWA if the State has been authorized for these provisions, or the Environmental Protection Agency would issue a separate federal permit addressing Section 3004(u) requirements.

26. The permittee shall operate and maintain the on-site transfer facility pursuant to Rule 62-730.171, FAC.

27. The permittee shall comply with the provisions of §268.7 regarding notification and certifications which must accompany each shipment of waste restricted from land disposal. The permittee shall keep copies of all notices and certifications made by the permittee pursuant to this section for wastes shipped from the facility. The permittee shall also keep copies of all land disposal restriction notices and certifications that accompany shipments of hazardous waste received at the facility. These documents are to be kept filed with the permittee's copy of the manifest or service document as in the case of the small quantity generator (SQG) that accompanied the original shipment.

28. The permittee may not store hazardous wastes restricted from land disposal for more than one year from the date of receipt. The permittee shall notify the Department in writing within 14 days if any wastes restricted from land disposal are stored at the facility for more than one year. The notice must include a summary of all previous actions taken by the permittee to find a facility to accept the waste for treatment or disposal. The notice shall also include what measures the permittee shall undertake to dispose of the waste. The permittee shall submit copies of all manifests for wastes stored more than one year to the Department within 30 days of shipment off-site as per §268.50.

29. The permittee shall clearly mark upon receipt of shipment each container of hazardous waste restricted from land disposal with the following information:

- a description of the contents, including all applicable EPA waste identification numbers; and
- the date the waste was received at the facility.

Part II. Container Storage Conditions

1. Container storage shall be conducted *only* within the three bays of the container storage building. Total container storage volume within the permitted building shall not exceed 50,000 gallons as per Section 13 of the application.
2. The permittee shall conform to DOT standards 49 CFR 173.24 with the type, quality, and specification of containers utilized for storing hazardous wastes and managed in accordance with Section 13 of the permit application. Any change in container type shall be previously approved by the Department.
3. Containers shall be kept closed except when adding or removing waste and be handled in a manner that will not allow the containers to rupture or leak. If a container holding hazardous waste is not in good condition, or begins to leak, the waste shall be transferred to another container in good condition as per §264.171, .172 and .173.
4. The permittee shall use containers that are compatible with the hazardous waste to be stored to comply with the requirements of §264.172.
5. The permittee shall not store incompatible waste in containers or place it in unwashed containers that have previously held incompatible waste as per §264.177.
6. The permittee shall inspect the container loading/unloading areas as well as the container storage area in accordance with the schedule and procedures identified in Section 13 and Section 5 (Inspections) of the application and §264.174.
7. Any unknown waste shall be segregated from all other hazardous wastes until it is identified by analyses and a compatibility group is assigned.
8. The permittee shall not store incompatible wastes in the same bay or in bays having the same containment system. Incompatible waste shall be physically separated by a dike, berm or other approved device in accordance with §264.177(c) requirements.
9. Hazardous waste must be compatible with the secondary containment systems and liners of the storage bays.
10. Spilled or leaked waste in the container storage area must be removed from the sump the same day the waste is discovered by the daily inspection in order to reduce potential overflow of the collection system [§264.175(b)(5)].

SPECIFIC CONDITIONS:

Part II. Container Storage Conditions (cont'd)

11. Liquids which accumulate in the containment sumps will be sampled, analyzed and managed as described in Section 13 of the application.
12. The container loading/unloading areas shall be clear of any liquids and/or debris at all times.
13. The permittee shall comply with the 15 meters (50 foot) setback rule concerning the storage of ignitable and reactive wastes in containers as per §264.176.
14. All service vehicle trucks, roll-offs and tractor trailers shall be situated over a manmade surface having emergency liquid containment or at one of the unloading areas when the vehicle contains hazardous waste.
- 15.a. No vehicle containing RCRA regulated wastes shall be on site at the facility for more than three consecutive work days before its contents shall be unloaded into a storage area, or in those instances where a truck is being located for shipment to a subsequent facility, the truck must leave the facility within five consecutive work days of the first container of RCRA waste being placed on the transport vehicle (exclusive of tanker trucks and those vehicles storing containers for which the facility is acting solely as a transfer facility, appropriate documentation verifying transfer facility activity shall be maintained).
- 15.b. The permittee shall provide assurances that the five consecutive work day time frame (specified above in Specific Condition Part II.15.a) is being observed via documented placement of RCRA waste containers on board the transport vehicle designated for off-site disposal of such RCRA waste.
16. The permittee shall not allow pass-through bulk waste shipments to be held at the facility in excess of 24 hours.
- 17.a. An inventory will be taken at the opening of each business day and recorded on the daily inventory logs.
- 17.b. The inventory of containers that have been loaded onto transport vehicles for outbound shipment shall be counted towards the maximum inventory of the storage area. The inventory of receipted waste which remain unloaded on the transport vehicle shall not be counted towards the maximum capacity of the facility but shall be included in the closure plan, financial assurance documents, and inspection logs.

SPECIFIC CONDITIONS:

Part II. Container Storage Conditions (cont'd)

- 17.c. The maximum quantity of receipted waste which remain unloaded shall not exceed 15,000 gallons at any one time.
18. The container storage building shall be closed in accordance with Section 11 of the application as required by 40 CFR Subpart G and §264.178.
19. Container arrangement is identified in Figure 5.12A of the application and Attachment III of this permit. Any change to the container arrangement in any bay requires prior approval by the Department.
20. The permittee may store non-regulated materials in the regulated storage area provided:
- a. The permittee complies with the requirements of §264.175 and includes the volume of non-regulated materials in calculating the total volume of liquid to be stored in the regulated storage area.
 - b. The permittee shall maintain the required aisle spacing in the storage area for both the regulated and non-regulated materials in accordance with §264.35.
 - c. The permittee assures that non-regulated materials have labels indicating the contents of the containers and that the materials are non-regulated.
 - d. The permittee provides a written record of non-regulated material in the facility operating record of any non-regulated materials in the regulated storage area. The notice shall include:
 - the type and the quantity of the materials,
 - verify adequate secondary containments,
 - confirm that appropriate aisle spacing is available,
 - document compatibility of the non-regulated materials with all other materials already present in the storage area.
21. The permittee shall manage all containers, which shall include containers of non-regulated waste in the manner outlined in this permit to ensure that a release of hazardous waste or hazardous constituents will not occur.

SPECIFIC CONDITIONS:

Part III. Closure Conditions

1. The permittee shall have a written closure plan as required by §264.112(a). The closure plan and all revisions to the plan must be kept at the facility until closure is completed, certified in accordance with §264.115, and accepted by the Department.
2. The permittee shall submit a written request for a permit modification to authorize a change in the closure plans in accordance with the procedures in 62-730. The written request must include a copy of the amended closure plan for Department approval as per §264.112.
3. The permittee shall manage all hazardous waste, residues, sludges, spilled or leaked waste, or contaminated liquids and soils removed during closure of the units in accordance with the applicable provisions of §260 through 268 and DEP Form 62-730.900(2), including the manifest requirements. A copy of each manifest required as a result of closure activities shall be submitted to the Department with closure certification.
4. The permittee shall close the container storage area and the associated loading/unloading dock in a manner that minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface waters, or to the atmosphere as per §264.111.
5. The permittee shall notify the Department 45 days prior to the date on which he expects to begin partial closure or final closure of a unit(s) as per §264.112.
6. The permittee shall complete closure activities within 180 days after Department approval of the closure plan. Any changes in the time allowed for closure of the units after approval shall require prior Departmental approval as per §264.113.
7. The permittee shall decontaminate or dispose of as hazardous waste all facility equipment, structures, and residues resulting from the closure activities as required by §264.114.
8. Within sixty days of the completion of closure, the permittee shall submit to the Department, by certified mail or hand delivery, a letter signed by the permittee and an independent, Professional Engineer registered in the State of Florida, stating that the facility has been closed in compliance with the closure plan as required by §264.115.

SPECIFIC CONDITIONS:

Part III. Closure Conditions (cont'd)

9. Closure of the container storage area or any components thereof, or of any other hazardous waste unit shall be conducted in accordance with plans specified in Section 11 of the application and Part 264 Subpart G.

Part IV. Waste Minimization

1. The permittee shall, for hazardous waste generated onsite, comply with § 264.73(b)(9) and certify no less often than annually, that:
 - a) the permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the permittee to be economically practicable;
 - b) the proposed method of treatment, storage or disposal is the most practicable method available to the permittee which minimizes the present and future threat to human health and the environment; and,
 - c) the permittee shall maintain copies of certification in the facility operation record.
2. The waste minimization program identified in Specific Condition IV.1a and IV.1b shall, at a minimum, address the following elements:
 - a) Top management support:
 1. a dated and signed policy describing management support for waste minimization and for implementation of a waste minimization plan;
 2. a description of employee awareness and training program to involve employees in waste minimization planning and implementation to the maximum extent feasible; and
 3. a description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations, and maintenance;

SPECIFIC CONDITIONS:

Part IV. Waste Minimization (cont'd)

b) Characterization of waste generation:

identification of types, amounts, and hazardous constituents of waste streams, with the source and date of generation;

c) Periodic waste minimization assessments:

1. identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled;
2. identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation;
3. description of technically and economically practical waste reduction/recycling options to be implemented, and a planned schedule for implementation;
4. specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

d) Cost allocation system:

1. identification of waste management cost for each waste, factoring in liability, transportation, record keeping, personnel, pollution control, treatment, disposal, compliance, and oversight cost to the extent feasible;
2. description of how departments are held accountable for the waste they generate;
3. comparison of waste management cost with cost of potential reduction and recycling techniques applicable to each waste;

e) Technology transfer:

description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants;

SPECIFIC CONDITIONS:

Part IV. Waste Minimization (cont'd)

f) Program evaluation:

1. description of types and amounts of hazardous waste reduced or recycled;
2. analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented;
3. amendments to waste minimization plan and explanation;
4. explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan; and
5. explanation and documentation regarding impediments to hazardous waste reduction specified to the individual facility.

Part V. Miscellaneous

1a. The permittee shall comply with the requirements for used oil transporters and transfer facilities as required by Chapter 62-710.600 and .850 FAC and §279.40, Subpart E.

1b. The permittee shall not store used oil longer than 35-days as described in §279.45(a).

2. The permittee shall comply with the storage limits of 2,000 kilograms or less of mercury-containing lamps and 100 kilograms or less of mercury-containing devices not to exceed a storage period of 180-days in accordance with Chapter 62-737.700(1).

Issued this _____ day of _____, 199__

Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

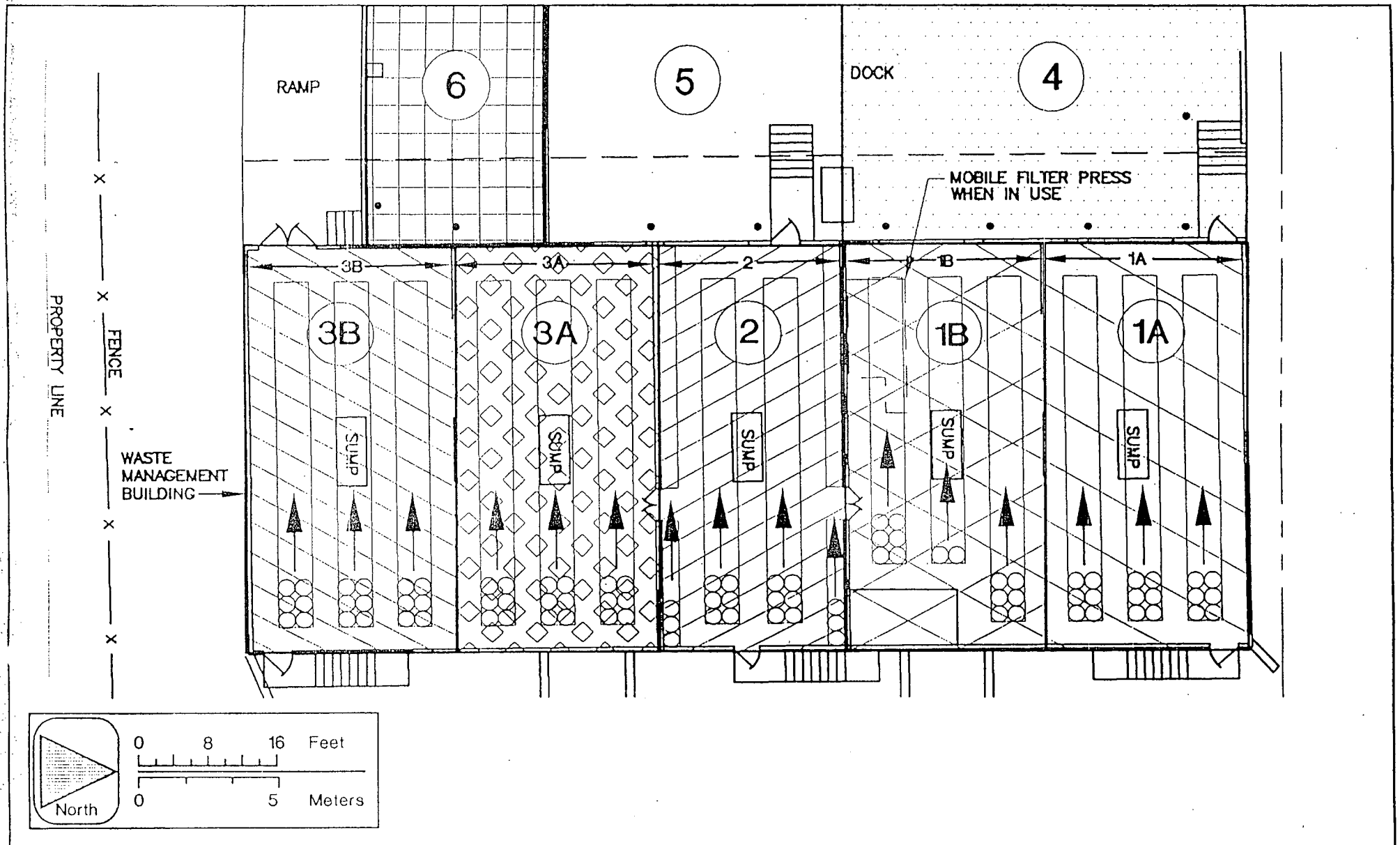


FIGURE 5.12B
 RECONTAINERIZATION OPERATION LOCATION DIAGRAM



Universal Waste
 & Transit, Inc.

LEGEND























<u>ACTIVITY</u>	<u>PERMITTED AREA</u>
PAINT CAN PROCESSING	2  5 
AEROSOL CAN RECYCLING	2 
FLUORESCENT BULB CRUSHING	3B 
EMPTY CONTAINER COMPACTING	4 
RAG COMPACTING	1B 
LOADING, UNLOADING AND TRANSFER FACILITY OPERATION	5  4  6 
RECONTAINERIZATION OPERATION	1A  2  3B  5  1B  3A  4  6 
PERMITTED CONTAINER STORAGE	1A  2  3B  1B  3A 

FIGURE 5.12C
RECONTAINERIZATION OPERATION LOCATION DIAGRAM



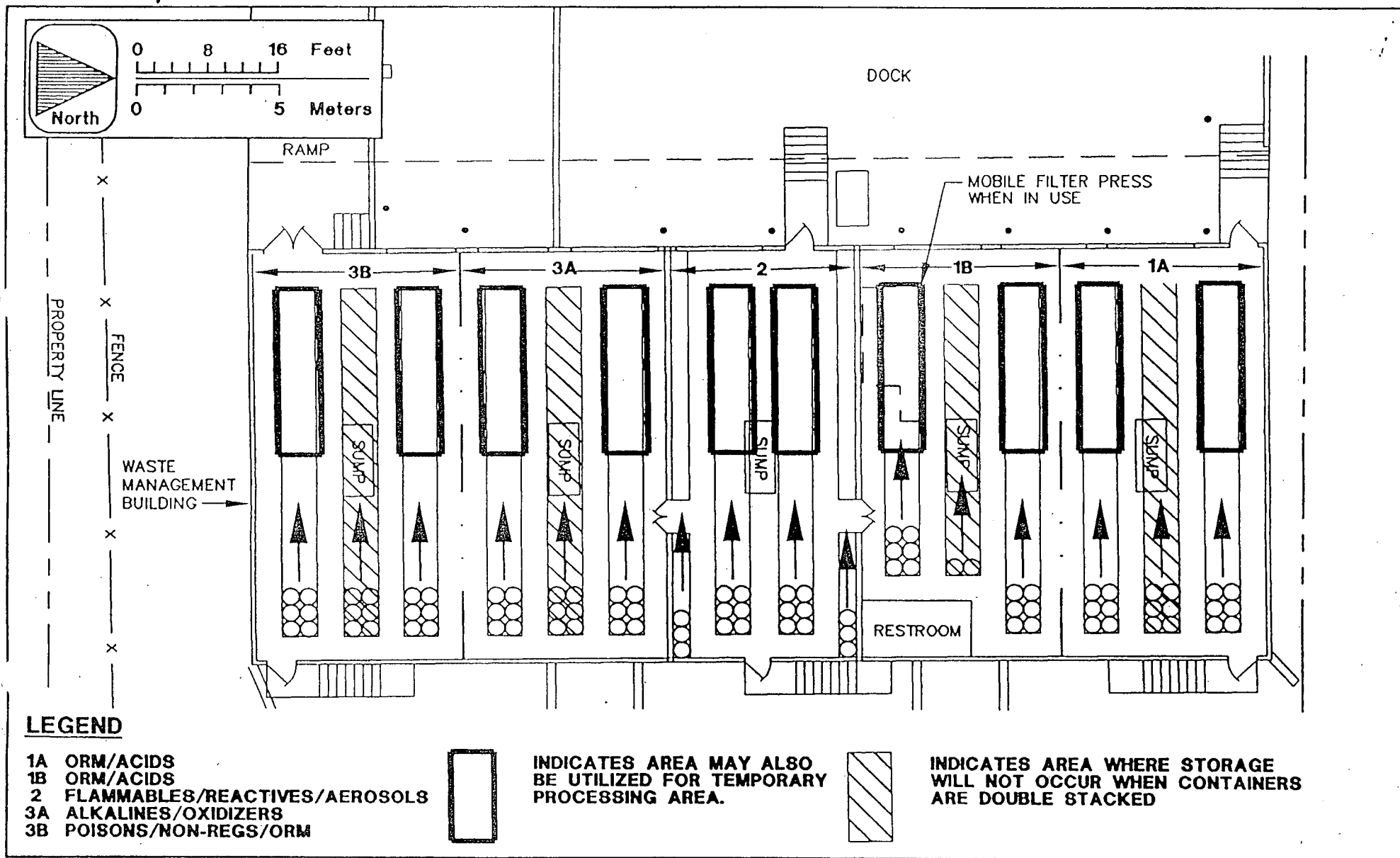


FIGURE 5.12 A
ORIENT ROAD FACILITY
CONTAINER STORAGE BUILDING DIAGRAM

SOURCES: ENGINEERING AND APPLIED SCIENCE, INC., 1996



CITY ENVIRONMENTAL SERVICES, INC. OF FLORIDA
 7202 EAST EIGHTH AVENUE • TAMPA, FLORIDA 33619



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

FEB 05 1996

4WD-RCRA

Dr. Richard D. Garrity
Director of District Management
Southwest District
Florida Department of Environmental
Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8218

SUBJ: 1984 Hazardous and Solid Waste Amendments Permit
Universal Waste & Transit, Inc./Tampa, Florida
EPA I.D. No. FLD 981 932 494

Dear Dr. Garrity:

Enclosed please find the draft Hazardous and Solid Waste Amendments (HSWA) permit for Universal Waste & Transit, Inc., Tampa, Florida. On September 25, 1995, Universal Waste & Transit sent a letter to EPA requesting that the requirement to perform confirmatory sampling on SWMU 6 (Pre-Treatment Unit) be deleted from the HSWA Permit. EPA agreed to this request because the sampling required for SWMU 3 (Retention Pond) will satisfy sampling for SWMU 6 as well. No other changes to the HSWA Permit have been made.

Please proceed with the joint public notice of this Draft HSWA Permit. If you have any questions regarding the enclosed Draft HSWA Permit, please contact Ms. Kimberly C. Clifton, of my staff at (404) 347-3555 ext. 6320.

Sincerely,

G. Alan Farmer
Chief, RCRA Branch
Waste Management Division

Enclosure

Bill K

RECEIVED
FEB 15 1996
Department of Environmental Protection
BY SOUTHWEST DISTRICT

DRAFT

FACT SHEET

FOR PERMIT UNDER 1984 RCRA AMENDMENTS PERTAINING TO
SOLID AND HAZARDOUS WASTE MANAGEMENT AT
UNIVERSAL WASTE & TRANSIT, INC.
TAMPA, FLORIDA
EPA I.D. NUMBER: FLD 981 932 494

This fact sheet is prepared pursuant to 40 CFR §124.8 for the draft permit developed by the U.S. Environmental Protection Agency (EPA) for Universal Waste & Transit (UW&T). If issued, this federal permit along with the Operating Permit from the Florida Department of Environmental Protection (FDEP) will cover all applicable sections of the Resource Conservation and Recovery Act (RCRA) except for those requirements which become effective by statute, are promulgated under 40 CFR Part 268 restricting placement of hazardous waste in or on the land or are promulgated under 40 CFR Part 264 of this chapter regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units, as specified in 40 CFR §270.4. Together, these permits constitute a complete RCRA Hazardous Waste Permit for this facility (i.e., the RCRA Permit).

A. RCRA PERMIT PROCESS/STRUCTURE

The purpose of the permitting process is to afford EPA and interested citizens the opportunity to evaluate the ability of the Permittee to comply with the applicable requirements promulgated under the Resource Conservation and Recovery Act (RCRA), as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA). EPA administers the statutory requirements of the 1984 Amendments for which Florida is not authorized. The remaining sections of this fact sheet will identify the federal portion of the RCRA Permit as the "HSWA Permit." The remaining portion of UW&T's RCRA Permit, which is administered by the FDEP, will be identified as the "Operating Permit."

B. HSWA PERMIT STRUCTURE

The HSWA Permit is divided into four (4) parts: a cover sheet setting forth the basic legal authority for issuing the permit; a section on standard conditions applicable to all hazardous waste management facilities (Part I); a section on the corrective action conditions applicable to this particular facility (Part II); a section addressing applicable land disposal restrictions (Part III);

C. FACILITY DESCRIPTION AND HSWA APPLICABILITY

UW&T is located in Tampa, Florida on approximately 1.4 acres of previously undeveloped land five miles east of downtown Tampa in a heavy industrial zone. The facility, which has been in existence since 1990, is a RCRA-permitted hazardous waste treatment and container storage facility which accepts hazardous and non-hazardous wastes (including household wastes) from generators and other off-site treatment/disposal facilities. The facility consists of a 5,866 square foot concrete building which contains the drum storage area composed of three separate bays and five sumps, loading/unloading area directly connected to the drum storage area, stormwater retention pond, and office/laboratory trailer.

Specific areas of the facility which are subject to the corrective action requirements of HSWA are solid waste management units (SWMUs) and areas of concern (AOCs). SWMUs are any units which have been used for the treatment, storage or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. AOCs are any areas having a probable release of a hazardous waste or hazardous constituent which is not from a SWMU and is determined to pose a current or potential threat to human health or the environment. Based on information submitted by the Permittee, information contained in state and EPA records, and the RCRA Facility Assessment (RFA) report, prepared by an EPA contractor, dated March 1995, and finalized July 5, 1995, six (6) SWMUs have been identified at this time. Justifications for actions required by the draft HSWA Permit are contained in documentation included in EPA administrative files.

Issuance of the HSWA Permit will provide EPA with the authority to require necessary corrective action at identified SWMUs. Specifically, the HSWA Permit for UW&T requires the submittal of a Confirmatory Sampling (CS) Work Plan for one (1) of the six (6) identified SWMUs. The objective of a CS Work Plan is to determine the presence or absence of a release. A release is defined as a hazardous constituent concentration above background. Findings from the implementation of the CS Work Plan will be the basis for determining whether further investigation is required.

The HSWA Permit for UW&T does not require the submittal of a RCRA Facility Investigation (RFI) Work Plan at this time. However, the purpose of the RFI would be to characterize the nature and extent of releases to soil, groundwater, surface water, and air. Information gained by the RFI

characterization would be utilized to determine whether or not a RCRA Corrective Measures Study (CMS) is necessary. If comparison to conservative health-based levels performed in the RFI identifies the potential need for remedial measures, the owner or operator is then responsible for performing a CMS. During this phase of the Corrective Action Process, the owner or operator would identify, study and recommend specific alternatives for remedial action. The CMS includes a public participation plan, and the public will be given an opportunity to comment on the proposed remedial alternative prior to the selection of the final remedy.

Information gathered during the RFI would be used not only to determine the potential need for and support for corrective measures, but also to aid in determining if Interim Measures (IM) are necessary. Interim Measures are activities which prevent or lessen the continued migration of contamination. Interim Measures may be used to protect human health and the environment from current or potential threats. Because Interim Measures often address the most intense and persistent areas of contamination at a facility, Interim Measures are usually incorporated into the proposed final remedy. Currently, there is not enough information available for the Agency to impose Interim Measures.

Based on current information, corrective action is not warranted for the remaining five (5) SWMUs not already covered by CS or RFI requirements. Therefore, a no further action decision at this time has been made for these particular SWMUs.

In addition to requiring confirmatory sampling for identified SWMUs, the permit also includes provisions for notifying EPA of newly identified releases from previously identified SWMUs or AOCs, newly identified SWMUs and newly identified AOCs which are discovered after permit issuance. The HSWA Permit also requires notification of imminent hazards, and when applicable, compliance with the requirements developed under land disposal restrictions.

D. PERMIT CONDITIONS

HSWA PERMIT COVER PAGE

The Cover Page cites authority for issuance of the HSWA Permit and establishes the term of the permit.

PART I. STANDARD PERMIT CONDITIONS

Part I of the permit sets forth standard administrative conditions applicable to all hazardous waste management facilities. Unless otherwise specified, all citations refer to the regulations as codified in Title 40 of the Code of Federal Regulations (40 CFR).

<u>Activity</u>	<u>Regulation (40 CFR)</u>	<u>Permit Condition</u>
Effect of Permit	§270.4 §270.30(g)	I.A.
Permit Actions	§270.30(f) §270.41 §270.42 §270.43	I.B.
Severability	§124.16	I.C.
Duty to Comply	§270.30(a)	I.D.1.
Duty to Reapply	§270.10(h) §270.30(b)	I.D.2.
Obligation for Corrective Action	§264.101 §270.1(c) §270.51	I.D.3.
Need to Halt or Reduce Activity	§270.30(c)	I.D.4.
Duty to Mitigate	§270.30(d)	I.D.5.
Proper Operation and Maintenance	§270.30(e)	I.D.6.
Duty to Provide Information	§264.74 §270.30(h)	I.D.7.
Inspection and Entry	§270.30(i)	I.D.8.
Monitoring and Records	§264.74(b) §270.30(j)	I.D.9.
Reporting Planned Changes	§270.30(1)(1) & (2)	I.D.10.
Anticipated Noncompliance	§270.30(1)(2)	I.D.11.

Transfer of Permit	§264.12(c) §270.30(1)(3) §270.40	I.D.12.
Compliance Schedules	§270.33	I.D.13.
Twenty-four Hour Reporting	§264.56(d) & (j) §270.30(1)(6)	I.D.14.
Other Noncompliance	§270.30(1)(10)	I.D.15.
Other Information	§270.30(1)(11)	I.D.16.
Signatory Requirement	§270.11 §270.30(k)	I.E.
Confidential Information	§270.12, Part 2	I.F.
Definitions	Part 124 Part 260 Part 261 Part 264 Part 270 RCRA	I.G.

PART II. SPECIFIC PERMIT CONDITIONS

Part II of the permit sets forth the specific conditions for this facility with which the Permittee must comply.

PERMIT CONDITION

II.A. Applicability

II.B. Notification and Assessment for Newly Identified SWMUs and AOCs

II.C. Notification Requirements for Newly Discovered Releases at SWMUs or AOCs

II.D. Confirmatory Sampling

II.E. RCRA Facility Investigation

II.F. Interim Measures

JUSTIFICATION

40 CFR §264.101(a) requires that corrective action be instituted as necessary to protect human health and the environment for all releases of hazardous waste or constituents from many solid waste management units, regardless of the time that waste was placed in the unit.

40 CFR §270.14(d) gives EPA authority to require the Permittee to submit specific information for each solid waste management unit at a facility. 40 CFR §270.14(d)(3) also gives EPA authority to require the Permittee to conduct and provide the results of sampling and analysis where the Regional Administrator ascertains it is necessary to determine whether a more complete investigation is necessary.

In order to decide whether corrective action under 40 CFR §264.101 is required, it is necessary to characterize the nature and extent of releases, identify exposure pathways, and evaluate effects on human health and the environment.

Interim measures may be necessary to protect human health and the environment. Therefore, justification for this condition is identical to those stated for Condition II.G. 40 CFR §270.33(a) requires progress reports if the time to complete any interim activity exceeds one year.

- II.G. Corrective Measures Study 40 CFR §264.101(a) requires corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under Subtitle C, regardless of the time at which waste was placed in such unit. 40 CFR §264.101(b) requires assurance of financial responsibility for completing corrective action. 40 CFR §264.101(c) requires corrective action beyond the facility boundary. Once a final remedy has been selected, it will be officially incorporated into the permit through a permit modification (40 CFR §270.41 and 40 CFR §270.42). 40 CFR §264.101(b) requires the permit to contain schedules of compliance for corrective action which cannot be completed prior to issuance.
- II.H. Remedy Approval and Permit Modification
- II.I. Modification of the Corrective Action Schedule of Compliance
- II.J. Imminent Hazard and Reporting Requirements 40 CFR §270.30(h) requires the Permittee to furnish, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying the permit, or to determine compliance with the permit. 40 CFR §270.33(a) requires progress reports if the time required to complete any interim activity exceeds one year. 40 CFR §270.30(l)(6) requires the Permittee to report any endangerment of human health or the environment within 24 hours from the time the Permittee becomes aware of the circumstances.

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|---|---|
| II.K. Plan and Report Requirements | 40 CFR §270.11 and §270.30(k) require that all applications, reports, and/or information submitted to the Regional Administrator be signed and certified. |
| II.L. Approval/ Disapproval of Submittals | In order to facilitate the corrective action process required under 40 CFR §264.101, the Permittee is given the opportunity, under these conditions, to attempt informal resolution of any disagreement regarding the Regional Administrator's revision of a submittal or disapproval of a revised submittal. |
| II.M. Dispute Resolution | |

PART III. LAND DISPOSAL RESTRICTIONS

Part III of this permit outlines land disposal restrictions in accordance with 40 CFR Part 268.

E. VARIANCES

This permit does not provide for variances to the regulations cited above.

F. PROCEDURES

The issuance of a complete RCRA Hazardous Waste Permit to UW&T, Tampa, Florida will be coordinated by both the EPA and the FDEP. The portions of the RCRA Permit issued by the State of Florida will cover those portions of RCRA, including HSWA provisions, for which it has final authorization to administer. Consequently, the federal portion of the RCRA Permit will address those provisions which the state has not received final authorization to administer. If the State portion of the RCRA Permit is written to include those conditions contained in the federal permit, then the State may assume administration for those requirements contained in the federal portion of the RCRA Permit upon receiving final authorization for those provisions.

The regulations under 40 CFR §124.10 require that a 45-day comment period be instituted for each draft permit under the Resource Conservation and Recovery Act. The comment period will begin on _____, which is the date of publication of the public notice in major local newspapers of general circulation, and will end on _____. The public notice will also be broadcast over local radio stations.

The draft federal HSWA permit and fact sheet may be viewed and copied at the EPA Regional Office in Atlanta, Georgia between the hours of 8:00 am to 4:30 pm, Monday through Friday, except legal holidays. Additional copies of the draft federal permit and fact sheet will be available for public review at the Florida Department of Environmental Protection, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida, 32399, (904) 488-0300 and the Florida Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida, 32256, (904) 448-4300.

Persons wishing to require a public hearing or to comment on the permit application or the proposed permit conditions should submit such requests or comments in writing. Copies of comments regarding the federal RCRA permit should be sent to the Environmental Protection Agency, ATTENTION: Mr. G. Alan Farmer, Chief, RCRA Branch, Waste Management Division, at 345 Courtland Street, N.E., Atlanta, Georgia 30365. All comments must be received no later than midnight, _____, _____.

When EPA makes a final permit decision to either issue, deny or modify the permit, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final decision. The final permit decision shall become effective thirty (30) after the service of notice of the decision unless a later date is specified or review is requested under 40 CFR §124.19. If no comments were received requesting a change in the draft permit, the final permit shall become effective immediately upon issuance.

G. CONTACT PERSONS

EPA:

Kent Williams
U.S. Environmental Protection
Agency
RCRA Branch
345 Courtland Street, N.E.
Atlanta, Georgia 30365
(404) 347-3433

State of Florida:

Dr. Richard D. Garrity
Florida Department of
Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
(813) 744-6100



HSWA PORTION OF THE RCRA PERMIT

OWNER/OPERATOR: Universal Transit Property Co. EPA I.D. No. FLD 981 932 494
Universal Waste & Transit, Inc.
2002 N. Orient Road
Tampa, Florida 33619

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, 42 USC Section 6901 et seq., and the Hazardous and Solid Waste Amendments (HSWA) of 1984, P.L. 98-616, and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to Universal Waste & Transit, Inc., (hereafter called the Permittee), who owns and operates a hazardous waste facility located in Tampa, Florida at latitude 27°57'49" and longitude 8°22'23".

This Permit, in conjunction with the Hazardous Waste Management Permit issued by the State of Florida, constitutes the full RCRA Permit for this facility. The Permittee shall be required to investigate any releases of hazardous waste or hazardous constituents pursuant to this permit at the facility regardless of the time at which waste was placed in a unit and to take appropriate corrective action for any such releases. The permit also requires the Permittee to comply with all land disposal restrictions and air emission standards applicable to this facility and to certify annually that on-site generation of hazardous waste is minimized to the extent practicable.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and applicable regulations contained in 40 CFR Parts 260 through 264, 266, 268, 270, and 124 as specified in the permit and statutory requirements of RCRA, as amended by HSWA. Nothing in this permit shall preclude the Regional Administrator from reviewing and modifying the permit at any time during its term in accordance with 40 CFR §270.41.

This permit is based on the premise that information and reports submitted by the Permittee prior to issuance of this permit are accurate. Any inaccuracies found in this information or information submitted as required by this permit may be grounds for termination or modification of this permit in accordance with 40 CFR §270.41, §270.42, and §270.43 and potential enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

The authority to perform all actions necessary to issue, modify, enforce, or revoke this permit has been delegated by the Regional Administrator to the Associate Waste Management Division Director.

This permit is effective _____, and shall remain in effect for _____ years until _____, unless revoked and reissued, or terminated under 40 CFR §270.41 and §270.43 or continued in accordance with 40 CFR §270.51(a). All obligations for performance of HSWA provisions required under this permit are in effect until deemed complete by the Regional Administrator.

If any conditions of this permit are appealed in accordance with 40 CFR §124.19, the effective date of the conditions determined to be stayed in accordance with 40 CFR §124.16 shall be determined by final agency action as specified under 40 CFR §124.19.

Issued Date

James S. Kutzman
Associate Director
Office of RCRA & Federal Facilities
Waste Management Division

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PART I - STANDARD CONDITIONS

I.A. EFFECT OF PERMIT

Compliance with this RCRA permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which become effective by statute, are promulgated under 40 CFR Part 268 restricting placement of hazardous waste in or on the land or are promulgated under 40 CFR Part 264 of this chapter regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units, as specified in 40 CFR §270.4. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3008(a), 3008(h), 3004(v), 3008(c), 3007, 3013 or Section 7003 of RCRA, Sections 104, 106(a), 106(e), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., commonly known as CERCLA), or any other law providing for protection of public health or the environment.

I.B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§270.41, 270.42, and 270.43 except for the Corrective Action schedule of compliance which shall be modified in accordance with Condition II.I. of this permit. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

I.C. SEVERABILITY

The provisions of this permit are severable, as specified in 40 CFR §124.16 and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I.D. DUTIES AND REQUIREMENTS

I.D.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

I.D.2. Duty to Reapply

If the Permittee will continue an activity allowed or required by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least one hundred eighty (180) calendar days before this permit expires, unless permission for a later date has been granted by the Regional Administrator.

I.D.3. Obligation for Corrective Action

The Permittee is required to continue this permit for any period necessary to comply with the corrective action requirements of this permit.

I.D.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

I.D.5. Duty to Mitigate

In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases of hazardous waste or hazardous constituents to the environment, and shall carry out such measures as are reasonable to prevent significant adverse effects on human health or the environment.

I.D.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

I.D.7. Duty to Provide Information

The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

I.D.8. Inspection and Entry

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated, or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.D.9. Monitoring and Records

I.D.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative waste sample to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261, the EPA Region 4 Environmental Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP) (most recent version), or an equivalent method approved by the Regional Administrator. Procedures for sampling contaminated media must be those identified in the EPA Region 4 SOP or an equivalent method approved by the Regional Administrator. Laboratory methods must be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, or an equivalent method approved by the Regional Administrator.

I.D.9.b. The Permittee shall retain at the facility, as provided for under 40 CFR Part 264, or other appropriate location as approved by the Regional Administrator, records of all monitoring information required under the terms of this permit, including all calibration and maintenance records, records of all data used to prepare documents required by this permit, copies of all reports and records required by this permit, the certification required by 40 CFR §264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, certification or application, or until corrective action is completed, whichever date is later. As a generator of hazardous waste, the Permittee shall retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to 40 CFR Part 268 for at least five years from the date that the waste which is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal, or until corrective action is completed, whichever date is later. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

I.D.9.c. Records of monitoring information shall specify:

- i. The dates, exact place, and times of sampling, or measurements;
- ii. The individuals who performed the sampling or measurements;
- iii. The dates analyses were performed;
- iv. The individuals who performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses.

I.D.10. Reporting Planned Changes

The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions which impact any SWMUs, AOCs, or the areas contaminated by them, including voluntary corrective measures, to the SWMUs or AOCs referenced in Conditions II.A.1., II.A.3., II.A.4., and II.C. at the permitted facility as defined in 40 CFR §270.2.

I.D.11. Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this permit.

I.D.12. Transfer of Permit

This permit may be transferred to a new owner or operator only after notice to the Regional Administrator and only if it is modified or revoked and reissued pursuant to 40 CFR §270.40(b) or §270.41(b)(2) to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate Act. Before transferring ownership or operation of the facility during its operating life, or of a disposal facility during the post-closure care period, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270, HSWA and this permit.

I.D.13. Compliance Schedules

Written notification of compliance or noncompliance with any item identified in the compliance schedule of this permit shall be submitted according to each schedule date. If the Permittee does not notify the Regional Administrator within fourteen (14) calendar days of its compliance or noncompliance with the schedule, the Permittee shall be subject to an enforcement action. Submittal of a required item according to the schedule constitutes notification of compliance.

I.D.14. Twenty-four Hour Reporting

I.D.14.a. The Permittee shall report any noncompliance or any imminent or existing hazard from a release of hazardous waste or hazardous constituents which may endanger human health or the environment. Any such information shall be reported orally to the Regional Administrator within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include:

- i. Information concerning the release of any hazardous waste or hazardous constituents which may endanger public drinking water supplies.
- ii. Information concerning the release or discharge of any hazardous waste or hazardous constituents, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility.

I.D.14.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazard to the environment and human health outside the facility; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

I.D.14.c. A written report shall also be provided to the Regional Administrator within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances. The written report shall contain the information specified under Conditions I.D.14.a. and b.; a description of the noncompliance or imminent hazard and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance or imminent hazard has been corrected; and if not, the

anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance or imminent hazard.

I.D.15. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time written reports as required by this permit are submitted. The reports shall contain the information listed in Condition I.D.14. as appropriate.

I.D.16. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in any document(s) submitted to the Regional Administrator, the Permittee shall promptly submit such facts or information.

I.E. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Regional Administrator shall be signed and certified in accordance with 40 CFR §270.11.

I.F. CONFIDENTIAL INFORMATION

The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR §270.12.

I.G. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in RCRA and 40 CFR Parts 124, 260, 261, 264, and 270, unless this permit specifically provides otherwise. Where terms are not defined in the regulation, the permit, or EPA guidelines or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

I.G.1. "Action levels" for the purposes of this permit are health-based concentrations of hazardous constituents determined to be indicators for the protection of human health and/or the environment.

I.G.2. The term "area of concern" (AOC) for purposes of this permit includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Regional Administrator to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under Section 3005(c)(3) of the Resource Conservation and Recovery Act and 40 CFR §270.32(b)(2) in order to ensure adequate protection of human health and the environment.

I.G.3. A "Corrective Action Management Unit" (CAMU) for purposes of this permit, includes any area within a facility that is designated by the Regional Administrator under part 264 subpart S, for the purpose of implementing corrective action requirements under §264.101 and RCRA section 3008(h). A CAMU shall only be used for the management of remediation wastes pursuant to implementing such corrective action requirements at the facility.

I.G.4. "Corrective measures" for purposes of this permit, include all corrective action necessary to protect human health and the environment

for all releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in the unit, as required under 40 CFR §264.101. Corrective measures may address releases to air, soils, surface water or groundwater.

I.G.5. "Extent of contamination" for the purposes of this permit is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Regional Administrator.

I.G.6. "Facility" for purposes of this permit includes all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g. one or more landfills, surface impoundments, or combination of them). For the purposes of implementing corrective action under §264.101, a facility includes all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA.

I.G.7. A "hazardous constituent" for purposes of this permit are those substances listed in 40 CFR Part 261 Appendix VIII and Part 264 Appendix IX.

I.G.8. "Interim Measures" for purposes of this permit are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

I.G.9. "Land Disposal" for purposes of this permit and 40 CFR Part 268 means placement in or on the land except for a CAMU and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

I.G.10. "Landfill" for the purposes of this permit includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

I.G.11. A "release" for purposes of this permit includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents.

I.G.12. "Remediation waste" for the purposes of this permit includes all solid and hazardous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under §264.101 and RCRA section 3008(h). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing RCRA sections 3004(v) or 3008(h) for releases beyond the facility boundary.

I.G.13. "Solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but

does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

- I.G.14. A "solid waste management unit" (SWMU) for the purposes of this permit includes any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. RCRA regulated hazardous waste management units are also solid waste management units. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g. product or process spills).
- I.G.15. A "Temporary Unit" (TU) for the purposes of this permit includes any temporary tanks and/or container storage areas used solely for treatment or storage of hazardous remediation wastes during specific remediation activities. Designated by the Regional Administrator, such units must conform to specific standards, and may only be in operation for a period of time as specified in this permit.
- I.G.16. A "unit" for the purposes of this permit includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer station, or recycling unit.

PART II - CORRECTIVE ACTION

II.A. APPLICABILITY

The Conditions of this Part apply to:

- II.A.1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Appendix A-1, which require a RCRA Facility Investigation (RFI);
- II.A.2. The SWMUs and AOCs identified in Appendix A-2, which require no further investigation under this permit at this time;
- II.A.3. The SWMUs and AOCs identified in Appendix A-3, which require confirmatory sampling;
- II.A.4. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means; As used in this Part of the permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee either, (1) visually observes evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment;
- II.A.5. Contamination which has migrated beyond the facility boundary, if applicable. The Permittee shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Regional Administrator that, despite the Permittee's best efforts, as determined by the Regional Administrator, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site corrective action will be required.

II.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

- II.B.1. The Permittee shall notify the Regional Administrator in writing, within fifteen (15) calendar days of discovery, of any suspected new AOC as discovered under Condition II.A.4. The notification shall include, at a minimum, the location of the AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). The Regional Administrator may conduct, or require the Permittee to conduct, further assessment (i.e., Confirmatory Sampling) in order to determine the status of the suspected AOC. The Regional Administrator will notify the Permittee in writing of the final determination as to the status of the suspected AOC. If the Regional Administrator determines that further investigation of an AOC is required, the permit will be modified in accordance with 40 CFR §270.41.
- II.B.2. The Permittee shall notify the Regional Administrator in writing, within fifteen (15) calendar days of discovery, of any additional SWMU as discovered under Condition II.A.4.
- II.B.3. The Permittee shall prepare and submit to the Regional Administrator, within ninety (90) calendar days of notification, a SWMU Assessment Report (SAR) for each SWMU identified under Condition II.B.2. At a minimum, the SAR shall provide the following information:

- a. Location of unit(s) on a topographic map of appropriate scale such as required under 40 CFR §270.14 (b) (19).
- b. Designation of type and function of unit(s).
- c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
- d. Dates that the unit(s) was operated.
- e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.
- f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data).

II.B.4. Based on the results of the SAR, the Regional Administrator shall determine the need for further investigations at the SWMUs covered in the SAR. If the Regional Administrator determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.E.1.b. or II.D.1.

II.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES FROM SWMUs or AOCs

II.C.1. The Permittee shall notify the Regional Administrator in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within fifteen (15) calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Condition II.A.2. or SWMU or AOCs identified in Condition II.A.4. for which further investigation under Condition II.B.4. was not required.

II.C.2. If the Regional Administrator determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.E.1.b.

II.D. CONFIRMATORY SAMPLING (CS)

II.D.1. The Permittee shall prepare and submit to the Regional Administrator, within forty five (45) calendar days of the effective date of this permit, for SWMUs or AOCs identified in Condition II.A.3. and Appendix A-3 or within forty five (45) calendar days of notification by the Regional Administrator for a newly identified SWMU identified in Condition II.B.4., a Confirmatory Sampling (CS) Work Plan to determine any release from these SWMUs or AOCs. The CS Work Plan shall include schedules of implementation and completion of specific actions necessary to determine whether or not a release has occurred. It should also address applicable requirements and affected media. In order to partly or wholly satisfy the CS requirement, the use of data obtained outside of the permit structure may be submitted with the work plan for the Regional Administrator's review and approval. Within forty-five (45) calendar days of notification by the Regional Administrator, the Permittee shall prepare and submit to the Regional Administrator a CS Work Plan to determine if any release has occurred from suspected AOCs per Condition II.B.1. or newly identified SWMUs per Condition II.B.4.

II.D.2. The CS Work Plan must be approved by the Regional Administrator, in writing, prior to implementation. The Regional Administrator shall specify the start date of the CS Work Plan schedule in the letter approving the CS Work Plan. If the Regional Administrator disapproves

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US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

PS Form 3800, April 1995

Sent to <i>Universal Waste Transit</i>	
Street & Number <i>7202 E. Eight Ave</i>	
Post Office, State, & ZIP Code <i>TAMPA, FL 33619</i>	
Postage	\$
Additional Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date <i>5-17-96</i>	

Intent to Issue

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

*Universal Waste Transit
7202 E. Eight Ave
TAMPA, FL 33619*

Attn: Terry M. Murr

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

[Signature] Blair Nolan

4a. Article Number

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4b. Service Type

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery

5-20-96

8. Addressee's Address (Only if requested and fee is paid)

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

State of Florida
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318

BY

Environmental Protection
SOUTHWEST DISTRICT

Roger EVANS
HAZARDOUS WASTE

MAY 21 1996

RECEIVED



the CS Work Plan, the Regional Administrator shall either (1) notify the Permittee in writing of the CS Work Plan's deficiencies and specify a due date for submission of a revised CS Work Plan, (2) revise the CS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CS Work Plan and notify the Permittee of the conditions.

II.D.3. The Permittee shall implement the confirmatory sampling in accordance with the approved CS Work Plan.

II.D.4. The Permittee shall prepare and submit to the Regional Administrator in accordance with the schedule in the approved CS Work Plan, a Confirmatory Sampling (CS) Report identifying those SWMUs or AOCs listed in Condition II.A.3. that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and a summary and analysis of the data, that supports the above determination.

II.D.5. Based on the results of the CS Report, the Regional Administrator shall determine the need for further investigations at the SWMUs or AOCs covered in the CS Report. If the Regional Administrator determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition II.E.1.b. The Regional Administrator will notify the permittee of any no further action decision.

II.E. RCRA FACILITY INVESTIGATION (RFI)

II.E.1. RFI Work Plan(s)

II.E.1.a. The Permittee shall prepare and submit to the Regional Administrator, within ninety (90) calendar days of the effective date of this permit, a RCRA Facility Investigation (RFI) Work Plan(s) for those units identified in Condition II.A.1. This Work Plan shall be developed to meet the requirements of Condition II.E.1.c.

II.E.1.b. The Permittee shall prepare and submit to the Regional Administrator, within ninety (90) calendar days of notification by the Regional Administrator, an RFI Work Plan for those units identified under Condition II.B.4., Condition II.C.2., or Condition II.D.5. The RFI Work Plan(s) shall be developed to meet the requirements of Condition II.E.1.c.

II.E.1.c. The RFI Work Plan(s) shall meet the requirements of Appendix B. The RFI Work Plan(s) shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of contamination and the potential pathways of contaminant releases to the air, soil, surface water, and groundwater. The Permittee must provide sufficient justification and associated documentation that a release is not probable or has already been characterized if a unit or a media/pathway associated with a unit (groundwater, surface water, soil, subsurface gas, or air) is not included in the RFI Work Plan(s). Such deletions of a unit, media or pathway from the RFI(s) are subject to the approval of the Regional Administrator. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix B. Such omissions or deviations are subject to the approval of the Regional Administrator. In addition, the scope of the RFI Work Plan(s) shall include all investigations necessary to ensure compliance with 40 CFR §264.101(c).

II.E.1.d. The RFI Work Plan(s) must be approved by the Regional Administrator, in writing, prior to implementation. The Regional Administrator shall specify the start date of the RFI Work Plan schedule in the letter approving the RFI Work Plan(s). If the Regional Administrator disapproves the RFI Work Plan(s), the Regional Administrator shall either (1) notify the Permittee in writing of the RFI Work Plan's deficiencies

and specify a due date for submission of a revised RFI Work Plan, (2) revise the RFI Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved RFI Work Plan, or (3) conditionally approve the RFI Work Plan and notify the Permittee of the conditions.

II.E.2. RFI Implementation

The Permittee shall implement the RFI(s) in accordance with the approved RFI Work Plan(s) and Appendix B. The Permittee shall notify the Regional Administrator within twenty (20) days prior to any sampling activity.

II.E.3. RFI Reports

II.E.3.a. If the time required to conduct the RFI(s) is greater than one hundred eighty (180) calendar days, the Permittee shall provide the Regional Administrator with quarterly RFI Progress Reports (90 day intervals) beginning ninety (90) calendar days from the start date specified by the Regional Administrator in the RFI Work Plan approval letter. The Progress Reports shall contain the following information at a minimum:

- i. A description of the portion of the RFI completed;
- ii. Summaries of findings;
- iii. Summaries of any deviations from the approved RFI Work Plan during the reporting period;
- iv. Summaries of any significant contacts with local community public interest groups or State government;
- v. Summaries of any problems or potential problems encountered during the reporting period;
- vi. Actions taken to rectify problems;
- vii. Changes in relevant personnel;
- viii. Projected work for the next reporting period; and
- ix. Copies of daily reports, inspection reports, data, etc.

II.E.3.b. The Permittee shall prepare and submit to the Regional Administrator Draft and Final RCRA Facility Investigation Report(s) for the investigations conducted pursuant to the RFI Work Plan(s) submitted under Condition II.E.1. The Draft RFI Report(s) shall be submitted to the Regional Administrator for review in accordance with the schedule in the approved RFI Work Plan(s). The Final RFI Report(s) shall be submitted to the Regional Administrator within thirty (30) calendar days of receipt of the Regional Administrator's final comments on the Draft RFI Report. The RFI Report(s) shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination at the facility, including sources and migration pathways, identify all hazardous constituents present in all media, and describe actual or potential receptors. The RFI Report(s) shall also describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area. If the Draft RFI Report is a summary of the initial phase investigatory work, the report shall include a work plan for the final phase investigatory actions required based on the initial findings. Approval of the final phase work plan shall be carried out in accordance with Condition II.E.1.d. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study, if

necessary.

II.E.3.c. The Permittee shall prepare and submit to the Regional Administrator, along with the Draft and Final RFI Report(s), action levels for each of the hazardous constituents reported in Condition II.E.3.b. Action levels shall be calculated as specified in Appendix F of this permit.

II.E.3.d. The Regional Administrator will review the RFI Report(s), including the action levels described in Condition II.E.3.c. The Regional Administrator shall notify the Permittee of the need for further investigative action if necessary and, if appropriate at this moment of the investigation, inform the Permittee, if not already notified, of the need for a Corrective Measures Study to meet the requirements of II.G and 40 CFR §264.101. The Regional Administrator will notify the permittee of any no further action decision. Any further investigative action required by the Regional Administrator shall be prepared and submitted in accordance with a schedule specified by the Regional Administrator and approved in accordance with Condition II.E.1.d.

II.F. INTERIM MEASURES (IM)

II.F.1. IM Work Plan

II.F.1.a. Upon notification by the Regional Administrator, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC which the Regional Administrator determines is necessary. IM are necessary in order to minimize or prevent the further migration of contaminants thereby limiting current and future potential for human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within thirty (30) calendar days of such notification and shall include the elements listed in II.F.1.b. Such interim measures may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IM by submitting an IM Work Plan for approval and reporting in accordance with the requirements under Condition II.F.

II.F.1.b. The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.

II.F.1.c. The IM Work Plan must be approved by the Regional Administrator, in writing, prior to implementation. The Regional Administrator shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan. If the Regional Administrator disapproves the IM Work Plan, the Regional Administrator shall either (1) notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan, (2) revise the IM Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Work Plan, or (3) conditionally approve the IM Work Plan and notify the Permittee of the conditions.

II.F.2. IM Implementation

II.F.2.a. The Permittee shall implement the interim measures in accordance with the approved IM Work Plan.

II.F.2.b. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned changes, reductions or additions to the IM Work Plan.

II.F.2.c. Final approval of corrective action required under 40 CFR §264.101 which

is achieved through interim measures shall be in accordance with 40 CFR §270.41 and Condition II.H. as a permit modification.

II.F.3. IM Reports

II.F.3.a. If the time required for completion of interim measures is greater than one year, the Permittee shall provide the Regional Administrator with progress reports at intervals specified in the approved Work Plan. The Progress Reports shall contain the following information at a minimum:

- i. A description of the portion of the interim measures completed;
- ii. Summaries of findings;
- iii. Summaries of any deviations from the IM Work Plan during the reporting period;
- iv. Summaries of any problems or potential problems encountered during the reporting period; and
- v. Projected work for the next reporting period.

II.F.3.b. The Permittee shall prepare and submit to the Regional Administrator, within ninety (90) calendar days of completion of interim measures conducted under Condition II.F., an Interim Measures (IM) Report. The IM Report shall contain the following information at a minimum:

- i. A description of interim measures implemented;
- ii. Summaries of results;
- iii. Summaries of all problems encountered;
- iv. Summaries of accomplishments and/or effectiveness of interim measures; and
- v. Copies of all relevant laboratory/monitoring data, etc. in accordance with Condition I.D.9.

II.G. CORRECTIVE MEASURES STUDY

II.G.1. Corrective Measures Study (CMS) Work Plan

II.G.1.a. The Permittee shall prepare and submit a CMS Work Plan for those units requiring a CMS within ninety (90) calendar days of notification by the Regional Administrator that a CMS is required. This CMS Work Plan shall be developed to meet the requirements of Condition II.G.1.b. The Permittee may seek approval from the Regional Administrator for concurrent RFI/CMS. The CMS may be performed concurrent with the RFI process if the Regional Administrator determines that sufficient investigative details are available to allow concurrent action.

II.G.1.b. The CMS Work Plan shall meet the requirements of Appendix C at a minimum. The CMS Work Plan shall include schedules of implementation and completion of specific actions necessary to complete a CMS. The Permittee must provide sufficient justification and/or documentation for any unit deleted from the CMS Work Plan. Such deletion of a unit is subject to the approval of the Regional Administrator. The CMS shall be conducted in accordance with the approved CMS Work Plan. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix C. Such omissions or deviations are subject to the approval of the Regional Administrator. The scope of the CMS Work Plan shall include all investigations necessary to ensure compliance with 3005(c)(3), 40 CFR §264.101, §264.552, and

§270.32(b)(2). The Permittee shall implement corrective actions beyond the facility boundary, as set forth in Condition II.A.5.

- II.G.1.c. The Regional Administrator shall either approve or disapprove, in writing, the CMS Work Plan. If the Regional Administrator disapproves the CMS Work Plan, the Regional Administrator shall either (1) notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan, (2) revise the CMS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CMS Work Plan and notify the Permittee of the conditions. This modified CMS Work Plan becomes the approved CMS Work Plan.

II.G.2. Corrective Measures Study Implementation

The Permittee shall begin to implement the Corrective Measures Study according to the schedules specified in the CMS Work Plan, no later than fifteen (15) calendar days after the Permittee has received written approval from the Regional Administrator for the CMS Work Plan. Pursuant to Permit Condition II.G.1.b. the CMS shall be conducted in accordance with the approved CMS Work Plan.

II.G.3. CMS Report

- II.G.3.a. The Permittee shall prepare and submit to the Regional Administrator a draft and final CMS Report for the study conducted pursuant to the approved CMS Work Plan. The draft CMS Report shall be submitted to the Regional Administrator in accordance with the schedule in the approved CMS Work Plan. The final CMS Report shall be submitted to the Regional Administrator within thirty (30) days of receipt of the Regional Administrator's final comments on the draft CMS Report. The CMS Report shall summarize any bench-scale or pilot tests conducted. The CMS Report must include an evaluation of each remedial alternative. If a remedial alternative requires the use of a CAMU, the CMS report shall include all information necessary to establish and implement the CAMU. The CMS Report shall present all information gathered under the approved CMS Work Plan. The CMS Final Report must contain adequate information to support the Regional Administrator's decision on the recommended remedy, described under Permit Condition II.H.
- II.G.3.b. If the Regional Administrator determines that the CMS Final Report does not fully satisfy the information requirements specified under Permit Condition II.G.3.a., the Regional Administrator may disapprove the CMS Final Report. If the Regional Administrator disapproves the CMS Final Report, the Regional Administrator shall notify the Permittee in writing of deficiencies in the CMS Final Report and specify a due date for submittal of a revised CMS Final Report. The Regional Administrator will notify the Permittee of any no further action decision.
- II.G.3.c. As specified under Permit Condition II.G.3.b., based on preliminary results and the CMS Final Report, the Regional Administrator may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

II.H. REMEDY APPROVAL AND PERMIT MODIFICATION

- II.H.1. A remedy shall be selected from the remedial alternatives evaluated in the CMS. It will be based at a minimum on protection of human health and the environment, as per specific site conditions, existing regulations, and guidance. The selected remedy may include any interim measures implemented to date.
- II.H.2. Pursuant to 40 CFR §270.41, a permit modification will be initiated by the Regional Administrator after recommendation of a remedy under Condition II.H.1. This modification will serve to incorporate a final remedy, including a CAMU if necessary, into this permit.

II.H.3. Within one hundred and twenty (120) calendar days after this Permit has been modified for remedy selection, the Permittee shall demonstrate financial assurance for completing the approved remedy.

II.I. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE

II.I.1. If at any time the Regional Administrator determines that modification of the Corrective Action Schedule of Compliance is necessary, the Regional Administrator may initiate a modification to the Schedule of Compliance (Appendix D).

II.I.2. Modifications that are initiated and finalized by the Regional Administrator will be in accordance with the applicable provisions of 40 CFR Part 270. The Permittee may also request a permit modification in accordance with 40 CFR Part 270 to change the Schedule of Compliance.

II.J. WORK PLAN AND REPORT REQUIREMENTS

II.J.1. All work plans and schedules shall be subject to approval by the Regional Administrator prior to implementation to assure that such work plans and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as specified by the Regional Administrator. Upon approval the Permittee shall implement all work plans and schedules as written.

II.J.2. All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Regional Administrator based on the Permittee's demonstration that sufficient justification for the extension exists.

II.J.3. If the Permittee at any time determines that the SAR information required under Condition II.B., the CS Work Plan under Condition II.D., or RFI Work Plan(s) required under Condition II.E. no longer satisfy the requirements of 40 CFR §264.101 or this permit for prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units and/or areas of concern, the Permittee shall submit an amended Work Plan(s) to the Regional Administrator within ninety (90) calendar days of such determination.

II.J.4. All reports shall be signed and certified in accordance with 40 CFR §270.11.

II.J.5. Three (3) copies of all reports and work plans shall be provided by the Permittee to the Regional Administrator in care of the RCRA Branch Chief at the following address:

Chief, RCRA Branch
Waste Management Division
Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

II.K. APPROVAL/DISAPPROVAL OF SUBMITTALS

II.K.1. The Regional Administrator will review the work plans, reports, schedules, and other documents ("submittals") which require the Regional Administrator's approval in accordance with the conditions of this permit. The Regional Administrator will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. Condition II.L. shall apply only to submittals that have been disapproved and revised by the Regional Administrator, or that have been disapproved by the Regional Administrator,

then revised and resubmitted by the Permittee, and again disapproved by the Regional Administrator.

II.L. DISPUTE RESOLUTION

Notwithstanding any other provision in this permit, in the event the Permittee disagrees, in whole or in part, with the Regional Administrator's revision of a submittal or disapproval of any revised submittal required by the permit, the following may, at the Permittee's discretion apply:

- II.L.1.a. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Regional Administrator in writing within thirty (30) days of receipt of the Regional Administrator's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth the specific matters in dispute, the position the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and any matters considered necessary for the Regional Administrator's determination.
- II.L.1.b. The Regional Administrator and the Permittee shall have an additional thirty (30) days from EPA's receipt of the notification provided for in Condition II.L.1.a. to meet or confer to resolve any disagreement.
- II.L.1.c. In the event agreement is reached, the Permittee shall submit the revised submittal and implement the same in accordance with and within the time frame specified in such agreement.
- II.L.1.d. If agreement is not reached within the thirty (30) day period, the Regional Administrator will notify the Permittee in writing of his/her decision on the dispute, and the Permittee shall comply with the terms and conditions of the Regional Administrator's decision in the dispute. For the purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Waste Management Division Director.
- II.L.1.e. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that the Regional Administrator determines are not affected by the dispute.

PART III - LAND DISPOSAL RESTRICTIONS

III.A. GENERAL RESTRICTIONS

- III.A.1. 40 CFR Part 268 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage or disposal unit. The Permittee shall maintain compliance with the requirements of 40 CFR Part 268. Where the Permittee has applied for an extension, waiver or variance under 40 CFR Part 268, the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such application.

III.B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS

- III.B.1. A restricted waste identified in 40 CFR Part 268 Subpart C may not be placed in a land disposal unit without further treatment unless the requirements of 40 CFR Part 268 Subparts C and/or D are met.
- III.B.2. The storage of hazardous wastes restricted from land disposal under 40 CFR Part 268 is prohibited unless the requirements of 40 CFR Part 268 Subpart E are met.

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APPENDICES

Universal Waste & Transit
Tampa, Florida

APPENDIX A

SOLID WASTE MANAGEMENT UNIT SUMMARY

A.1. List of solid waste management units (SWMUs) and areas of concern (AOCs) requiring a RCRA Facility Investigation (RFI):	
SWMU Number	SWMU Name
There are no units identified at this time which require a RCRA Facility Investigation.	

A.2. List of solid waste management units (SWMUs) and areas of concern (AOCs) requiring no further action at this time:

SWMU Number	SWMU Name
*1	Drum Storage Area
*2	Loading/Unloading Area
3	Pre-Treatment Unit
*4	Filter Press
5	Municipal Waste Dumpster
* Unit Regulated by State Permit	

A.3. List of solid waste management units (SWMUs) and areas of concern (AOCs) requiring Confirmatory Sampling:

SWMU Number	SWMU Name
3	Retention Pond

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APPENDIX B

RCRA Facility Investigation (RFI)
Work Plan Outline

APPENDIX B

RCRA FACILITY INVESTIGATION (RFI) WORK PLAN OUTLINE

I. RFI WORK PLAN REQUIREMENTS

The Permittee shall prepare a RCRA Facility Investigation (RFI) Work Plan that meets the requirements of Part II of this appendix and the RFI Guidance, EPA-530/SW-89-031. This Work Plan shall also include the development of the following plans, which shall be prepared concurrently:

A. Project Management Plan

Permittee shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules and personnel. The Project Management Plan will also include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RCRA Facility Investigation.

B. Sampling and Analysis Plan(s)

The Permittee shall prepare a plan to document all monitoring procedures: field sampling, sampling procedures and sample analysis performed during the investigation to characterize the environmental setting, source, and releases of hazardous constituents, so as to ensure that all information and data are valid and properly documented. The Sampling Strategy and Procedures shall be in accordance with EPA Region 4 Environmental Compliance Branch's Standard Operating Procedure and Quality Assurance Manual (SOP) (most recent version). Any deviations from this reference must be requested by the applicant and approved by EPA. The Sampling and Analysis Plan must specifically discuss the following unless the SOP procedures are specifically referenced.

1. Sampling Strategy

- a. Selecting appropriate sampling locations, depths, etc.;
- b. Obtaining all necessary ancillary data;
- c. Determining conditions under which sampling should be conducted;
- d. Determining which media are to be sampled (e.g., groundwater, air, soil, sediment, subsurface gas);
- e. Determining which parameters are to be measured and where;

- f. Selecting the frequency of sampling and length of sampling period;
- g. Selecting the types of samples (e.g., composites vs. grabs) and number of samples to be collected.

2. Sampling Procedures

- a. Documenting field sampling operations and procedures, including;
 - i) Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and absorbing reagents);
 - ii) Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
 - iii) Documentation of specific sample preservation method;
 - iv) Calibration of field instruments;
 - v) Submission of field-biased blanks, where appropriate;
 - vi) Potential interferences present at the facility;
 - vii) Construction materials and techniques, associated with monitoring wells and piezometers;
 - viii) Field equipment listing and sampling containers;
 - ix) Sampling order; and
 - x) Decontamination procedures.
- b. Selecting appropriate sample containers;
- c. Sampling preservation; and
- d. Chain-of-custody, including:
 - i) Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and

- ii) Pre-prepared sample labels containing all information necessary for effective sample tracking.

3. Sample Analysis

Sample analysis shall be conducted in accordance with SW-846: "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods" (most recent version). The sample analysis section of the Sampling and Analysis Plan shall specify the following:

- a. Chain-of-custody procedures, including:
 - i) Identification of a responsible party to act as sampling custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
 - ii) Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and
 - iii) Specification of laboratory sample custody procedures for sample handling, storage, and dispersement for analysis.
- b. Sample storage;
- c. Sample preparation methods;
- d. Analytical Procedures, including:
 - i) Scope and application of the procedure;
 - ii) Sample matrix;
 - iii) Potential interferences;
 - iv) Precision and accuracy of the methodology; and
 - v) Method detection limits.
- e. Calibration procedures and frequency;
- f. Data reduction, validation and reporting;
- g. Internal quality control checks, laboratory performance and systems audits and frequency, including:

- i) Method blank(s);
 - ii) Laboratory control sample(s);
 - iii) Calibration check sample(s);
 - iv) Replicate sample(s);
 - v) Matrix-spiked sample(s);
 - vi) "Blind" quality control sample(s);
 - vii) Control charts;
 - viii) Surrogate samples;
 - ix) Zero and span gases; and
 - x) Reagent quality control checks.
- h. External quality control checks by EPA, including:
- i) Spikes and blanks at sampling events for which EPA or its technical representative provides oversight; and
 - ii) The equivalent of a CLP data package for samples split with EPA or for which EPA specifically requests the package.
- i. Preventive maintenance procedures and schedules;
- j. Corrective action (for laboratory problems); and
- k. Turnaround time.

C. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;
- e. Property or component measures; and
- f. Result of analysis (e.g. concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium, or for each constituent monitored;
- c. Data reduction for statistical analysis, as appropriate;
- d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data

3. Graphical Displays

The following data shall be presented in graphical formats (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transits, three dimensional graphs, etc.):

- a. Display sampling location and sampling grid;
- b. Indicate boundaries of sampling area, and area where more data are required;
- c. Display geographical extent of contamination;
- d. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and
- e. Indicate features affecting inter-media transport and show potential receptors.

II. RCRA Facility Investigation (RFI) Requirements

RCRA Facility Investigation:

The Permittee shall conduct those investigations necessary to: characterize the facility (Environmental Setting); define the source (Source Characterization); define the degree and extent of release of hazardous constituents (Contamination Characterization); and identify actual or potential receptors.

The investigations should result in data of adequate technical content and quality to support the development and evaluation of the corrective action plan if necessary. The information contained in previously developed documents such as a RCRA Part B permit application and/or RCRA Section 3019 Exposure Information Report may be referenced as appropriate, but must be summarized in both the RFI Work Plan and RFI Report.

All sampling and analyses shall be conducted in accordance with the Sampling and Analysis Plan. All sampling locations shall be documented in a log and identified on a detailed site map.

A. Environmental Setting

The Permittee shall collect information to supplement and/or verify Part B information on the environmental setting at the facility. The Permittee shall characterize the following as they relate to identified sources, pathways and areas of releases of hazardous constituents from Solid Waste Management Units.

1. Hydrogeology

The Permittee shall conduct a program to evaluate hydrogeologic conditions at the facility. This program shall provide the following information:

- a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground-water flow beneath the facility, including:
 - i) Regional and facility specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
 - ii) Structural geology: description of local and regional structural features (e. g., folding, faulting, tilting, jointing, etc.);
 - iii) Depositional history;

- iv) Regional and facility specific ground-water flow patterns; and
 - v) Identification and characterization of areas and amounts of recharge and discharge.
- b. An analysis of any topographic features that might influence the ground-water flow system.
- c. Based on field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility (i. e., the aquifers and any intervening saturated and unsaturated units), including:
 - i) Hydraulic conductivity and porosity (total and effective);
 - ii) Lithology, grain size, sorting, degree of cementation;
 - iii) An interpretation of hydraulic interconnections between saturated zones; and
 - iv) The attenuation capacity and mechanisms of the natural earth materials (e. g., ion exchange capacity, organic carbon content, mineral content etc.).
- d. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, a representative description of water level or fluid pressure monitoring including:
 - i) Water-level contour and/or potentiometric maps;
 - ii) Hydrologic cross sections showing vertical gradients;
 - iii) The flow system, including the vertical and horizontal components of flow; and
 - iv) Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.
- e. A description of man-made influences that may affect the hydrology of the site, identifying:

- i) Local water-supply and production wells with an approximate schedule of pumping; and
- ii) Man-made hydraulic structures (pipelines, french drains, ditches, etc.).

2. Soils

The Permittee shall conduct a program to characterize the soil and rock units above the water table in the vicinity of contaminant release(s). Such characterization may include, but not be limited to, the following types of information as appropriate:

- a. Surface soil distribution;
- b. Soil profile, including ASTM classification of soils;
- c. Transects of soil stratigraphy;
- d. Hydraulic conductivity (saturated and unsaturated);
- e. Relative permeability;
- f. Bulk density;
- g. Porosity;
- h. Soil sorption capacity;
- i. Cation exchange capacity (CEC);
- j. Soil organic content;
- k. Soil pH;
- l. Particle size distribution;
- m. Depth of water table;
- n. Moisture content;
- o. Effect of stratification on unsaturated flow;
- p. Infiltration;
- q. Evapotranspiration;
- r. Storage capacity;
- s. Vertical flow rate; and
- t. Mineral content.

3. Surface Water and Sediment

The Permittee shall conduct a program to characterize the surface water bodies in the vicinity of the facility. Such characterization may include, but not be limited to, the following activities and information:

- a. Description of the temporal and permanent surface water bodies including:
 - i) For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;

- ii) For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
 - iii) For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, flooding tendencies (i. e., 100 year event), discharge point(s), and general contents.
 - iv) Drainage patterns; and
 - v) Evapotranspiration.
- b. Description of the chemistry of the natural surface water and sediments. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients, chemical oxygen demand, total organic carbon, specific contaminant concentrations, etc.
- c. Description of sediment characteristics including:
- i) Deposition area;
 - ii) Thickness profile; and
 - iii) Physical and chemical parameters (e. g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.)

4. Air

The Permittee shall provide information characterizing the climate in the vicinity of the facility. Such information may include, but not be limited to:

- a. A description of the following parameters:
- i) Annual and monthly rainfall averages;
 - ii) Monthly temperature averages and extremes;
 - iii) Wind speed and direction;
 - iv) Relative humidity/dew point;
 - v) Atmospheric pressure;
 - vi) Evaporation data;

- vii) Development of inversions; and
 - viii) Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence. (i. e. Hurricanes)
- b. A description of topographic and man-made features which affect air flow and emission patterns, including:
- i) Ridges, hills or mountain areas;
 - ii) Canyons or valleys;
 - iii) Surface water bodies (e. g. rivers, lakes, bays, etc.); and
 - iv) Buildings.

B. Source Characterization

For those sources from which releases of hazardous constituents have been detected, the Permittee shall collect analytical data to completely characterize the wastes and the areas where wastes have been placed, to the degree that is possible without undue safety risks, including: type, quantity; physical form; disposition (containment or nature of deposits); and facility characteristics affecting release (e. g., facility security, and engineering barriers). This shall include quantification of the following specific characteristics, at each source area:

1. Unit/Disposal Area Characteristics:

- a. Location of unit/disposal area;
- b. Type of unit/disposal area;
- c. Design features;
- d. Operating practices (past and present)
- e. Period of operation;
- f. Age of unit/disposal area;
- g. General physical conditions; and
- h. Method used to close the unit/disposal area.

2. Waste Characteristics:

- a. Type of wastes placed in the unit;
 - i) Hazardous classification (e. g., flammable, reactive, corrosive, oxidizing or reducing agent);
 - ii) Quantity; and

- iii) Chemical composition.
- b. Physical and chemical characteristics such as;
 - i) Physical form (solid, liquid, gas);
 - ii) Physical description (e. g., powder, oily sludge);
 - iii) Temperature;
 - iv) pH;
 - v) General chemical class (e. g., acid, base, solvent);
 - vi) Molecular weight;
 - vii) Density;
 - viii) Boiling point;
 - ix) Viscosity;
 - x) Solubility in water;
 - xi) Cohesiveness of the waste; and
 - xii) Vapor pressure.
- c. Migration and dispersal characteristics of the waste such as:
 - i) Sorption capability;
 - ii) Biodegradability, bioconcentration, biotransformation;
 - iii) Photodegradation rates;
 - iv) Hydrolysis rates; and
 - v) Chemical transformations.

The Permittee shall document the procedures used in making the above determinations.

C. Characterization of Releases of Hazardous Constituents

The Permittee shall collect analytical data on groundwater, soils, surface water, sediment, and subsurface gas contamination in the

vicinity of the facility in accordance with the sampling and analysis plan as required above. These data shall be sufficient to define the extent, origin, direction, and rate of movement of contamination. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. The Permittee shall address the following types of contamination at the facility:

1. Groundwater Contamination

The Permittee shall conduct a groundwater investigation to characterize any plumes of contamination detected at the facility. This investigation shall at a minimum provide the following information:

- a. A description of the horizontal and vertical extent of any plume(s) of hazardous constituents originating from within the facility;
- b. The horizontal and vertical direction of contamination movement;
- c. The velocity of contaminant movement;
- d. The horizontal and vertical concentration profiles of hazardous constituents in the plume(s);
- e. An evaluation of factors influencing the plume movement; and
- f. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations (e. g., well design, well construction, geophysics, modeling, etc.).

2. Soil Contamination

The Permittee shall conduct an investigation to characterize the contamination of the soil and rock units above the saturated zone in the vicinity of any contaminant release. The investigation may include the following information:

- a. A description of the vertical and horizontal extent of contamination;
- b. A description of appropriate contaminant and soil chemical properties within the contaminant source area and plume. This may include contaminant solubility,

speciation, absorption, leachability, exchange capacity, biodegradability, hydrolysis photolysis, oxidation and other factors that might affect contaminant migration and transformation;

- c. Specific contaminant concentrations;
- d. The velocity and direction of contaminant movement; and
- e. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations.

3. Surface Water and Sediment Contamination

The Permittee shall conduct a surface water investigation to characterize contamination in surface water bodies resulting from releases of hazardous constituents at the facility. The investigation may include, but not be limited to, the following information:

- a. A description of the horizontal and vertical extent of any plume(s) originating from the facility, and the extent of contamination in underlying sediments;
- b. The horizontal and vertical direction of contaminant movement;
- c. The contaminant velocity;
- d. An evaluation of the physical, biological and chemical factors influencing contaminant movement;
- e. An extrapolation of future contaminant, movement; and
- f. A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, specific contaminant concentrations, etc.

4. Air Contamination

The Permittee shall conduct an investigation to characterize gaseous releases of hazardous constituents into the atmosphere or any structures or buildings. This investigation may provide the following information:

- a. A description of the horizontal and vertical direction and velocity of contaminant movement;

- b. The rate and amount of the release; and
- c. The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

D. Potential Receptors

The Permittee shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analysis of biological samples and/or data on observable effects in ecosystems may also be obtained as appropriate. The following characteristics shall be identified:

- 1. Current local uses and planned future uses of groundwater:
 - a. Type of use (e. g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and
 - b. Location of ground water users, to include withdrawal and discharge wells, within one mile of the impacted area.

The above information should also indicate the aquifer or hydrogeologic unit used and/or impacted for each item.

- 2. Current local uses and planned future uses of surface waters directly impacted by the facility:
 - a. Domestic and municipal (e. g., potable and lawn/gardening watering);
 - b. Recreational (e. g. swimming, fishing);
 - c. Agricultural;
 - d. Industrial; and
 - e. Environmental (e. g., fish and wildlife propagation).
- 3. Human use of or access to the facility and adjacent lands, including but not limited to:
 - a. Recreation;
 - b. Hunting;

- c. Residential;
 - d. Commercial; and
 - e. Relationship between population locations and prevailing wind direction.
-
- 4. A general description of the biota in surface water bodies on, adjacent to, or affected by the facility.
 - 5. A general description of the ecology within the area adjacent to the facility.
 - 6. A general demographic profile of the people who use have access to the facility and adjacent land, including, but not limited to: age; sex; and sensitive subgroups.
 - 7. A description of any known or documented endangered or threatened species near the facility.

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APPENDIX C

Corrective Measures Study (CMS)
Outline

APPENDIX C

CORRECTIVE MEASURE STUDY (CMS) OUTLINE

The purpose of the CMS portion of the RCRA corrective action process is to identify and evaluate potential remedial alternatives for the releases of hazardous constituents that have been identified at the facility through the RFI or other investigations to need further evaluation. The scope and requirements of the CMS are balanced with the expeditious initiation of remedies and rapid restoration of contaminated media. The scope and requirements of the CMS should be focused to fit the complexity of the site-specific situation. It is anticipated that Permittee's with sites with complex environmental problems may need to evaluate a number of technologies and corrective measure alternatives. For other facilities, however, the evaluation of a single corrective measure alternative may be adequate. Therefore, a streamlined or focused approach to the CMS may be initiated. Information gathered during any stabilizations or interim measures will be used to augment the CMS and in cases where corrective action goals are met, may be a substitute for the final CMS.

Regardless of whether a streamlined/focused or a detailed CMS is required, a CMS Work Plan and CMS Report are generally required elements. The requirements for a full, detailed CMS are listed below. The Agency has the flexibility not to require sections of the plan and/or report, where site-specific situations indicate that all requirements are not necessary. Additionally, the Agency may require additional studies besides these discussed in order to support the CMS.

I. Corrective Measures Study (CMS) Work Plan

A. Elements of the CMS Work Plan

The Corrective Measures Study (CMS) Work Plan shall include at a minimum the following elements:

1. A site-specific description of the overall purpose of the CMS;
2. A description of the corrective measure objectives, including proposed target media cleanup standards (e.g., promulgated federal and state standards) and preliminary points of compliance or a description of how a risk assessment will be performed (e.g., guidance documents);
3. A description of the specific corrective measure technologies and/or corrective measure alternatives which will be studied;
4. A description of the general approach to investigating and evaluating potential corrective measures;

5. A detailed description of any proposed pilot, laboratory and/or bench scale studies;
6. A proposed outline for the CMS Report including a description of how information will be presented;
7. A description of overall project management including overall approach, levels of authority (include organization chart), lines of communication, project schedules, budget and personnel. Include a description of qualifications for personnel directing or performing the work;
8. A project schedule that specifies all significant steps in the process and when key documents (e.g., CMS Progress Reports, draft CMS Report) are to be submitted to the Agency;
9. A detailed Public Involvement Plan.

II. Corrective Measures Study (CMS) Report

The detail of a CMS may vary based upon the complexity of the site, on-going Interim Measures, etc. However, the CMS Report may include the following elements:

A. Introduction/Purpose

The Permittee shall describe the purpose of the CMS Report and provide a summary description of the project.

B. Description of Current Situation

The Permittee shall submit a summary and an update to the information describing the current situation at the facility and the known nature and extent of the contamination as documented by the RCRA Facility Investigation (RFI) Report. This discussion should concentrate on those issues which could significantly affect the evaluation and selection of the corrective measures alternative(s). The Permittee shall provide an update to information presented in the RFI regarding previous response activities and interim measures which have or are being implemented at the facility. The Permittee shall also make a facility-specific statement of the purpose for the response, based on the results of the RFI. The statement of purpose should identify the actual or potential exposure pathways that should be addressed by corrective measures.

C. Establishment of Proposed Media Specific Cleanup Standards

The Permittee shall describe the proposed media cleanup standards and point of compliance. The standards must be either background,

promulgated federal and state standards or risk-derived standards. If media clean-up standards are not proposed, then the Agency will unilaterally propose setting media clean-up standards to either background, promulgated federal and state standards or the most conservative risk-derived standards.

D. Identification, Screening and Development of Corrective Measure Technologies

1. Identification: List and briefly describe potentially applicable technologies for each affected media that may be used to achieve the corrective action objectives. Include a table that summarizes the available technologies.

The Permittee should consider innovative treatment technologies, especially in situations where there are a limited number of applicable corrective measure technologies.

2. Screening: The Permittee shall screen the corrective measure technologies to eliminate those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations.

Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

- a. Site Characteristics: Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration.
- b. Waste Characteristics: Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site).
- c. Technology Limitations: During the screening process, the level of technology development, performance record,

and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field without extensive technology transfer or development.

3. Corrective Measure Development: The Permittee shall assemble the technologies that pass the screening step into specific alternatives that have the potential to meet the corrective action objectives for each media. Options for addressing less complex sites could be relatively straight-forward and may only require evaluation of a single or limited number of alternatives. Each alternative may consist of an individual technology or a combination used in sequence (i.e., treatment train). Different alternatives may be considered for separate areas of the facility, as appropriate. List and briefly describe each corrective measure alternative.

E. Evaluation of a Final Corrective Measure Alternative

For each remedy which warrants a more detailed evaluation (i.e., those that passed through the screening step), including those situations when only one remedy is being proposed, the Permittee shall provide detailed documentation of how the potential remedy will comply with each of the standards listed below. These standards reflect the major technical components of remedies including cleanup of releases, source control and management of wastes that are generated by remedial activities. The specific standards are as follows:

1. Protect human health and the environment.
2. Attain media cleanup standards set by EPA.
3. Control the source of releases so as to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment.
4. Comply with applicable standards for management of wastes.
5. Other factors.

In evaluating the selected alternative or alternatives, the Permittee shall prepare and submit information that documents that the specific remedy will meet the standards listed above. The following guidance should be used in completing this evaluation.

1. Protect Human Health and the Environment

Corrective action remedies must be protective of human health and the environment. Remedies may include those measures that

are needed to be protective, but are not directly related to media cleanup, source control or management of wastes. An example would be a requirement to provide alternative drinking water supplies in order to prevent exposures to releases from an aquifer used for drinking water purposes. Therefore, the Permittee shall provide a discussion of any short term remedies necessary to meet this standard, as well as discuss how the corrective measures alternative(s) meet this standard.

2. Attain Media Cleanup Standards

Remedies will be required to attain media cleanup standards. As part of the necessary information for satisfying this requirement, the Permittee shall address whether the potential remedy will achieve the remediation objectives. An estimate of the time frame necessary to achieve the goals shall be included. Contingent remedies may be proposed if there is doubt if the initial remedy will be successful (e.g., contingent remedies to innovative technologies).

3. Control of Sources of Releases

The Permittee shall address the issue of whether source control measures are necessary, and if so, the type of actions that would be appropriate. Any source control measure proposed should include a discussion on how well the method is anticipated to work given the particular situation at the facility and the known track record of the specific technology.

4. Comply With any Applicable Standards for Management of Wastes

The Permittee shall include a discussion of how the specific waste management activities will be conducted in compliance with all applicable state and federal regulations (e.g., closure requirements, LDRs)

5. Other Factors

There are five general factors that will be considered as appropriate by EPA in selecting/approving a remedy that meets the four standards listed above. These five decision factors include:

- a. Long-term reliability and effectiveness;
- b. Reduction in the toxicity, mobility or volume of wastes;
- c. Short-term effectiveness;
- d. Implementability; and
- e. Cost.

Examples of the type of information to include are provided below:

- a. Long-term reliability and effectiveness: The Permittee may consider whether the technology, or combination of technologies, have been used effectively under analogous site conditions, whether failure of any one technology in the alternative would have any immediate impact on receptors, and whether the alternative would have the flexibility to deal with uncontrollable changes at the site. Operation and maintenance requirements include the frequency and complexity of necessary operation and maintenance. In addition, each corrective measure alternative should be evaluated in terms of the projected useful life of the overall alternative and of its component technologies. Useful life is defined as the length of time the level of effectiveness can be maintained.
- b. Reduction in the toxicity, mobility or volume of wastes: As a general goal, remedies will be preferred that employ techniques that are capable of eliminating or substantially reducing the potential for the wastes in SWMUs and/or contaminated media at the facility to cause future environmental releases. Estimates of how the corrective measure alternative will reduce toxicity, mobility and or volume of the waste is required and may be accomplished through a comparison of initial site conditions to expected post-corrective measures conditions.
- c. Short-term effectiveness: The Permittee shall evaluate each corrective measure alternative for short-term effectiveness. Possible factors to consider are fire, explosion, exposure to hazardous constituents and potential threats associated with the treatment, excavation, transportation and re-disposal or containment of the waste material.
- d. Implementability: Information to consider when assessing implementability include:
 - i) The administrative activities needed to implement the corrective measure alternative (e.g. permits, rights of way, etc.) and the length of time these activities will take;
 - ii) The constructibility, time for implementation, and time for beneficial results;
 - iii) The availability of adequate off-site treatment, storage capacity, disposal services, needed

technical services and materials; and
iv) The availability of prospective technologies for each corrective measure alternative.

e. Cost: The Permittee shall develop an estimate of the cost of each corrective measure alternative (and for each phase or segment of the alternative). The cost estimate shall include both capital and operation and maintenance costs. The capital costs shall include, but are not limited to, costs for: engineering, site preparation, construction, materials, labor, sampling/analysis, waste management/disposal, permitting, health and safety measures, etc. The operation and maintenance costs shall include labor, training, sampling and analysis, maintenance materials, utilities, waste disposal and/or treatment, etc. Costs shall be calculated as the net present value of the capital and operation and maintenance costs.

F. Justification and Recommendation of the Corrective Measure or Measures

The Permittee shall justify and recommend in the CMS Report a corrective measure alternative for consideration by the Agency. Such a recommendation should include a description and supporting rationale for the preferred alternative that is consistent with the corrective action standards and remedy selection decision factors discussed above. In addition, this recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Regional Administrator will select the corrective measure alternative or alternatives to be implemented based on the results presented in the CMS Report.

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APPENDIX D

Schedule of Compliance

Schedule of Compliance	Due Date
Notification of Newly Identified SWMUs and AOCs Condition II.B.1. and Condition II.B.2.	Within fifteen (15) calendar days of discovery
SWMU Assessment Report Condition II.B.3.	Within ninety (90) calendar days of notification
Notification for Newly Discovered Releases at Previously Identified SWMUs and AOCs Condition II.C.1.	Within fifteen (15) calendar days of discovery
Confirmatory Sampling Work Plan for SWMUs or AOCs identified in Appendix A.3 Condition II.D.1	Within forty-five (45) calendar days after effective date of permit
Confirmatory Sampling Work Plan for SWMUs identified under Condition II.B.4.	Within forty-five (45) calendar days of notification by the Regional Administrator (RA)
Confirmatory Sampling Report Condition II.D.4.	In accordance with the approved CS Work Plan
RFI Work Plan for SWMU(s) and AOC(s) identified under Condition II.A.1.	Within ninety (90) calendar days from effective date of permit
RFI Work Plan for SWMU(s) and AOC(s) Identified under Condition II.B.4., Condition II.C.2., or Condition II.D.5.	Within ninety (90) calendar days after receipt of notification by Regional Administrator (RA) which SWMUs or AOCs require an RFI

Schedule of Compliance	Due Date
RFI Progress Reports Condition II.E.3.a.	Quarterly, beginning ninety (90) calendar days from the start date specified by the RA *
Draft RFI Report Condition II.E.3.b.	In accordance with the approved RFI Work Plan
Final RFI Report Condition II.E.3.b.	Within thirty (30) calendar days after receipt of RA's final comments on Draft RFI Report
Interim Measures Work Plan Condition II.F.1.a.	Within thirty (30) calendar days of notification by RA
Interim Measures Progress Reports Condition II.F.3.a.	In accordance with the approved Interim Measures Work Plan **
Interim Measures Report Condition II.F.3.b.	Within ninety (90) calendar days of completion
CMS Work Plan Condition II.G.1.a.	Within ninety (90) calendar days of notification by RA that a CMS is required
Implementation of CMS Work Plan Condition II.G.2.	Within fifteen (15) calendar days after receipt of RA approval of Plan
Draft CMS Report Condition II.G.3.a.	In accordance with the schedule in the approved CMS Work Plan

Schedule of Compliance	Due Date
Final CMS Report Condition II.G.3.a.	Within thirty (30) calendar days of RA's final comments on Draft CMS Report
Demonstration of Financial Assurance Condition II.H.3.	Within one hundred twenty (120) calendar days after permit modification for remedy
Noncompliance/Imminent Hazard Report Condition I.D.14.	Oral within 24 hours and written within fifteen (15) calendar days of becoming aware of the hazardous circumstances
<p>The above reports must be signed and certified in accordance with 40 CFR §270.11.</p> <p>* This applies to Work Plan execution that requires more than one hundred eighty (180) calendar days</p> <p>** This applies to Work Plan execution that requires more than one year.</p>	

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APPENDIX E

Action Levels

APPENDIX E

ACTION LEVELS

I. Definition

Action levels are conservative health-based concentrations of hazardous constituents determined to be indicators for the protection of human health or the environment. Action levels shall be set for all hazardous constituents, a subset of hazardous wastes, identified in the RFI Report(s) or for those hazardous constituents which the Regional Administrator has reason to believe may have been released from a solid waste management unit (SWMU) or Area of Concern (AOC) at the facility. Should the concentration of a hazardous constituent(s) in an aquifer, surface water, soils, or air exceed its action level for any environmental medium, the Regional Administrator may require the Permittee to conduct a Corrective Measure Study (CMS) to meet the requirements of permit Condition II.G., Appendix C, and 40 CFR §264.101. If the Regional Administrator determines that a constituent(s) released from a SWMU or AOC in quantities below its respective action level(s) may pose a threat to human health or the environment, given site-specific exposure conditions, cumulative effects, ecological concerns, etc., then the Regional Administrator has the authority to require a CMS to meet the requirements of permit Condition II.G., Appendix C, and 40 CFR §264.101.

Action levels shall be concentration levels which satisfy the following criteria:

- A.
 1. Is derived in a manner consistent with EPA guidelines for assessing human and environmental health risks from hazardous constituents; and
 2. Is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act (TSCA) Good Laboratory Practice Standards, or equivalent; and
 3. For human health action levels to address carcinogens, represents a concentration associated with an excess upper bound lifetime cancer risk of 1×10^{-6} for class A and class B carcinogens and 1×10^{-5} for class C carcinogens due to continuous constant lifetime exposure; and
 4. For human health action levels to address systemic toxicants, represents a concentration to which the human population (including sensitive subgroups) could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime.

- B. For constituent(s) detected in groundwater, air, surface water, or soils, for which a concentration level that meets the criteria specified in section I.A.1 through I.A.4 of this appendix is not available or possible, the action level for the constituent(s) shall be the background concentration of the constituent(s).

II. Groundwater

- A. Action levels for constituents in groundwater shall be concentrations specified as:
1. MCLs; or
 2. For constituents for which MCLs have not been promulgated, a concentration which satisfies the criteria specified in section I.A.1 through I.A.4 of this appendix and calculated as specified in section VII of this appendix.
- B. In deriving action levels for constituents for which MCLs have not been promulgated, the recommended exposure/intake assumption of water is 2 liters/day for 70 kg adult/70 year lifetime exposure period.

III. Surface Water

- A. Action levels for constituents in surface water shall be concentrations specified as:
1. Water Quality Standards established pursuant to the Clean Water Act by the State in which the facility is located, where such standards are expressed as numeric values; or
 2. Numeric interpretations of State narrative water quality standards where water quality standards expressed as numeric values have not been established by the State; or
 3. MCLs for constituents in surface water designated by the State for drinking water supply, where numeric values or numeric interpretations, described in paragraphs 1 and 2, are not available; or
 4. For constituents in surface waters designated by the State for drinking water supply for which numeric values, numeric interpretations, or MCLs are not available, a concentration which meets the criteria specified in section I.A.1 through I.A.4 of this appendix and calculated as specified in section VII of this appendix, assuming exposure through consumption of the water contaminated with the constituent; or

5. For constituents in surface waters designated for use or uses other than drinking water supply and for which numeric values or numeric interpretations have not been established, a concentration established by the EPA Regional Administrator which meets the criteria specified in section I.A.1 through I.A.4 of this appendix and calculated as specified in section VII of this appendix.

- B. In deriving human health action levels for constituents in surface water, the recommended exposure/intake assumption of water is 2 liters/day for 70 kg adult/70 year lifetime exposure period.

IV. Air

- A. Action levels for constituents in air shall be defined as concentrations which meet the criteria specified in section I.A.1 through I.A.4 of this appendix and calculated as specified in section VII of this appendix, assuming exposure through inhalation of the air contaminated with the constituent, as measured or estimated at the facility boundary, or another location closer to the unit if necessary to protect human health and the environment.
- B. In deriving human health action levels for constituents in air, the RfC should be utilized as the action level, where available. The RfC includes exposure assumptions, and no calculations are necessary to calculate an action level. If a RfC is not available, the recommended exposure/intake assumption of air is 20 cubic meters/day for 70 kg adult/70 year lifetime exposure period.

V. Soils

- A. Action levels for constituents in soils shall be concentrations which meet the criteria specified in section I.A.1 through I.A.4 of this appendix.
- B. The calculation of human health action levels for soil includes several specific exposure routes which must be evaluated individually: 1) ingestion, 2) inhalation and 3) leachability to groundwater. In deriving action levels to address ingestion, inhalation and leaching, the methodology found in the most recent Soil Screening Level Guidance should be reviewed for appropriate equations and assumptions.

VI. Sediment

- A. Action levels for constituents in sediment shall be based on whether human health or ecological health is the major concern. If

ecological concerns are deemed to predominate, then action levels for constituents in sediment shall be concentrations based on the latest sediment screening values as calculated by Region 4. If an ecological sediment screening value for a constituent of concern has not been generated by Region 4 and cannot be generated using the criteria in sections I.A.1 and I.A.2, then the ecological action level for sediment shall be background. If human health is the prevailing concern, then the human health action level for sediment shall address all applicable exposures.

VII. Equations for Calculating Groundwater, Surface Water and Air Action Levels

A. Systemic Toxicants

$$C_m = [RfD * W]/[I]$$

where:

C_m = action level in medium (units are medium-dependant);
 RfD = reference dose (mg/kg/day), value obtained from the Integrated Risk Information System (IRIS) or Health Effects Assessment Summary Tables (HEAST) (most recent version);
 W = body weight (kg);
 I = intake assumption (units are medium-dependent), specified for each medium in this appendix;

B. Carcinogenic Constituents

$$C_m = [R * W * LT]/[CSF * I * ED]$$

where:

C_m = action level in medium (units are medium-dependent);
 R = assumed risk level (dimensionless), (10^{-6} for class A and B; 10^{-5} for class C carcinogens);
 W = weight (kg);
 LT = assumed lifetime (70 years);
 CSF = carcinogenic slope factor (mg/kg/day) $^{-1}$, value obtained from the Integrated Risk Information System (IRIS) or Health Effects Assessment Summary Tables (HEAST);
 I = intake assumption (units are medium-dependent), specified for each medium in this appendix;
 ED = exposure duration (70 years).

- C. For those constituents for which a Rfd and a CSF may both be available, the lower (more protective) of the two levels shall be used as an action level.