

Transmit Confirmation Report

No. : 017
Receiver : 8-1-813-847-8064
Transmitter : WASTE MGT TAMPA SWDIST
Date : Apr 25 96 14:48
Time : 14:14
Mode : Fine
Pages : 18
Result : OK



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

4/25/96
Date

TO: Vince Manna
DEPT.: SOLID WASTE MANAGEMENT
FAX #: (813) 8478064
FROM: Jim Ford
DEPT.: D.E.P., Tampa Office
PHONE: 813-744-6100 or SunCom 542-6100 Ext. 382
FAX(local) 744-6125 or (SunCom) 542-6125
SUBJECT: Intent for Tank
AS YOU REQUESTED
COMMENT: NOTE FOR PUBLICATION INCLUDED

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 18

RECEIVED BY: _____

PHONE: _____

**THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

APR 25 1996

In the matter of an
Application for Permit by:

DEP File No. SC51-277316
Pasco County

Pasco County Board of
County Commissioners
c/o Douglas Bramlett
7536 State Street
New Port Richey, FL 33654

INTENT TO ISSUE

The Department of Environmental Protection hereby gives notice of its Intent to Issue a construction permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Pasco County Board of County Commissioners, applied on September 11, 1995 to the Department of Environmental Protection for a permit to construct a leachate storage tank and treatment facility adjacent to the existing Resource Recovery Facility, located near Hays Road, 2 miles north of S.R. 52, Springhill, Pasco County, Florida.

The Department has permitting jurisdiction under 403.707 and 403.861, Florida Statutes, and Chapters 62-4 and 62-701 (formerly 17-4 and 17-701), Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

The Department intends to issue this permit based on its belief that reasonable assurances have been provided to indicate that the proposed project will not adversely impact water quality and the proposed project will comply with appropriate provisions of Chapters 62-4 and 62-701 (formerly 17-4 and 17-701), F.A.C., subject to the specific conditions attached in the permit.


Pursuant to Section 403.815, Florida Statutes and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on Permit Application. The notice must be published one time only within thirty (30) days of receipt of this intent in the legal ad section of a newspaper of general circulation in the area affected. Proof of publication must be provided to the Department within seven (7) days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless petition for administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, Florida Statutes. 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, Florida Statutes. Petitions must comply with the requirements of Florida Administrative Code Rule 62-103.155 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road,

Tallahassee, Florida 32399-2400. Petitions filed by the permit application must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


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

RDG/kbfb
Attachments


Copies furnished to:

Elected County Officials
Vince Mannella, P.E., Pasco County
Daniel Strobbridge, CDM Tampa
Darwish El-Hajii, P.E., CDM Tampa
Doug Beason, OGC Tallahassee
Kathy Anderson, FDEP Tallahassee
Robert Butera, P.E., FDEP Tampa

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on APR 25 1996 to the listed persons.

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk

APR 25 1996
Date

Is your RETURN ADDRESS completed on the reverse side?

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):

- 1. ☐ Addressee's Address
- 2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Pastor BCC
c/o Doug Bramlett
7536 State Street
New Port Richey, FL 33654

4a. Article Number
P 378 180 565

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)
X

Thank you for using Return Receipt Service.

P 378 180 565

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to Pastor BCC	
Street & Number c/o Doug Bramlett	
Post Office, State, & ZIP Code	
Postage	\$
Certified 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 4-25-96	

PS Form 3800, April 1995

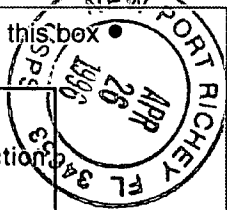
UNITED STATES POSTAL SERVICE



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Postage & Fees Paid
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• Print your name, address, and ZIP Code in this box •

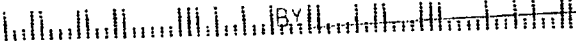
State of Florida
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318



Kim FRIEGE

APR 29 1996

Department of Environmental Protection
SOUTHWEST DISTRICT



RULES OF THE ADMINISTRATION COMMISSION, MODEL RULES OF PROCEDURE
CHAPTER 28-5, DECISIONS DETERMINING SUBSTANTIAL INTERESTS
PART II, FORMAL HEARINGS
A) PREHEARING PROCEDURES

28-5.201 Initiation of Formal Proceedings.

(1) Initiation of formal proceedings shall be made by petition to the Agency responsible for rendering final Agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced and indented.

(2) - All petitions filed under these rules should contain:

(a) The name and address of each Agency affected and each Agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the Agency determination;

(c) A statement of when and how petitioner received notice of the Agency decision of intent to render a decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A demand for relief to which the petitioner deems himself entitled; and

(g) Other information which the petitioner contends is material.

(3) Upon receipt of a petition for formal proceedings, the Agency shall either accept or deny the petition, and if accepted shall elect either to conduct the hearing itself through the Agency head, or member thereof, assign a person authorized by Subsection 120.57(1)(a) or other authority, or request that a Hearing Officer from the Division of Administrative Hearings be assigned to conduct the hearing.

(a) A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the Agency determination, or if the petition is untimely.

(b) The Agency shall promptly give written notice to all parties of the action taken on the petition, and shall state with particularity its reasons therefor.

(4) If the Agency elects to request that a Hearing Officer of the Division of Administrative Hearings be assigned to conduct the hearing, the Agency shall forward the petition, and all materials filed with the Agency, to the Division of Administrative hearings, and shall notify all parties of its action.

Specific Authority: 120.53(1), 120.54(10), F.S.
Law Implemented: 120.57, F.S.
History: New 3-23-80

SECTION 62-103.155, FLORIDA ADMINISTRATIVE CODE
RULES OF ADMINISTRATIVE PROCEDURE
FINAL AGENCY ACTION (NON-RULEMAKING) AND APPEAL

62-103.155 Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding.

(1)(a) Any person whose substantial interests may be affected by proposed or final agency action by the Department may file a petition for formal administrative hearing in accordance with this rule if the person disputes the material facts upon which the Department's action is based.

(b) Any person whose substantial interests may be affected by proposed or final action by the Department may file a petition for informal administrative hearing in accordance with this rule if the person objects to the Department's action but does not dispute the material facts upon which the Department's action is based.

(2) A petition for formal or informal administrative hearing pursuant to section 120.57, F.S., 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 applicant'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 notices of the Department 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) is 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 relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

(3)(a) A petition shall be in the form required by this rule and must be filed (received) in the Office of General Counsel of the Department within the following number of days after receipt or publication (whichever occurs first) of notice of proposed agency action or of notice of agency action:

1. Petitions concerning Department action or proposed action on applications for permits (except permits for hazardous waste facilities): 14 days;

2. Petitions concerning Department action or proposed action on applications for hazardous waste facility permits: 45 days;

3. Petitions concerning notices of violation when no informal conference is held: 20 days after receipt of the notice of violation;

4. Petitions concerning notices of violation when an informal conference is held: 10 days after receipt of notice of completion of the informal conference.

5. Petitions concerning other Department actions or proposed actions: 21 days.

The petitioner shall also serve a copy of the petition on all other parties to the proceeding, as identified in the published notice, at the time of filing.

(b) Failure to timely file a petition within the applicable time period after receipt of notice of agency action or receipt of notice of proposed agency action, whichever notice first occurs, shall constitute a waiver of any right to request an administrative proceeding under Chapter 120, F.S.

(4) If a petition is filed that does not substantially comply with the requirements of subsection (2) of this rule, the Department shall issue an order dismissing the petition with leave to file an amended petition complying with the requirements of this rule within 15 days of service of the order. If an amended petition complying with this rule is not filed (received) within 15 days of service of the order, the petitioner's right to a proceeding under Section 120.57, F.S., is waived.

(5) When there has been no publication of notice of agency action or notice of proposed action as prescribed in Rule 62-103.150, F.A.C., a person who has actual knowledge of the action or has knowledge which would lead a reasonable person to conclude that the Department taken final agency action, has a duty to make further inquiry within 14 days of obtaining such knowledge by contacting the Department to ascertain whether action has occurred. The Department shall upon receipt of such an inquiry, if agency action has occurred, promptly provide the person with notice as prescribed by Rule 62-103.150, F.A.C. Failure of the person to make inquiry with the Department within 14 days after obtaining such knowledge may stop the person from obtaining administrative proceeding on the agency action.

(6)(a) "Receipt of notice of agency action" means receipt of written notice of final agency action, as prescribed by Department rule, or the publication, pursuant to Department rule, of notice of final agency action, whichever first occurs.

(b) "Receipt of notice of proposed agency action" means receipt of written notice (such as letter of intent) that the Department proposes to take certain action, or the publication pursuant to Department rule of notice of proposed agency action, whichever first occurs.

(7) Notwithstanding any other provision in this Chapter, should a substantially affected person who fails to timely request a hearing under Section 120.57, F.S., administratively appeal the final Department action or order, the record on appeal shall be limited to:

(a) the application and accompanying documentation submitted by the applicant prior to the issuance of the agency's intent to issue or deny the requested permit.

(b) the materials and information relied upon by the agency in determining the final agency action or order;

(c) any notices issued or published; and

(d) the final agency action or order entered concerning the permit application.

(8) In such cases where persons do not timely exercise their rights accorded by Section 120.57(1), Florida Statutes, the allegations of fact contained in or incorporated by the final agency action shall be deemed uncontested and true, and appellants may not dispute the truth of such allegations upon subsequent appeal.

(9) Any applicant may challenge the Department's request for additional information by file with the Office of General Counsel an appropriate petition for administrative proceeding pursuant to Section 120.60, F.S., following receipt by the applicant of the Department's notification pursuant to Section 403.0876, F.S., that additional information is required.

Specific Authority: 120.53, 403.0876, 403.815, F.S.

Law Implemented: 120.53, F.S.

History: New 9-20-79; Amended 4-28-81; Transferred from 17-1.62 and Amended 6-1-84; Am 10-19-88, Formerly 17-103.155.

**State of Florida
Department of Environmental Protection
Notice of Proposed Agency Action on Permit Application**

The Department gives notice of its intent to issue a permit to Pasco County Board of County Commissioners, who applied on September 11, 1995, to the Department of Environmental Protection for a permit to construct a leachate storage tank and treatment facility adjacent to the existing Resource Recovery Facility, located near Hays Road, 2 miles north of S.R. 52, Springhill, Pasco County, Florida.

Persons 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, Florida Statutes. The petition must contain the information set forth below,, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of 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 the material facts disputed by Petitioner, if any; (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; and (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 is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. .

Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 62-103.155, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holiday, at 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

PERMITTEE

Pasco County Board of
County Commissioners
c/o Douglas Bramlett
7536 State Street
New Port Richey, FL 33654

DRAFT

PERMIT/CERTIFICATION

GMS ID No: 4051M30035
Permit No: SC51-277316
Date of Issue:
Expiration Date: 07/01/98
County: Pasco
Lat/Long: 28°22'30"
82°34'00"
Sec/Town/Rge: 25/24S/17E
Project: Pasco County
Leachate Storage Tank
and Treatment Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-701 (formerly 17-4 and 17-701). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To construct a solid waste leachate storage tank and treatment facility adjacent to the existing Resource Recovery Facility, subject to the conditions attached, located near Hays Road, 2 miles north of S.R. 52, Springhill, Pasco County, Florida. The specific conditions attached are for the construction activities for:

1. Leachate Storage Tank and Treatment Facility

Replaces Permit Number: N/A, New Facility

This permit contains compliance items summarized in Attachment 1 that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

GENERAL CONDITIONS

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1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403-859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not 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 this 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are 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:

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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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor 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 provide the Department with the following information:

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

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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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:

DRAFT

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, 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 or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - (a) Determination of Best Available Control Technology (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
 - (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (d) Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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:
 1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

PERMITTEE: Pasco County BCC

PERMIT NO.: SC09-277316

Pasco County Leachate Storage Tank and Treatment Facility

GENERAL CONDITIONS:

DRAFT

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 the 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 corrected promptly.

SPECIFIC CONDITIONS:

DRAFT

1. **Permit Application Documentation.** This permit is valid for construction and installation of the leachate storage tank and treatment facility in accordance with:

- January 1996 Specifications by CDM received March 22, 1996;
- Addendum #1 dated January 23, 1996 and Addendum #2 dated February 5, 1996, received March 22, 1996;
- January 1996 Construction plans by CDM received March 25, 1996;
- Geotechnical Report dated March 14, 1996 by PSI received April 22, 1996;

and in accordance with all applicable requirements of Department rules. Construction activities approved as part of this permit shall be completed by **December 1, 1996.**

2. **Permit Modifications.** Any construction not previously approved as part of this permit will require a separate Department permit unless the Department determines a permit modification to be more appropriate. Permits shall be modified in accordance with the requirements of 62-4.080, F.A.C. A modification, which is reasonably expected to lead to substantially different environmental impacts, and which requires a detailed review by the Department, is considered a substantial modification.

3. **Construction Plans.** At least **thirty (30) days** prior to initiation of construction activities, a complete set of plans and specifications to be used for construction, shall be submitted to the Department. All changes (i.e., all additions, deletions, revisions to the plans previously approved by the Department) shall be noted on the plans. Significant changes in the plans shall require a permit modification. All changes in the plans shall be accompanied by a narrative indicating the change, the cause of the deviation, and a re-certification of the alternate design by the design engineer. These alternate designs shall be approved by the Department prior to construction. Shop drawings for the tank shall be provided to the Department prior to construction to verify conformance with construction plans and acceptable design standards.

4. **Pre-Construction Meeting Notification.** The Department Solid Waste Permitting staff shall be notified **72 hours** before all pre-construction meetings with the contractor. Prior to initiating construction activities, the permittee shall make arrangements for the Engineer of Record to meet on site and discuss all plan changes with Department Solid Waste Permitting Staff of the Southwest District Office. A copy of the minutes from the pre-construction conference shall be submitted to the Department within **two (2) weeks after** the conference.

SPECIFIC CONDITIONS:

DRAFT

5. Construction Schedule and Progress Report. No later than two (2) weeks after the pre-construction conference, the owner or operator shall submit a construction schedule which includes estimated dates for each phase of the construction to the Department. The Engineer of Record or another qualified professional engineer shall make periodic inspections during construction to ensure that design integrity is maintained. An updated construction schedule and progress chart shall be submitted to the Department monthly.

6. Quality Assurance. Liner systems shall have a construction quality assurance plan to provide personnel with adequate information to achieve continuous compliance with the liner construction requirements. The plan shall include or refer to specifications and construction methods which use established engineering practices to construct a liner system and provide for quality control testing procedures and sampling frequencies. Sampling and testing shall be conducted in the field by trained personnel during construction and after construction completion. Such personnel will be under the direction of the construction quality assurance professional engineer, to assure the liner system will comply with the standards. The engineer or his designee shall be on-site at all times during liner system construction to monitor construction activities.

7. Certification of Construction Completeness. Within sixty (60) days after all specified construction has been completed, the following activities shall be completed:

a. The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer in charge of construction and quality assurance to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

b. The owner or operator shall submit Record Drawings showing all changes (i.e. all additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations).

c. The owner or operator shall submit a narrative indicating all changes to plans and the cause of the deviations and certification by the design engineer to the Department.

d. The engineer of record shall provide a report to verify conformance with the standards and specifications required by FAC Rule 62-701.400. The report including all testing results for the entire liner system shall be submitted to the Department along with the completion of construction documents.

SPECIFIC CONDITIONS:

DRAFT

8. **Control of Nuisance Conditions.** The permittee shall be responsible for the control of odors and fugitive particulates arising from this construction and testing. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public, and confirmed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance. The owner or operator shall control disease vectors so as to protect the public health and welfare.
9. **Water Quality, Gas and Leachate Management.** Water quality, gas and leachate management systems shall be operated and maintained in accordance with the current site certification.
10. **Water Quality, Gas and Leachate Monitoring.** Water quality, gas and leachate shall be monitored in accordance with the current site certification.
11. **Testing Requirements.** The permittee shall be allowed twelve (12) months for operating and testing of the leachate storage tank and treatment facility to determine compliance with the rules and regulations of the Department. A report assessing the effectiveness of the leachate storage tank and treatment facility shall be submitted to the Department **within sixty (60) days** after the end of the first 3 months of operation. The report shall also include solids testing and characterization. **Within twelve (12) months** following construction completion and annually thereafter, the secondary containment liner shall be inspected for damage and repair, and a report provided to the Department containing the results of the inspection and corrective actions if necessary, signed and sealed by a professional engineer.
12. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
13. **Permit Acceptance.** By acceptance of this Permit, the permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

PERMITTEE: Pasco County BCC

PERMIT NO.: SC09-277316

Pasco County Leachate Storage Tank and Treatment Facility

SPECIFIC CONDITIONS:

DRAFT

14. General Conditions. The permittee shall be aware of and operate under the "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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

ATTACHMENT 1

SPECIFIC
CONDITION

SUBMITTAL
DUE DATE

REQUIRED
ITEM

DRAFT

- | | | |
|-----|---|---|
| 1. | December 1, 1996 | Construction complete |
| 3. | 30 days prior to construction | Submit complete plans and specifications, noting changes |
| 4. | 72 hours prior to meeting | Notify Department of pre-construction meetings |
| 4. | 2 weeks after meeting | Submit minutes of pre-construction meeting |
| 5. | 2 weeks after meeting | Submit construction schedule |
| 5. | Monthly | Submit update construction schedule |
| 7. | Within 60 days after construction is complete | Submit Certification of Construction Completion, Arrange for inspection, submit Record Drawings, submit narrative describing all deviations |
| 11. | Within 60 days after 3 months of operation | Submit assessment report |



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833

April 17, 1996

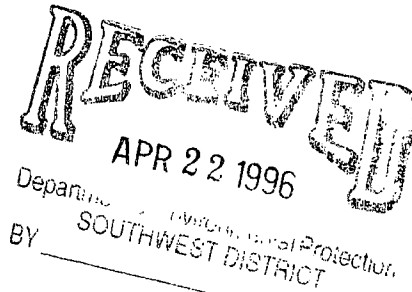
Mr. Kim Ford, P.E.
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Subject: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County

Dear Mr. Ford:

The intent of this letter is to address the comments raised by the Department during our telephone conversation on Monday April 15, 1996.

1. A copy of the settlement calculations performed by PSI is included for the Department use.
2. The County intends to implement all of the recommendations enumerated in the PSI geotechnical report regarding the tank construction.
3. It is CDM's opinion that the proposed 60 mil synthetic liner will have the tolerance to handle the anticipated tank settlement of 2 to 4 inches with no adverse results on the liner material.
4. PSI was provided with a set of plans for their use to perform the geotechnical evaluation. The plans clearly depict the presence of a leak detection system under the tank.
5. The County will provide a copy of the geotechnical report to the tank manufacturer for their use during tank design. The manufacturer will be required to provide calculations demonstrating the tolerance of the proposed structure to the predicted total and differential settlement estimated by PSI. This calculations will be submitted to FDEP following the contract award and during the shop drawing phase.



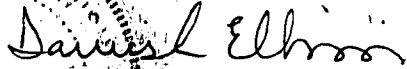
CDM Camp Dresser & McKee Inc.

Mr. Kim Ford
April 17, 1996
Page 2

We trust that the above information will satisfy the Department's requirements. If you have any questions or comments, please don't hesitate to call me.

Sincerely,

CAMP DRESSER & McKEE INC.



Darwish El-Hajji, P.E.

cc: Doug Bramlett/Pasco County
Vince Mannella/Pasco County
Dan Strobridge/CDM

DATE 1 March 1996PROJECT No. 795-63071SUBJECT Pasco County UtilitiesBY SMHSETTLG INPUT PARAMETERSPAGE 1 of 1

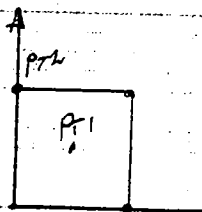
B-2		B-1	
0'	Strata	0'	
25'	① Sand N=20 $\gamma_T = 110$ pcf $q_c = 80$ tsf (0.138) TSF	25'	① Sand N=20 $\gamma_T = 110$ pcf $q_c = 80$ tsf (0.138) TSF
5'	$C_c' = 0.0026$	5'	$C_c' = 0.0026$
75'	② Sand N=6-10 $\gamma_T = 105$ pcf $q_c = 30$ tsf (0.328) TSF	75'	② Sand N=7-11 $\gamma_T = 105$ pcf $q_c = 36$ tsf (0.328) TSF
10'	$C_c' = 0.016$	10'	$C_c' = 0.014$
14'	③ Sand N=18 $\gamma_T = 115$ pcf $q_c = 72$ tsf (0.484) TSF	14'	③ Sand N=18 $\gamma_T = 115$ pcf $q_c = 72$ tsf (0.458) TSF
18'	$C_c' = 0.010$	16'	$C_c' = 0.010$
20'	④ Clay N=11 $\gamma_T = 120$ pcf W% = 36 $e_o = 0.954$ (0.640) TSF	18'	④ Clay N=6 $\gamma_T = 105$ pcf W% = 52 $e_o = 1.38$ (0.785) TSF
23'	$C_r = 0.018$ $C_c' = 0.008$	22'	$C_r = 0.03$ $C_c' = 0.0126$
		24'	⑤ Sand N=39 $\gamma_T = 125$ pcf $q_c = 156$ tsf (0.748) TSF
		27'	$C_c' = 0.014$

* SEASON HIGH ANTICIPATED AT 6' DEPTH
ASSUME GW DEPTH AT 5' (conservative)

EQUIVALENT SQUARE

$$\square = \frac{\sqrt{\pi \times 100^2}}{4} = 88.6$$

PT1 PT2
 ΔH 2.47 0.86



LOAD INTENSITY

2.5 KSF

PT1 PT2
 ΔH 3.64 1.18

```

*****
*
*
*      SETTLEMENT ANALYSIS
*
*
***** S E T T L G *****
*
*      PORTIONS (C) COPYRIGHT 1985, 1986
*
*
*      GEOSOFT
*
*      ALL RIGHTS RESERVED
*
*****
*
*      GEOSOFT, 1442 LINCOLN AVE., SUITE 146
*
*
*      ORANGE, CA 92665. (714) 998-4030
*
*****

```

Boring 1

NUMBER OF LOADED AREAS = 1
 NUMBER OF SOIL LAYERS = 4
 NUMBER OF STRESS POINTS = 2
 POISSONS RATIO = .30
 STRESS DISTRIBUTION CODE = 1

0" Pasco Utilities

SURFACE NUMBER	LOADING INTENSITY KSF	DEPTH FEET	LOADED SURFACES			CORNER Y2	CO-ORDINATES			
			X1	Y1	X2		X3	Y3	X4	Y4
1	2.500	.0	.0	.0	88.6	.0	88.6	88.6	.0	88.6

SETTLEMENT ANALYSIS

TABLE OF STRESS POINT COORDINATES

POINT NO.	X-COORDINATE	Y-COORDINATE, FEET
1	44.3	44.3
2	.0	88.6

SETTLEMENT ANALYSIS

**** BOUSSINESQ STRESS DISTRI. JN ****

0 STRESS POINT NO. 1 2

DEPTH STRESS
FEET KSF

2.5	2.500	.625
7.5	2.491	.625
14.0	2.448	.623
20.5	2.356	.620

SETTLEMENT ANALYSIS

OSTRATUM	Z FT	H FT	G KCF	PO KSF	SOURCE AND OTHER INFORMATION
1	2.50	5.00	.1100	.275	CC
2	7.50	5.00	.0420	.655	CC
3	14.00	8.00	.0520	.968	CC
4	20.50	5.00	.0420	1.281	CC

SETTLEMENT ANALYSIS

0 COMPRESSIBILITY DATA

LAYER

0	1	SLOPE OF F-LOG(P) CURVE =	.0026
0	2	SLOPE OF F-LOG(P) CURVE =	.0160
0	3	SLOPE OF F-LOG(P) CURVE =	.0100
0	4	SLOPE OF F-P CURVE =	.0080, FT.*FT./KIP

SETTLEMENT ANALYSIS

0SETTLEMENT (IN.)

OSTRESS POINT NO.	1	2
0 STRATUM		
1	.16	.08
2	.65	.28
3	.53	.21
4	1.13	.30
TOTAL SETTLEMENT	2.47	.86

```

*****
*
*      SETTLEMENT ANALYSIS
*
***** S E T T L G *****
*
*      PORTIONS (C) COPYRIGHT 1985, 1986
*
*      GEOSOFT
*
*      ALL RIGHTS RESERVED
*
*****
*
*      GEOSOFT, 1442 LINCOLN AVE., SUITE 146
*
*      ORANGE, CA 92665. (714) 998-4030
*
*****

```

Boring 2

NUMBER OF LOADED AREAS = 1
 NUMBER OF SOIL LAYERS = 5
 NUMBER OF STRESS POINTS = 2
 POISSONS RATIO = .27
 STRESS DISTRIBUTION CODE = 1

0" Pasco Utilities

SURFACE NUMBER	LOADING INTENSITY KSF	DEPTH FEET	LOADED SURFACES			CORNER Y2	CO-ORDINATES			
			X1	Y1	X2		X3	Y3	X4	Y4
1	2.500	.0	.0	.0	88.6	.0	88.6	88.6	.0	88.6

SETTLEMENT ANALYSIS

TABLE OF STRESS POINT COORDINATES

POINT NO.	X-COORDINATE	Y-COORDINATE, FEET
1	44.3	44.3
2	.0	88.6

SETTLEMENT ANALYSIS

**** BOUSSINESQ STRESS DISTRIB A ****

0 STRESS POINT NO. 1 2

DEPTH STRESS
FEET KSF

2.5	2.500	.625
7.5	2.491	.625
13.0	2.457	.624
19.0	2.381	.621
24.5	2.276	.616

SETTLEMENT ANALYSIS

OSTRATUM	Z FT	H FT	G KCF	PO KSF	SOURCE AND OTHER INFORMATION
1	2.50	5.00	.1100	.275	CC
2	7.50	5.00	.0420	.655	CC
3	13.00	6.00	.0520	.916	CC
4	19.00	6.00	.0420	1.198	CC
5	24.50	5.00	.0620	1.479	CC

SETTLEMENT ANALYSIS

0 COMPRESSIBILITY DATA
LAYER

0 1	SLOPE OF F-LOG(P) CURVE =	.0026
0 2	SLOPE OF F-LOG(P) CURVE =	.0140
0 3	SLOPE OF F-LOG(P) CURVE =	.0100
0 4	SLOPE OF F-P CURVE =	.0126, FT.*FT./KIP
0 5	SLOPE OF F-LOG(P) CURVE =	.0140

SETTLEMENT ANALYSIS

0SETTLEMENT (IN.)

OSTRESS POINT NO.	1	2
0 STRATUM		
1	.16	.08
2	.57	.24
3	.41	.16

4	2.16	.56
5	.34	.13
TOTAL SETTLEMENT	3.64	1.18



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

April 19, 1996

Mr. Vince Mannella, P.E.
Solid Waste Management
Pasco County Utilities
7530 Little Road
New Port Richey, FL 34654

Re: Leachate Storage Tank and Treatment Facility
Pending permit #SC51-277316, Pasco County

Dear Mr. Mannella:

Upon receipt of the additional supporting information recently requested, the Department should be in the position to send the Intent to Issue and draft permit for construction. The draft permit will allow time for operation and testing prior to issuance of an operation permit. One item of interest to the Department is the potential damage to the secondary containment liner that is possible from animals. The Department intends to include in the construction, and subsequent operation permits, a provision for an annual inspection to detect and repair damage to the liner. In lieu of this annual inspection, the County may propose to install a protective layer over the exposed liner. If the County chooses to install the protective layer, the design should be submitted to the Department for review and approval prior to installation.

If you have any questions, you may call me at (813) 744-6100, extension 382.

Sincerely,

Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab

cc: Robert Butera, P.E., FDEP Tampa

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 4/15/96 Subject W PASCO TANK
Time 2pm Permit No. _____
County PASCO
M DARWISSE - E Telephone No. 2212833
Representing CDM
[☒] Phoned Me [☐] Was Called [☐] Scheduled Meeting [☐] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting _____

- WE DISCUSSED ITEM NEEDED FOR W PASCO TANK
- ✓ 1. Will include PSI Recommendations in Construction
 - ✓ 2. POSSIBLE SETTLEMENT CALCULATION
 - 3. TANK WILL TOLERATE EXPECTED SETTLEMENT
 - ✓ 4. LINER WILL TOLERATE EXPECTED SETTLEMENT
 - ✓ 5. SETTLEMENT INCLUDES LGS DESIGN
 - ✓ 6. PSI REPORT SIGNED & SEALED
 - ✓ 7. CDM LETTER SIGNED & SEALED

DARWISSE WILL SEND LETTER THIS WEEK ADDRESSING ITEMS

(continue on another
sheet, if necessary)

Signature [Signature]

Title _____

BIDDING AND CONTRACT DOCUMENTS
FOR THE
PASCO COUNTY, FLORIDA
LEACHATE STORAGE TANK AND TREATMENT FACILITY
COUNTY BID NO. 96-033
CDM PROJECT NO. 6104-30

MAR 22 1996

Environ
SOUTHWEST

ADDENDUM NO. 2

Date Issued: February 5, 1996

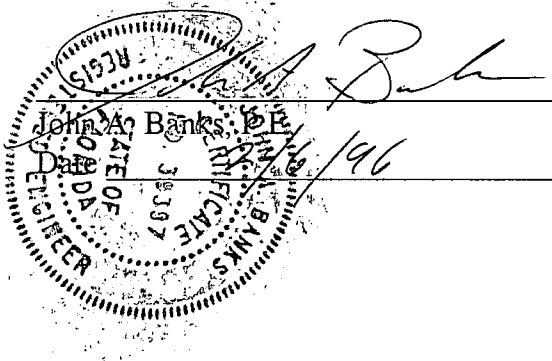
Bidders on the Project are hereby notified that this Addendum shall be attached to and made a part of the above named Bidding and Contract Documents, dated January 1996.

The following items are issued to add to, modify, and clarify the Bidding and Contract Documents. These items shall have full force and effect as the Bidding and Contract Documents, and cost involved shall be included in the bid prices. Bids, to be submitted on the specified bid data, shall conform with the additions and revisions listed herein.

Acknowledge receipt of the Addendum by inserting its number and data on Page 00300-2 of the Bid Form. Failure to do so may subject the bidder to disqualification.

CAMP DRESSER & McKEE INC.

Florida Registered Professional
Engineer No. 39397



ADDENDUM NO. 2
PASCO COUNTY LEACHATE STORAGE TANK AND TREATMENT FACILITY.

QUESTIONS SUBMITTED

1. Question received from Sam Sawyer of the Crom Corporation.

“There is a detail in the center of sheet CD-2 of the drawings, labeled “BID OPTION ITEM DOUBLE TANK CONFIGURATIONS”. At the top of this detail is a view showing a section through both tank floors with compacted stone fill between. What is the thickness of the stone fill?”

Response: The vertical distance between the bottom of the primary tank floor and the top of the secondary tank floor shall be a minimum of 12 inches.

2. Questions received from MWM South.

- “1. What are the diameters of the concrete foundations on the 100' and 120' diameter concrete tanks?
i.e., What is the distance from the tank OD to the foundation OD?”

Response: The foundation O.D. for the 100' diameter tank (prestressed concrete) is 100'. The foundation O.D. for the 120' diameter tank (Factory Coated Bolted Steel) is 121 ft 8 inches.

- “2. Can HDPE embed be used instead of S.S. Batten Bar System to seal liner to tank foundation?”

Response: No

- “3. Does 8' wide 60-MIL Rub pads get extrusion welded or are they just placed on the liner loose?”

Response: The Rub Pads shall be extrusion tack welded 5 ft on centers.

- “4. Plans indicate 60-MIL HDPE Liner. Spec book calls for 40-MIL HDPE Liner. Which one will be used in this project?”

Response: Only 60-MIL HDPE Liner

3. Questions received from John Fox of Florida Aquastore.

- "1. Is the roof handrail for the glass tank (Sec. 13412) to encompass the roof hatch as shown on plan sheet CD-4?" (Concrete leachate tank detail)

Response: The roof handrail detail on sheet CD-4 applies equally to both tank options.

- "2. Glass tank specifications (Sec. 13412) appear to refer to the std. glass roof with a 316 S.S. roof hatch when the roof for large diameter (34' & greater) utilizes a Temcor Aluminum dome with aluminum vent, handrail, & roof latch (All which meets or exceeds AWWA stds.) Please clarify."

Response: The specification for the roof has been revised in this Addendum to reflect the Aluminum dome.

- "3. Please confirm that the soil bearing capacity for the leachate tank(s) is 1500 PSF."

Response: The statement in the specification (Section 13412, paragraph 1.06 D.2.) was inadvertant. This statement is deleted as stated in this addendum.

- "4. Glass tank specifications (Sec. 13412) do not indicate any overflow(s), but plan sheet CD-4 shows (4) overflows on the concrete tank. Please clarify."

Response: Provisions for overflow pipes are provided in this addendum.

- "5. Glass tank specification requires coating of the primary tank slab, but concrete tank specification (13414-14 3.07 8) indicates the concrete tank interior (i.e. floor, walls & roof) shall not be coated or painted. Leachate is very corrosive and will attack concrete and therefore coating the concrete should be mandatory?"

Response: The concrete tank floors shall be protected by use of a microsilica admixture. The requirements for the admixture is provided for Sections 13412 and 13414 via this addendum.

IN THE SPECIFICATIONS

1. SECTION 02776 - HIGH DENSITY POLYETHYLENE (HDPE) LINER, ATTACHMENT A

Page 5, Item 1.2.2 CONTRACTOR'S REPRESENTATIVE, paragraph 1.2.2.2 RESPONSIBILITIES, In the seventh and eighth sentences replace the words "clay liner" with the words "liner system".

2. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

Paragraph 1.04, SUBMITTALS, Add the following:

"J. Submit concrete mix design for bottom slab which includes the provisions for microsilica admixture as required in paragraph 2.01 O".

Paragraph 1.06 DESIGN CRITERIA, sub-paragraph D, Delete item 2 in its entirety.

Paragraph 2.01 MATERIALS

Replace sub-paragraph F in its entirety with the following:

"The tank roof shall be constructed of non-corrugated triangular aluminum panels which are sealed and firmly clamped in an interlocking manner to a fully triangulated aluminum space truss system of wide flange extrusion, thus forming a spherical dome structure. The dome shall be clear-span and designed to be self supporting from the periphery structure with primary horizontal thrust contained by an intergral tension ring. The dome dead weight shall not exceed 3 pounds per square foot of surface area. The dome and tank shall be designed as an intergral unit. The roof material shall be as manufactured by TEMCOR or approved equal."

Add subparagraph O as follows:

"O.1. The concrete floor in contact with leachate shall include microsilica admixture which shall be supplied in slurry or dry form as determined by supplier, such as Force 10,000 as manufactured by W.R. Grace and Co., Connecticut.

Permeability of microsilica concrete shall be tested by AASHTO T277-83 "Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete". Results of tests shall be expressed in electrical units of coulombs. Coulomb tests shall be made on two 4" x 8"

representative samples, moist cured for 90 days. Test cylinders shall be made according to ASTM C31. Coulomb requirement shall be 1,000 coulombs or less at 90 days."

Add subparagraph P. As follows:

- "P. The storage tank shall be equipped with a total of 4 overflow pipes. The overflow pipes shall be 6 inch diameter schedule 80 PVC pipes equipped with 180° bends and coated with an epoxy paint."

Paragraph 3.02 WATERPROOF COATING, Delete in its entirety.

Renumber paragraphs 3.03, 3.04, and 3.05 as paragraphs 3.02, 3.03, and 3.04 respectively.

3. SECTION 13415 - PRESTRESSED CONCRETE TANKS

Paragraph 1.03 SUBMITTALS , Add the following to sub-paragraph A:

- "3. Submit concrete mix design for shotcrete and bottom slab which includes the provisions for microsilica admixture as required in paragraphs 2.02 B and 2.03B."

Paragraph 2.03 FLOOR, Add the following:

- "B The concrete floor in contact with leachate shall include microsilica admixture which shall be supplied in slurry or dry form as determined by supplier, such as Force 10,000 as manufactured by W.R. Grace and Co., Connecticut.

Permeability of microsilica concrete shall be tested by AASHTO T277-83 "Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete". Results of tests shall be expressed in electrical units of coulombs. Coulomb tests shall be made on two 4" x 8" representative samples, moist cured for 90 days. Test cylinders shall be made according to ASTM C31. Coulomb requirement shall be 1,000 coulombs or less at 90 days."

BIDDING AND CONTRACT DOCUMENTS
FOR THE
PASCO COUNTY, FLORIDA
LEACHATE STORAGE TANK AND TREATMENT FACILITY
COUNTY BID NO. 96-033
CDM PROJECT NO. 6104-30



ADDENDUM NO. 1
Date Issued: January 23, 1996



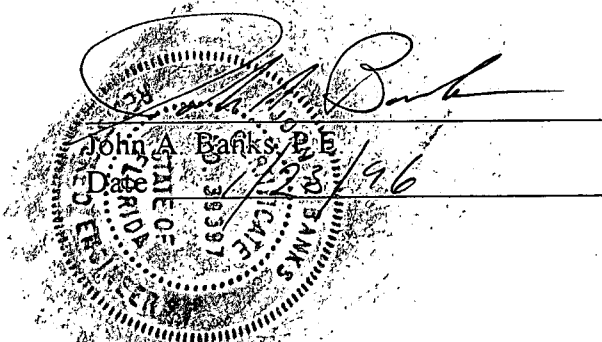
Bidders on the Project are hereby notified that this Addendum shall be attached to and made a part of the above named Bidding and Contract Documents, dated January 1996.

The following items are issued to add to, modify, and clarify the Bidding and Contract Documents. These items shall have full force and effect as the Bidding and Contract Documents, and cost involved shall be included in the bid prices. Bids, to be submitted on the specified bid data, shall conform with the additions and revisions listed herein.

Acknowledge receipt of the Addendum by inserting its number and data on Page 00300-2 of the Bid Form. Failure to do so may subject the bidder to disqualification.

CAMP DRESSER & McKEE INC.

Florida Registered Professional
Engineer No. 39397



ADDENDUM NO. 1
PASCO COUNTY LEACHATE STORAGE TANK AND TREATMENT FACILITY.

A. IN THE SPECIFICATIONS

1. SECTION 00100 - INSTRUCTION TO BIDDERS

Article 9.1, delete the sentence which reads "The amount of subcontract work shall not exceed forty-nine percent (49%) of the work".

2. SECTION 00490 - PUBLIC ENTITY CRIME FORM

Delete in its entirety

3. SECTION 00500 - AGREEMENT

Article 3.2, third sentence: Change "...the amount of Three Thousand Dollars (\$1,000.00) for each..." to read as follows "...the amount of One Thousand Dollars (\$1,000.00) for each..."

Change "...and Two Thousand Dollars (\$500.00) for each..." to read as follows "...and Five Hundred Dollars (\$500.00) for each...."

Article 7.8, change "December 1995" to read "January 1996"

4. SECTION 00850 - DRAWING INDEX

Add after sheet No. S-1; "S-2 Leachate Treatment Facility Plans and Details."

5. SECTION 01010 - SUMMARY OF WORK

Page 01010-1, paragraph 1.02, subparagraph B, Item 4 change to read as follows:

"4. Installation of yard piping and connecting to existing yard piping."

6. SECTION 01100 - SPECIAL PROJECT PROCEDURES

Page 01100-4, paragraph 1.12, subparagraph A, delete the last sentence. Also, subparagraph C, delete in its entirety

7. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

Page 13412-1, paragraph 4b, In the sentence that reads "The inlet diameter shall be . . .", change "4" to "6" inches and the outlet diameter shall be . . .", change "6" to "4" inches."

8. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

Page 13412-2, paragraph 4f, In the sentence "Level indicator shall be located adjacent to the ...", change "6" to "4" . . . inch outlet.

9. SECTION 13414- PRESTRESSED CONCRETE TANKS

Page 13414-6, paragraph E, In the sentence "Report of Geotechnical Investigation by Jammal and Associates", change "is appended to these specifications" to "is available with the purchase of Bid documents and for examination at the office of the ENGINEER".

10. SECTION 16191 - MISCELLANEOUS EQUIPMENT

Page 5, change Section "2.08" to read "2.02".

IN THE CONSTRUCTION QUALITY ASSURANCE MANUAL:

11. SECTION 10 - DEFINITIONS AND RESPONSIBILITIES

Page 2, paragraph 1.1.3 , last sentence to read . . . "These geomembranes include 60 mil high density polyethylene (HDPE) membranes."

12. SECTION 5.0 - TESTING, EXECUTION AND FIELD QUALITY CONTROL

Page 32, paragraph e, Change "5)" to "4)"

13. APPENDIX B - HDPE AND PVC MATERIAL PROPERTY AND FACTORY AND FIELD SEAMS PROPERTIES

Page 60, TABLE B-2, Is provided in its entirety with this Addendum No.1.

14. TABLE OF CONTENTS

A revised Table of Contents is provided with this Addendum No. 1

15. TABLE 1-1 - PROJECT PERSONNEL RESPONSIBILITY

Page 3, Replace in its entirety with new table provided with this Addendum No.1.

B. ON THE DRAWINGS

1. Sheet CD
 1. Detail A, replace "3" plug valve (typ)" with "3" true union PVC Ball Valve (typ)", replace "1 ½" plug valve" with "1 ½" true union PVC ball valve".
 2. Sections 1 & 2, Delete the words "Uniflange"; also change sheet call outs from "C-2" to read "C-3".
2. Sheet CD-2
 1. Detail A, change "6" or 12" non-perforated PVC Pipe" to read "4" or 12" non-perforated PVC Pipe". Add Note: "INV. EL. Is for 12" Gravity Pipe only."
 2. Section 1, change "course sand" to read "concrete sand"
 3. Bid Option Item Detail, Change "6" Outlet", "6" PGV" and "6" secondary outlet" to read, "4" outlet", "4" PGV" and "4" secondary outlet"
3. Sheet CD-3
 1. Detail A, Distillate Storage Tank, add the following note:
"Steel tank shall be ¼" A36 C.S. painted inside with SP10 plus 2 coats Tnemec Pota Pox, external paint SP6 plus 2 coats Epoxy paint."
 2. Detail B, delete "(Optional)"; also change the sheet call out from "C-2" to read "C-3".
4. Sheet P-2, All references which state: "See mechanical drawings for continuation" change to read as follows: "Coordinate location with process Equipment Contractor".
5. Sheet E-2, add note 9. to read as follows: "9. The method of installation across driveways is at the Contractor's option provided that traffic is maintained during normal solid waste delivery hours (7 a.m. - 5 p.m. Monday through Saturday). Any open cuts to pavement must be repaired to the same design as the existing pavement."
6. Sheet E-3, add note 5. to read as follows: "5. Notify facility operator of schedule for work within the power plant structure and provide every opportunity for facility operator to observe work."
7. Sheet E-4, The note for Exhaust fan EF-1 elementary diagram, "Site 1, 3P full voltage non-reversing combination motor starter w/NEMA 12 enclosure" shall be changed to read as follows; "Size 1, 3P Full Voltage non-reversing combination motor starter w/NEMA 4X Stainless Steel Enclosure"
8. Sheet E-5
Erase all bare copper home runs from the ground rods except for the bare copper home runs from the ground rod where the note is located.

Change note for bare copper home runs from ground rod from: "To equipment by others confirm location in field (TYP)" to read "To equipment by others confirm location in field (TYP of 22)"

**PASCO COUNTY UTILITIES SERVICES BRANCH
LEACHATE STORAGE TANK AND TREATMENT FACILITY
COUNTY BID NO. 96-033
CDM PROJECT NO. 6104-30**

**PRE-BID CONFERENCE
January 22, 1996**

The Pre-Bid Conference for the Pasco County Leachate Storage Tank and Treatment Facility was held on January 16, 1996 at 10:00 a.m. at the Pasco County Solid Waste Energy Recovery Facility Conference Room. Those in attendance were:

Vince Mannella	Pasco County
Peter Neustadt	Pasco County Purchasing
Dan Strobridge	Camp Dresser & McKee
John Banks	Camp Dresser & McKee
Jeff Streeter	Fabco Constructors
Daniel G. Hunt	Smith Environmental
Greg Mullins	Codi Environmental
Steve Voytoko	Moretrench Environmental Services
David G. Eldridge	Eclipse Construction
Mark Amsingen	Great Monument Construction
Mike Slaton	Spartan
Philip Gray	RM Williams Contractors

1. Introductions

Peter Neustadt introduced himself representing the Pasco County Purchasing Division. He stated the pre-bid conference was not mandatory and therefore, anyone not present may still be eligible to bid the project. He also stated that after this meeting all dialog stops. Any questions after the pre-bid meeting must be submitted in writing to the Purchasing Division. Technical questions will be forwarded to the Engineers for the appropriate response.

Vince Mannella introduced himself as Director of Contract Services and Solid Waste for Pasco County.

Dan Strobridge introduced himself as the Project Manager for Camp Dresser and McKee (CDM). John Banks introduced himself as the Project Engineer for CDM.

Pasco County is the Owner for the Leachate Storage Tank and Treatment System Facilities which is a part of the Pasco County Utilities Services Branch Solid Waste System located at this site.

1. **PURPOSE**

Dan Strobridge stated the purpose of this meeting is to ask questions regarding the Pasco County Leachate Storage Tank and Leachate Treatment System. These questions will be discussed and/or clarified in addenda. Nothing said during this meeting, as far as clarifications and/or answers is to be taken as an official answer and shall not modify the contract documents. The answers will be covered in an addenda and at that time will become an official clarification and/or answer to your question.

2. **PROJECT INFORMATION**

Dan Strobridge stated the project is to provide the civil sitework and building components to house process equipment to treat landfill leachate.

As advertised, bids shall be submitted for furnishing, delivering and installing all materials, equipment and services, including labor, for the work, to construct the Leachate Storage Tank and Treatment Facilities, in its entirety as shown on the drawings and specified herein:

- Scope of work shall include but not be limited to:
 1. Furnishing and installing a 2 million gallon Leachate Storage Tank complete with a 2.2 million gallon secondary containment system.
 2. Furnishing and installing a leachate transfer pumping system, pump control panel and associated piping .
 3. Furnishing and installing a distillate transfer pumping system, control panel, and associated piping.
 4. Furnishing and installing a water well, pump, bladder tank, control panel and associated piping.
 5. Furnishing and installing yard piping, valves and fittings and connections to pipelines provided by others.
 6. Furnishing and installing electrical power supply conduit and cable.
 7. Furnishing and installing a 10,000 gallon steel distillate storage tank.
 8. Providing site clearing, grading and earthwork.
 9. Furnishing and installing an approximate 2200 sq ft pre-engineered metal building and associated appurtenances.
 10. Construction of concrete foundation slabs for process equipment to be installed by others.
 11. Construction of asphalt pavement.
 12. Furnishing and installing sod.
 13. All miscellaneous work and cleanup.

Work shall include construction and modifications of all facilities required to complete, test and make ready for operations all work specified in the Contract Documents.

Bidders are advised that, because construction will take place within an operating landfill facility, care will be required during construction to minimize the impact of construction on existing traffic patterns. The project control provisions of the Contract shall be strictly adhered to and enforced.

The scheduling of the work is essential to project control and timely completion. Further, be advised of construction constraints included in Specification Section 01014. Please note, the listed constraints are not intended to release the Contractor from the responsibility to coordinate the work in any manner which will ensure project completion within the time allowed.

3. **CONTRACT TIME**

Dan Strobridge advised bidders that time is of the essence for this project. Section 00500, Article 3 states 180 calendar days to Substantial and 210 to Final Completion. Please be advised, Specification Section 01010, Paragraph 1.04 of "Work Sequence" states the definition of Substantial and Final Completion.

4. **QUESTIONS NON-TECHNICAL (BIDDING)**

Dan Strobridge stated the following bid documents are attached to and made a condition of this Bid:

1. Bid Form (Section 00300).
2. Bid Security (Surety bond, cashier's check or certified check; five(5) percent of maximum bid price, Section 00350).
3. Certification of Compliance with the Trench Safety Act Requirements (Section 00495).
4. Power of Attorney (for Surety Bond Only).

5. **SUBCONTRACTORS**

Dan Strobridge stated (Article 9 of Section 00100) - Instruction to Bidders states "The amount of subcontract work shall not exceed forty-nine percent (49%) of the work.

[However, upon further review it was determined that this requirement shall be waived for this project. This change is included in the changes in the specification listed in this addendum.]

6. **ADDENDA**

Mr. Strobridge stated we anticipate issuing an addendum by January 23, 1996, subject to other comments developed at this meeting.

7. **GENERAL DISCUSSION AND QUESTIONS**

Mr. Strobridge asked if you have a question related to the requirements of the project, please state your name, your organization and your question. The minutes are being recorded so speak clearly.

John Banks provided an overview of the project site plan. The overall site plan, sheet C-1 provides the location of the proposed facilities relative to existing structures. There are four options for the leachate storage tank. Two options include a geomembrane secondary

containment system which is shown on the drawings. The other two options include a dual tank secondary containment system. If the contractor selects one of the dual tank options, the location of the leachate storage tank and the limits of construction will be modified, as noted on the drawings, to decrease the area of construction as the secondary containment berm will not be required.

An existing fence must be relocated. The process building will be located in the area of the existing fence. The contractor must connect to the 6" leachate force main at the location shown on the drawings. There will be a 6" reuse pipeline and 4" wastewater force main to be provided by the county to which the contractor must connect yard piping. There is also a 2" distillate force main to be provided by the County and the contractor shall connect to at the location shown on the drawings. The power supply duct bank must be installed by the contractor to the power plant. A drainage swale shall be installed to the existing dry retention pond. A leachate transfer pump shall be installed to transfer leachate from the leachate storage tank to the treatment process building. There are two process equipment pads outside the process building and a for the distillate storage tank. There is also an asphalt driveway and parking area which the contractor must construct.

Mr. Banks pointed out that the bid form requires the contractor to select one leachate storage tank option. Should the contractor select one of the dual tank options, earthwork associated with the geomembrane secondary containment system will not be required nor will the 12" gravity drain line from the containment area be required. The drawings do provide a piping detail for the dual tank system to provide a drain from the secondary containment area.

There will be a gas pipeline to be provided by the gas company (People's Gas) and the contractor must coordinate construction activities with the gas company. The gas company has been given the information on the project.

There is additional information in the specifications from the process vendor, RCC (Resources Conservation Company) related to the process building slab and outside pads. The information from RCC provides the location of the equipment pads and anchor bolt information.

Questions/Answers

Question 1: Steve Voytko of Moretrench asked if the County had any preference as to the tank option and if that would have any determination on the award.

Answer: Mr. Mannella said No.

Question 2: Mike Slaton of Spartan asked if this project would be performed this year.

Answer: Mr. Mannella answered Yes.

Question 3: David Eldridge of Eclipse Construction asked if there will be any permits the contractor will have to pull to construct this project.

- Answer: Mr. Mannella said the contractor will be responsible for the standard building permits. He also said the County will waive the building permit fee.
- Question 4: Steve Voytko of Moretrench asked if startup and acceptance testing requirements include the process equipment to be provided by others.
- Answer: Mr. Mannella answered that startup and testing would include only the items included in this contract.
- Question 5: Steve Voytko of Moretrench asked how the process equipment package would be bid.
- Answer: Dan Strobridge answered that RCC would be taking bids for that part of the work and that the list of the pre-bid attendees would be provided to RCC.
- Question 6: Jeff Streeter of Fabco Construction asked if the leachate storage tank can be cast in place.
- Answer: John Banks answered that the Leachate Storage Tank options were prestressed concrete or glass fused steel bolted construction.
- Question 7: Jeff Streeter of Fabco asked if the geomembrane liner was required if the dual tank option was used.
- Answer: John Banks answered that if one of the dual tank options is selected, no geomembrane liner is required. Mr. Banks pointed out the dual tank option must include a double bottom in the tank with leak detection capability as shown on the drawings and that the tanks shall not have a common slab bottom.
- Question 8: Jeff Streeter of Fabco asked if the 6" drainline shown on sheet CD-2, dual tank detail, was correct.
- Answer: Dan Strobridge said that line should be a 4" line and this would be corrected in the addendum.
- Question 9: Steve Voytko asked if minority participation is required.
- Answer: Mr. Mannella answered that it is welcome but not mandatory.
- Question 10: Jeff Streeter of Fabco stated the amount of liquidated drainage referred to in Section 0500, page 1 was inconsistent between the written amount and the numerical amount shown.
- Answer: Dan Strobridge stated this would be clarified in the addendum.
- Question 11: Mike Slaton of Spartan asked if the terms and conditions requires the contractor to accept consequential damages.

Answer: Dan Strobridge answered that this issue will be addressed in the addendum. Mr. Mannella stated that the electrical revenues for the power plant are about \$900,000 per month. If divided by 30, you have the daily revenues the County stands to lose should the plant not be able to operate. The County would also have to buy 4 megawatts/hr of electricity for their operations.

Section 5.4.5 of the Construction Contract requires the Contractor to carry liability insurance for claims for damages other than to the work itself, because of injury to or destruction of tangible property wherever located, including loss of use therefrom. . . .

Question 12: Jeff Streeter of Fabco asked if the dirt for the berms is on-site.

Answer: John Banks answered that there is some excavation involved but that the site is not represented as a balanced site. Mr. Strobridge clarified that you should not plan on material for the berm being available on-site. Mr. Strobridge brought up an issue related to consequential damages. He stated that the Power Plant Operator would be responsible for the termination of the power supply wiring, inside their facility. The contractor's responsibility would end at the back wall of the facility. **(Subsequent review of the contract documents, found this statement to be not correct. The contract documents show the contractors responsibility inside the power plant structure including installation of the feeder breaker - see sheets E-2 and E-3 of the drawings. The contractor shall coordinate all work inside the Resource Recovery Facility with the facility manager, Mr. Bob Sitz.)**

Question 13: Jeff Streeter asked if land clearing debris can be disposed on-site by burning.

Answer: Dan Strobridge said on-site burning is allowed provided the contractor acquires the appropriate burn permits.

Question 14: An unidentified person asked for the engineer's cost estimate.

Answer: Dan Strobridge said the engineers estimate of this construction is 1.25 million and there is an additional identified \$50,000 contingency on the bid form subject to approval of the County.

Question 15: An unidentified person asked if ENGINEER was going to specify the method of constructing the duct bank under the driveways.

Answer: A response will be given in the Addenda. **(Method of construction is the Contractor's option. Open cutting is acceptable provided that traffic is maintained during normal solid waste delivery hours. See Item B.5. of this Addendum No. 1.)**

9. **COMMENTS FROM OWNER, ENGINEER AND OTHERS**

There were no additional comments.

10. **BIDS**

Mr. Strobridge stated Sealed Bids must be received in triplicate by the Pasco County Purchasing Department, Attn: Frank Fortino, Purchasing Director, either by mail or hand delivery, no later than 2:00 p.m. on Tuesday, February 13, 1996, at the following address:

Pasco County Purchasing Department
8919 Government Drive
New Port Richey, Florida 34654

Bids shall be submitted in triplicate at or before the time and at the place indicated in the Advertisement For Bids and shall be submitted in an opaque sealed envelope. The envelope shall be marked on the exterior "LEACHATE STORAGE TANK AND TREATMENT FACILITY, BID NUMBER: 96-033, OPEN DATE: FEBRUARY 13, 1996 AT 2:00 P.M., FRANK FORTINO, PURCHASING DIRECTOR" and other markings as required.

Opening and Reading: The Bids will be publicly opened and read aloud at 2:00 p.m. on Tuesday, February 13, 1996, in the Purchasing Department, 8919 Government Drive, New Port Richey, Florida 34654. Bids received after the above time will not be accepted under any circumstances. Any uncertainty regarding the time a Bid is received will be resolved against the Bidder.

11. **TOUR OF PROJECT**

Mr. Strobridge invited attendees to a site tour conducted today, January 16, 1996, immediately following the Pre-Bid Conference. Mr. Mannella gave instruction on how to attend the site tour.

12. **ADJOURN**

Mr. Mannella asked if you have not signed the Pre-Bid Attendance Sheet, please do so before leaving. On behalf of Pasco County; Thank you for your interest in this important Pasco County Project. Mr. Newstand stated that all questions be faxed to the attention of Frank Fortino at (813) 847-8065 and to please include the bid number on the fax (96-033).

TABLE B-2

MATERIAL PROPERTIES
POLYVINYL CHLORIDE (PVC) LINER

Properties	Test Method	Minimum Value
Thickness mils	ASTM D1593, Para 8.1.3	28.5
Specific gravity, min	ASTM D792	1.20
Minimum tensile properties (each direction)	ASTM D882	
Breaking factor (pounds/inch width)	Method A or B (1 inch wide)	69
Elongation at break (percent)	Method A or B	325
Modulus (force) at 100% elongation (pounds/inch width)	Method A or B	30
Tear resistance (pounds/minimum)	ASTM D1004	8
Low temperature, F	ASTM D1790	-20
Dimensional stability (each direction, % change, max)	ASTM D1204 (212 F), 15 min.	5
Water extraction (% loss, max)	¹ ASTM D3083	-0.25
Volatile loss (% loss, max)	ASTM D1203 Method A	0.7
Resistance to soil burial (% change, max in original value)	¹ ASTM D3083	--
Breaking factor	--	5
Elongation, at break	--	20
Modulus at 100% elongation	--	20
Hydrostatic resistance (psi, min)	ASTM D751 Method A	82
Factory and field seam requirements	--	--
Bonded seam strength (factory seam, breaking factor, ppi width)	¹ ASTM D3083	55.2
Peel adhesion	¹ ASTM D413	10
Resistance to soil burial	ASTM D3083	-
Peel adhesion	--	-20
Bonded seam strength	--	-20
¹ Test Method as modified in Annex A, Standard 54, November 1993.		

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Table 1-1: Project Personnel Responsibilities

PARTY	DEFINITION	RESPONSIBILITY	QUALIFICATION	REPORT TO
Contractor	Construct project in accordance with plans and specifications	Page 5	Licensed in Florida	Owner, Engineer, and EFR
Contractor's Representative (CR)	Assigned by the Contractor to act as the Contractor Representative onsite	Page 6	Prior and similar experience	Contractor and EFR
Engineer	Assigned by Owner for preparation of the total site design including plans and specifications for the lining system and to provide services during construction	Page 6	Registered professional engineer in Florida	Owner
Engineer's Field Representative (EFR)	Assigned by the Engineer for observing and documenting activities related to QA for production and installation of the geosynthetic system	Pages 6, 7, and 8	Prior and similar experience	ENGINEER and OWNER
Installation Supervisor (IS)	Provided by Geosynthetic Installer to provide supervision and guidance to the installation crews	Page 9	Managed installation of 2,000,000 ft ² of geosynthetic material	CR, and EFR
Installer	Firm responsible for installation of the geosynthetic products	Page 9	Five completed similar facilities totaling 2,000,000 ft ² and certified by the geosynthetic Manufacturer	CR and EFR
Manufacturer	Firm or corporation responsible for production of geosynthetic materials	Page 11	Identified on Pages 13, 14 and 15	CR and EFR
Quality Assurance Laboratory (QAL)	Assigned by OWNER to conduct required testing activities	Page 13	Experience in testing in accordance with ASTM, FTMS and NSF	EFR and Owner



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833

March 21, 1996

Mr. Kim Ford, P.E.

Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Subject: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County

Dear Mr. Ford,

The purpose of this letter is to address the following additional comments raised by the FDEP letter dated February 2, 1995.

FDEP COMMENT: Please provide a site-specific foundation analysis to demonstrate that the filled tank will be supported on a well drained, stable foundation. Please include all design-specific calculations relating to expected structural settlement, and the supporting geotechnical investigation.

RESPONSE: A site specific foundation analysis was conducted by our geotechnical subconsultant PSI. Two copies of the report are included for your use.

FDEP COMMENT: Please provide two complete sets of construction plans and specifications with addendums; and all tank design details either as part of the construction plans or shop drawings, signed and sealed by a professional engineer.

RESPONSE: As agreed upon during our telephone conversation, we are enclosing one signed and sealed set of the plans, specifications and addendums for your use. Please note that we are not able to provide a copy of the shop drawings since the contract has not been awarded at this time. The contractor will use the enclosed plans to construct the project and will provide CDM an as-built plan at construction completion. Following contract award, and before construction begins, the contractor will provide shop drawings to CDM for approval.

RECEIVED
MAR 22 1996

Department of Environmental Protection
BY _____
SOUTHWEST DISTRICT

Mr. Kim Ford, P.E.
March 21, 1996
Page 2

We will be glad to provide a copy of the approved shop drawings to FDEP when they are available.

The county has received all the bids on the project and is ready to award to the apparent low bidder. However, the county would like to have the construction permit in hand prior to the actual award. CDM, on behalf of Pasco County, respectfully requests FDEP to expedite the review of the foundation analysis and the issuance of the permit by April 3, 1996.

We appreciate your help in this matter. If you have any questions or comments, please feel free to call me.

Sincerely,

CAMP DRESSER & MCKEE INC.



Darwish El-Hajji, P.E.

cc: Doug Bramlett, Pasco County
Vince Mannella, Pasco County
Daniel Strobbridge, CDM
John Banks, CDM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 3/6/96 Subject W PASO Tank
Time 11:10 Permit No. _____
County PALM
M DARWIS E. Telephone No. _____
Representing CON

☒ Phoned Me [] Was Called [] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting

DARWIS WANTED TO KNOW IF DEP
WOULD ISSUE THE TANK PLANS WITHOUT
SHOP DRAWINGS BECAUSE CONTRACT IS NOT AWARDED

I EXPLAINED THAT DEP WOULD AN EXPLANATION
IN RESPONSE TO OTHER ITEMS REQUESTED

DARWIS EXPLAINED COUNTY DOES NOT WANT TO
AWARD CONTRACT WITHOUT A PERMIT

I SAID DEP WANTS THE SHOP DRAWING FOR REVIEW
AT SOME TIME PRIOR TO CONSTRUCTION AND THAT
SHOULD BE SCHEDULED WITH CONTRACTOR WHO WILL
DEVELOP SHOP DRAWINGS

(continue on another
sheet, if necessary)

Signature E E

Title _____

BIDDING AND CONTRACT DOCUMENTS
FOR THE
PASCO COUNTY, FLORIDA
LEACHATE STORAGE TANK AND TREATMENT FACILITY
COUNTY BID NO. 96-033
CDM PROJECT NO. 6104-30

RECEIVED
FEB - 7 1996

Department of Environmental Protection
SOUTHWEST DISTRICT

BY

ADDENDUM NO. 2
Date Issued: February 6, 1996

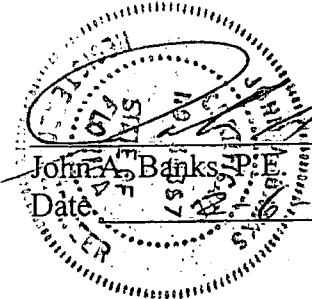
Bidders on the Project are hereby notified that this Addendum shall be attached to and made a part of the above named Bidding and Contract Documents, dated January 1996.

The following items are issued to add to, modify, and clarify the Bidding and Contract Documents. These items shall have full force and effect as the Bidding and Contract Documents, and cost involved shall be included in the bid prices. Bids, to be submitted on the specified bid data, shall conform with the additions and revisions listed herein.

Acknowledge receipt of the Addendum by inserting its number and data on Page 00300-2 of the Bid Form. Failure to do so may subject the bidder to disqualification.

CAMP DRESSER & McKEE INC.

Florida Registered Professional
Engineer No. 39397


John A. Banks, P.E.
Date FEB 6 1996

ADDENDUM NO. 2
PASCO COUNTY LEACHATE STORAGE TANK AND TREATMENT FACILITY.

QUESTIONS SUBMITTED

1. Question received from Sam Sawyer of the Crom Corporation.

“There is a detail in the center of sheet CD-2 of the drawings, labeled “BID OPTION ITEM DOUBLE TANK CONFIGURATIONS”. At the top of this detail is a view showing a section through both tank floors with compacted stone fill between. What is the thickness of the stone fill?”

Response: The vertical distance between the bottom of the primary tank floor and the top of the secondary tank floor shall be a minimum of 12 inches.

2. Questions received from MWM South.

- “1. What are the diameters of the concrete foundations on the 100' and 120' diameter concrete tanks?
i.e., What is the distance from the tank OD to the foundation OD?”

Response: The foundation O.D. for the 100' diameter tank (prestressed concrete) is 100'. The foundation O.D. for the 120' diameter tank (Factory Coated Bolted Steel) is 121 ft 8 inches.

- “2. Can HDPE embed be used instead of S.S. Batten Bar System to seal liner to tank foundation?”

Response: No

- “3. Does 8' wide 60-MIL Rub pads get extrusion welded or are they just placed on the liner loose?”

Response: The Rub Pads shall be extrusion tack welded 5 ft on centers.

- “4. Plans indicate 60-MIL HDPE Liner. Spec book calls for 40-MIL HDPE Liner. Which one will be used in this project?”

Response: Only 60-MIL HDPE Liner

3. Questions received from John Fox of Florida Aquastore.

- "1. Is the roof handrail for the glass tank (Sec. 13412) to encompass the roof hatch as shown on plan sheet CD-4?" (Concrete leachate tank detail)

Response: The roof handrail detail on sheet CD-4 applies equally to both tank options.

- "2. Glass tank specifications (Sec. 13412) appear to refer to the std. glass roof with a 316 S.S. roof hatch when the roof for large diameter (34' & greater) utilizes a Temcor Aluminum dome with aluminum vent, handrail, & roof latch (All which meets or exceeds AWWA stds.) Please clarify."

Response: The specification for the roof has been revised in this Addendum to reflect the Aluminum dome.

- "3. Please confirm that the soil bearing capacity for the leachate tank(s) is 1500 PSF."

Response: The statement in the specification (Section 13412, paragraph 1.06 D.2.) was inadvertant. This statement is deleted as stated in this addendum.

- "4. Glass tank specifications (Sec. 13412) do not indicate any overflow(s), but plan sheet CD-4 shows (4) overflows on the concrete tank. Please clarify."

Response: Provisions for overflow pipes are provided in this addendum.

- "5. Glass tank specification requires coating of the primary tank slab, but concrete tank specification (13414-14 3.07 8) indicates the concrete tank interior (i.e. floor, walls & roof) shall not be coated or painted. Leachate is very corrosive and will attack concrete and therefore coating the concrete should be mandatory?"

Response: The concrete tank floors shall be protected by use of a microsilica admixture. The requirements for the admixture is provided for Sections 13412 and 13414 via this addendum.

IN THE SPECIFICATIONS

1. SECTION 02776 - HIGH DENSITY POLYETHYLENE (HDPE) LINER, ATTACHMENT A

Page 5, Item 1.2.2 CONTRACTOR'S REPRESENTATIVE, paragraph 1.2.2.2 RESPONSIBILITIES, In the seventh and eighth sentences replace the words "clay liner" with the words "liner system".

2. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

Paragraph 1.04, SUBMITTALS, Add the following:

"J. Submit concrete mix design for bottom slab which includes the provisions for microsilica admixture as required in paragraph 2.01 O".

Paragraph 1.06 DESIGN CRITERIA, sub-paragraph D, Delete item 2 in its entirety.

Paragraph 2.01 MATERIALS

Replace sub-paragraph F in its entirety with the following:

"The tank roof shall be constructed of non-corrugated triangular aluminum panels which are sealed and firmly clamped in an interlocking manner to a fully triangulated aluminum space truss system of wide flange extrusion, thus forming a spherical dome structure. The dome shall be clear-span and designed to be self supporting from the periphery structure with primary horizontal thrust contained by an intergral tension ring. The dome dead weight shall not exceed 3 pounds per square foot of surface area. The dome and tank shall be designed as an intergral unit. The roof material shall be as manufactured by TEMCOR or approved equal."

Add subparagraph O as follows:

- "O.1. The concrete floor in contact with leachate shall include microsilica admixture which shall be supplied in slurry or dry form as determined by supplier, such as Force 10,000 as manufactured by W.R. Grace and Co., Connecticut.

Permeability of microsilica concrete shall be tested by AASHTO T277-83 "Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete". Results of tests shall be expressed in electrical units of coulombs. Coulomb tests shall be made on two 4" x 8"

representative samples, moist cured for 90 days. Test cylinders shall be made according to ASTM C31. Coulomb requirement shall be 1,000 coulombs or less at 90 days."

Add subparagraph P. As follows:

- "P. The storage tank shall be equipped with a total of 4 overflow pipes. The overflow pipes shall be 6 inch diameter schedule 80 PVC pipes equipped with 180° bends and coated with an epoxy paint."

Paragraph 3.02 WATERPROOF COATING, Delete in its entirety.

Renumber paragraphs 3.03, 3.04, and 3.05 as paragraphs 3.02, 3.03, and 3.04 respectively.

3. SECTION 13415 - PRESTRESSED CONCRETE TANKS

Paragraph 1.03 SUBMITTALS , Add the following to sub-paragraph A:

- "3. Submit concrete mix design for shotcrete and bottom slab which includes the provisions for microsilica admixture as required in paragraphs 2.02 B and 2.03B."

Paragraph 2.03 FLOOR, Add the following:

- "B The concrete floor in contact with leachate shall include microsilica admixture which shall be supplied in slurry or dry form as determined by supplier, such as Forçe 10,000 as manufactured by W.R. Grace and Co., Connecticut.

Permeability of microsilica concrete shall be tested by AASHTO T277-83 "Standard Method of Test for Rapid Determination of the Chloride Permeability of Concrete". Results of tests shall be expressed in electrical units of coulombs. Coulomb tests shall be made on two 4" x 8" representative samples, moist cured for 90 days. Test cylinders shall be made according to ASTM C31. Coulomb requirement shall be 1,000 coulombs or less at 90 days."



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833

February 1, 1996

D.E.P.

FEB - 5 1996

SOUTHWEST DISTRICT
TAMPA

Mr. Kim Ford, P.E.
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Leachate Storage Tank and Treatment Facility
Pending Permit No. SC51-277316, Pasco County

Dear Mr. Ford:

The purpose of this letter is to address the following additional comments raised by the Department during our telephone conversation on January 31, 1996.

Comment 1: In the QA/QC document, section 1.2.2.2 page 5, the paragraph specifically addresses clay liner material testing. This project does not have any clay liner proposed.

Response: The project does not have any clay liner. The paragraph will be modified to replace the clay liner wording with liner system wording. This item will be addressed in the second addendum.

Comment 2: The Force 10,000 concrete admixture literature calls for a trial mixture prior to actual application. The project specifications do not stipulate same.

Response: The contractor is not required to prepare a trial mixture. However, the contractor is required to conduct testing of the shotcrete material in accordance with the project specification section 13414 under item 2.02 (B)(4). The engineer CQA staff will observe the sampling process and review the test results to ensure compliance with the project specifications.

Comment 3: What is the purpose of the water well shown on sheet CD-2.?

Response: The well is proposed for non-potable water use at the facility for purposes such as sanitary services and cleaning. The

Mr. Kim Ford, P.E.
February 1, 1996
Page 2

County will post signs throughout the facility to indicate the use of non-potable water. Potable water will be provided in bottled containers. We believe that this issue does not need to be addressed in the second addendum.

We trust that these responses will meet with your approval. If you have any questions or comments, please feel free to call me.

Sincerely,

CAMP DRESSER & McKEE INC.

A handwritten signature in cursive script, appearing to read "Darwish El-Hajji".

Darwish El-Hajji, P.E.

cc: Doug Bramlett, Pasco County
Vince Mannella, Pasco County
Dan Strobridge, CDM
John Banks, CDM



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

February 2, 1995 *lb*

Mr. Daniel Strobridge
CDM
One Tampa City Center
Suite 1750
Tampa, FL 33602

**Re: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County**

Dear Mr. Strobridge:

This is to acknowledge receipt of the additional information submitted on December 14, 1995 and January 11, 1996 in support of your permit application to construct a leachate storage tank and treatment facility.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit remains incomplete. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]. Please provide:

- (1) A site specific foundation analysis to demonstrate that the filled tank will be supported on a well drained, stable foundation. Please include all design specific calculations relating to expected structural settlement, and the supporting geotechnical investigation.
- (2) Two complete sets of final construction plans and specifications with addendums; and all tank design details either as part of the construction plans or as shop drawings, signed and sealed by a professional engineer.

Please provide all responses that relate to engineering required for construction and operation, signed and sealed by a professional engineer. This includes all technical responses that require conclusions and recommendations regarding existing site conditions.

Mr. Daniel Strobebridge
CDM

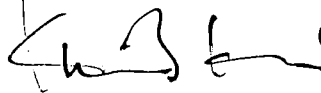
February 2, 1995
Page 2

"NOTICE! Pursuant to the provisions of Section 120.600, F.S. and Chapter 62-4.070, F.A.C., if the Department does not receive a response to this request for information within 30 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 30 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

Please be advised that publication of an Intent to Issue for the pending construction permit is required and may delay issuance of the permit upon receipt of all required information.

You are requested to submit your response to this letter as one complete package. On all future correspondence to the Department, please include Robert Butera on distribution. If there are points which must be discussed and resolved, please contact me at (813) 744-6100, extension 382.

Sincerely,



Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab

cc: Douglas Bramlett, Pasco County
Darwish El-Hajji, P.E., CDM Tampa
John Banks, P.E., CDM Tampa
Robert Butera, P.E., FDEP Tampa

CDM Camp Dresser & McKee Inc.

Date:

2/1/96

To:

Kim Ford, P.E.

From:

Darwish Q. El-Hajji, P.E.
Camp Dresser & McKee Inc.
One Tampa City Center, Suite 1750
Tampa, Florida 33602

(813) 221-2833

FAX (813) 221-2279

Project Number:

Number of pages sent (including cover sheet):

3

Kim, For your use.

Darwish

CDM Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833

FEBRUARY 1, 1996

Mr. Kim Ford, P.E.
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Leachate Storage Tank and Treatment Facility
Pending Permit No. SC51-277316, Pasco County

Dear Mr. Ford:

The purpose of this letter is to address the following additional comments raised by the Department during our telephone conversation on January 31, 1996.

Comment 1: In the QA/QC document, section 1.2.2.2 page 5, the paragraph specifically addresses clay liner material testing. This project does not have any clay liner proposed.

Response: The project does not have any clay liner. The paragraph will be modified to replace the clay liner wording with liner system wording. This item will be addressed in the second addendum.

Comment 2: The Force 10,000 concrete admixture literature calls for a trial mixture prior to actual application. The project specifications do not stipulate same.

Response: The contractor is not required to prepare a trial mixture. However, the contractor is required to conduct testing of the shotcrete material in accordance with the project specification section 13414 under item 2.02 (B)(4). The engineer COA staff will observe the sampling process and review the test results to ensure compliance with the project specifications.

Comment 3: What is the purpose of the water well shown on sheet CD-2.?

Response: The well is proposed for non-potable water use at the facility for purposes such as sanitary services and cleaning. The

County will post signs throughout the facility to indicate the use of non-potable water. Potable water will be provided in bottled containers. We believe that this issue does not need to be addressed in the second addendum.

We trust that these responses will meet with your approval. If you have any questions or comments, please feel free to call me.

Sincerely,

CAMP DRESSER & MCKEE INC.



Darwish EL-Hajji, P.E.

cc: Doug Bramlett, Pasco County
Vince Mannela, Pasco County
Dan Strobridge, CDM
John Banks, CDM

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 1/31/96 Subject W PASCO TANK
Time 9am Permit No. _____
County PASCO
M R DARWISSET - E. Telephone No. 2212833

Representing CDM

[] Phoned Me [☒] Was Called [] Scheduled Meeting [] Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting _____

Discuss 3 items:

① CQA pg 5, 1.2.2, Clay Liner.
BUT NOT ADPE ?

② WATER W/IN ON INTER CID-2 SHOULD BE
ADA POSSIBLE

③ SHORCOTE SPECS MILEAGE -

W/ PROPER SPECIAL DESIGN MIX

WITH SPECIAL ADMIXTURES AND

CQA OVERSIGHT, AND TRAIL MIX.

DARWISSET W/IN FAX RESPONSE TODAY.

(continue on another
sheet, if necessary)

Signature [Signature]

Title _____

CDM Camp Dresser & McKee Inc.

Date:

1/25/96

To:

Kim Ford

From:

Darwish Q. El-Hajji, P.E.
Camp Dresser & McKee Inc.
One Tampa City Center, Suite 1750
Tampa, Florida 33602

(813) 221-2833

FAX (813) 221-2279

Project Number:

Pasco County Leachate Tank

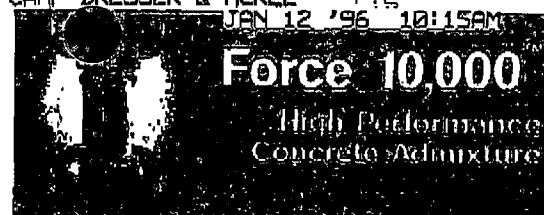
Number of pages sent (including cover sheet):

3

Kim, the enclosed material was left
out from the package we sent you. Please
add to the package.

Thanks

JAN 25 '96 05:44PM CDM - TAMPA & MCKEE

CAMP DRESSER & MCKEE P.2
JAN 12 '96 10:15AM

GRACE • CONCRETE ADMIXTURES

DESCRIPTION:

FORCE 10,000™ is a microsilica-based liquid admixture designed to increase concrete compressive and flexural strengths, increase durability, reduce permeability and improve hydraulic abrasion-erosion resistance. FORCE 10,000 contains a minimum of 5.5 pounds of microsilica and weighs 11.5±0.1 pounds per gallon.

USES:

FORCE 10,000 can be used to consistently produce concrete with strengths of 6,000 psi and higher in most instances with locally available materials and existing methods. It may also be used in precast and prestress applications where high early strengths are required.

The addition of FORCE 10,000 also produces concrete with increased watertightness and dramatically reduced permeability compared to conventional mixes. Reduced permeability is an important advantage in slowing the intrusion of chloride where corrosion of reinforcing steel is a potential problem. Examples are parking garages, bridge decks and concrete in a marine environment. FORCE 10,000 also enhances the durability of concrete against aggressive chemical attack and in hydraulic abrasion-erosion applications.

CHEMICAL ACTION:

FORCE 10,000 improves concrete through two mechanisms. The extremely fine microsilica particles are able to fill the microscopic voids between the cement particles, creating a less permeable structure. In addition, the microsilica reacts with the free calcium hydroxide within the concrete to form additional calcium silicate hydrate (glue), producing a tighter paste-to-aggregate bond.

ADDITION RATE:

FORCE 10,000 dosage rates will vary based on the requirements of the application. Dosage rates should be calculated on percent microsilica per hundred weight of cement, or on pounds per cubic yard of concrete, as appropriate. Dosage rates will be as specified. If not specified, consult your Grace representative for your particular job needs.

COMPATIBILITY WITH OTHER ADMIXTURES:

FORCE 10,000 is compatible with all conventional air entraining agents, water reducers, superplasticizers, set retarders and DCl® corrosion inhibitor. Only non-chloride set accelerators, such as Daracem®, may be used with FORCE 10,000 concrete. All admixtures must be added separately to assure their prescribed performance. Trial mixes and pretesting of concrete are recommended to optimize dosage rates, and ensure ultimate performance.

CONCRETE MIX:

FORCE 10,000 can be used in either central or transit mix concrete production, and in mobile mixers. FORCE 10,000

may be used in conjunction with water reducing admixtures (both normal and high range as approved by ASTM) to assure workability of the mix.

FORCE 10,000 does not affect concrete set times. When slump life extension is desired for transportation, finishing, etc, FORCE 10,000 may be used with an ASTM C494, Type G, slump extending superplasticizer like DARACEM™ 100 as manufactured by W.R. Grace & Co.-Conn., or approved equal.

MIX WATER REDUCTION:

Mix water adjustment is essential to account for the water in FORCE 10,000 and thus maintain the desired water/cement ratio. The mix water added at the batch plant must be reduced by 5.6 pounds of water per gallon of FORCE 10,000.

FINISHING AND CURING OF SLABS:

FORCE 10,000 concrete can be used in flatwork with little or no modification to the recommended practices outlined in ACI 302, "Guide for Concrete Floor and Slab Construction."

FORCE 10,000 will reduce the surface bleed water of concrete in large applications. ACI 308, "Standard Practice for Curing Concrete", must be followed to ensure that any problems that can occur due to decreased bleeding are minimized. Your Grace representative is available to review your particular job needs.

PRECONSTRUCTION TRIAL MIX:

It is strongly recommended that trial mixes be made several weeks before construction start up. This will allow the concrete producer an opportunity to determine the proper batching sequence and amounts of other admixtures needed in order to deliver the required concrete mix to the jobsite. A trial mix will also help determine whether the combination of concrete materials and construction practices will allow the concrete to meet a specified performance. Grace's broad experience with this product can help the concrete producer deliver a satisfactory product regardless of the mixture proportions. Contact your Grace salesman for help with trial mixes.

DISPENSING FORCE 10,000:

Dispensing equipment for the liquid FORCE 10,000 will be provided by W.R. Grace & Co.-Conn.

PACKAGING/AVAILABILITY:

FORCE 10,000 is available in bulk via Grace delivery vehicles. It is also available in 55 gallon drums.

FREEZING POINT:

FORCE 10,000 will freeze at approximately 32 degrees Fahrenheit. Care should be taken to prevent FORCE 10,000 from freezing, since once frozen the admixture is no longer useable.

FLAMMABILITY:

None.

Copyright 1989, W. R. Grace & Co.-Conn.

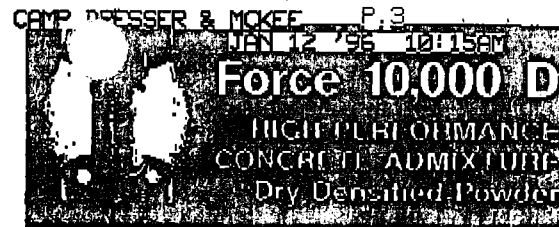
We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would infringe any patent or copyright. Construction Products Division, W.R. Grace & Co.-Conn., 62 Whittemore Ave., Cambridge, Mass. 02140

PL-48

GRACE
Construction Products

Printed in U.S.A. 04/89P 0/00 0000

JAN 25 '96 05:45PM CDM - JAMPAR & MCKEE



GRACE • CONCRETE ADMIXTURES

DESCRIPTION:

FORCE 10,000® D is a dry denseified microsilica powder designed to increase concrete compressive and flexural strengths, increase durability, reduce permeability and improve hydraulic abrasion-erosion resistance.

TERMINOLOGY:

Microsilica is also known as silica fume. Denseified powder is the same as compacted powder. **FORCE 10,000** is a liquid slurry microsilica product, while **FORCE 10,000 D** is a dry denseified microsilica powder. The effect of either product on the properties of concrete are equivalent.

USES:

FORCE 10,000 D can be used to consistently produce concrete with strengths of 8,000 psi and higher in most instances with locally available materials and existing methods. It may also be used in precast and prestress applications where high early strengths are required.

The addition of **FORCE 10,000 D** also produces concrete with increased watertightness and dramatically reduced permeability compared to conventional mixes. Reduced permeability is an important advantage in slowing the intrusion of chloride where corrosion of reinforcing steel is a potential problem. Examples are parking garages, bridge decks and concrete in a marine environment. **FORCE 10,000 D** also enhances the durability of concrete against aggressive chemical attack and in hydraulic abrasion-erosion applications.

CHEMICAL ACTION:

FORCE 10,000 D improves concrete through two mechanisms. The extremely fine microsilica particles are able to fill the microscopic voids between the cement particles, creating a less permeable structure. In addition, the microsilica reacts with the free calcium hydroxide within the concrete to form additional calcium silicate hydrate (glue), producing a lighter paste-to-aggregate bond.

ADDITION RATE:

FORCE 10,000 D dosage rates will vary based on the requirements of the application. Dosage rates should be calculated on percent microsilica per hundred weight of cement, or on pounds per cubic yard of concrete, as appropriate. Dosage rates will be as specified. If not specified, consult your Grace representative for your particular job needs.

COMPATIBILITY WITH OTHER ADMIXTURES:

FORCE 10,000 D is compatible with all conventional water reducers, superplasticizers, set retarders and DCl® corrosion inhibitor. Any air entraining agent which works effectively with superplasticizers and microsilica, particularly vinyl resins such as **DARAVAIR®** by W.R. Grace, are recommended. Only non-chloride set accelerators, such as **DARASET®**, may be used with **FORCE 10,000 D** concrete. All admixtures must be added separately to assure their prescribed performance. Trial mixes and pretesting of concrete are recommended to optimize dosage rates, and ensure ultimate performance.

PACKAGING:

FORCE 10,000 D is available in bulk and 50 pound bags.

STORING AND DISPENSING:

Bulk **FORCE 10,000 D** may be stored in already existing cement silos. The silos must be completely clean with no foreign residue remaining which may cause contamination. Up-pipes to the silo for unloading bulk tankers should also be clean and clear of obstructions. Small diameter (4") rigid metal pipes with several angles (especially right angles) will cause longer unloading times. Large diameter (8") flat lined, flexible rubber pipes will allow for the least unloading time. Dispensing bulk **FORCE 10,000 D** will take place in the same manner as that used for cement. Augering or dropping from the silo to the weigh hopper is the usual practice. Bagged **FORCE 10,000 D** should be stored in a dry, protected area. Manual dispensing by tearing the bags is the normal method. A simple dust mask should be used when dispensing the bagged product. **FORCE 10,000 D** is not considered a health hazard.

CONCRETE MIX:

FORCE 10,000 D can be used in either central or transit mix concrete production. **FORCE 10,000 D** may be used in conjunction with water reducing admixtures (both normal and high range as approved by ASTM) to assure workability of the mix.

FORCE 10,000 D does not affect concrete set times. When slump life extension is desired for transportation, finishing, etc., **FORCE 10,000 D** may be used with an ASTM C 494, Type G, slump extending superplasticizer like **DARACEM® 100** as manufactured by W.R. Grace & Co.-Conn., or approved equal.

CONCRETE PERFORMANCE:

FORCE 10,000 D will improve the mechanical properties of concrete. In order to meet specified concrete performance levels, however, many variables are involved. These include, but are not limited to: concrete materials, weather conditions, testing techniques and mixing, transporting, placing and finishing practices. ACI and ASTM guidelines must be strictly adhered to.

PRECONSTRUCTION TRIAL MIX:

It is strongly recommended that trial mixes be made several weeks before construction start up. This will allow the concrete producer an opportunity to determine the proper batching sequence and amounts of other admixtures needed in order to deliver the required concrete mix to the jobsite. A trial mix will also help determine whether the combination of concrete materials and construction practices will allow the concrete to meet a specified performance. Grace's broad experience with this product can help the concrete producer deliver a satisfactory product regardless of the mixture proportions. Contact your Grace salesman for help with trial mixes.

FINISHING AND CURING OF SLABS:

FORCE 10,000 D concrete can be used in formwork with little or no modification to the recommended practices outlined in ACI 302, "Guide for Concrete Floor and Slab Construction."

FORCE 10,000 D will reduce the surface bleed water of concrete in large applications. ACI 308, "Standard Practice for Curing Concrete", must be followed to ensure that any problems that can occur due to decreased bleeding are minimized. Your Grace representative is available to review your particular job needs.

FLAMMABILITY:

None.

Copyright 1989 W. R. Grace & Co.-Conn.

We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the user's consideration. Investigation and verification but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would infringe any patent or copyright. Construction Products Division, W.R. Grace & Co.-Conn., 62 Whittemore Ave., Cornwall, Mass 02440

PS-26

GRACE
Construction Products

Printed in U.S.A. FA/OPS 4/89 5000



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833 Fax: 813 221-2279

RECEIVED
JAN 25 1996

Department of Environmental Protection
SOUTHWEST DISTRICT

BY _____

January 24, 1996

Mr. Kim Ford, P.E.

Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Leachate Storage Tank and Treatment Facility
Pending Permit No. SC51-277316, Pasco County

Dear Mr. Ford:

The purpose of this letter is to provide you with the information you requested at our meeting on January 11, 1996 and in a subsequent telephone conversation with Mr. Dan Strobridge of our office.

I have enclosed two copies of Addendum No. 1 which was issued to the contractors on January 23, 1996. The addendum addresses the issues raised by the Department, modifications to the contract documents, and the minutes from the pre-bid conference held on January 22, 1996.

Regarding other issues raised at our meeting:

Issue 1-Provide Spec for Concrete Admixture

A copy of the Force 10,000 High Performance Concrete Admixture specification is enclosed, as you requested. This admixture will be incorporated in the concrete mix for the storage tank to protect the tank walls and bottom from leachate chemical attack.

Issue 2-Add Specifications for Coarse Sand

Please note that the attached addendum changes the "coarse sand" called for in the leak detection system on sheet CD-2 to "concrete sand." The concrete sand specification is included under the "fine aggregate" section of the concrete mixtures in specification Section 03301.

Mr. Kim Ford, P.E.
January 24, 1996
Page 2

✓
Issue 3-Check Gravel Size Around Leak Detection Pipe

✓
The leak detection pipe design was checked using the U.S. Army Corps of Engineers criteria for drainage media gradation in relation to pipe openings. The proposed pipe openings are circular 1/4-inch-diameter holes. The proposed drainage media will meet FDOT aggregate size No. 89. A copy of the FDOT gradation table is attached for your information. To determine the D_{85} of the drainage media, a weighted average calculation was performed using the FDOT gradation table.

The average percent passing size "D" for the two size columns closest to 85 percent was used to estimate the size for the D_{85} . The resulting value demonstrates that FDOT No. 89 is acceptable gravel media, as shown in the attached calculations.

Camp Dresser & McKee realizes that the Department cannot issue a construction permit until the foundation analysis has been submitted to the Department. The analysis will be submitted shortly after bid award. We trust that this submittal, with the exception of the foundation analysis, satisfies the Department's request for additional information dated December 7, 1995.

If you have any questions or require additional information, please do not hesitate to call me.

Sincerely,

CAMP DRESSER & McKEE INC.

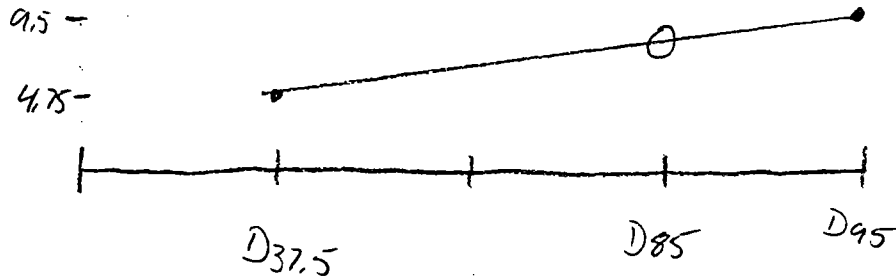
Darwish Elhajji

Darwish El-Hajji, P.E.

c: Doug Bramlett, Pasco County (w/o addendum)
Vince Mannella, Pasco County (w/o addendum)
Dan Strobridge, CDM (w/o addendum)
John Banks, CDM (w/o addendum)

CLIENT Pasco County
 PROJECT Lea site tank
 DETAIL _____

 JOB NO. _____
 DATE CHECKED _____
 CHECKED BY D. Wick

 COMPUTED BY JAB
 DATE 11/23/96
 PAGE NO. _____

 Find D_{85} given:

$$D_{95} = 9.5 \text{ mm}$$

Assume linear Relationship

$$D_{37.5} = 4.75 \text{ mm}$$

$$\text{Slope of curve} = \frac{9.5 - 4.75}{D_{95} - D_{37.5}} = \frac{4.75}{57.5}$$

$$D_{85} = 9.5 - \left(\text{distance away from } D_{95} \text{ times the slope} \right)$$

$$= 9.5 - \left[D_{95} - D_{85} \times \frac{4.75}{57.5} \right]$$

$$= 9.5 - \left(\frac{10 \times 4.75}{57.5} \right)$$

$$= 8.67$$

Check for compliance with COE equation

$$\frac{D_{85}}{\text{Hole Diam}} > 1.2 \quad \frac{8.67 \text{ mm}}{6.35 \text{ mm}} = 1.37 \quad \checkmark$$



$$1/4" = 6.35 \text{ mm}$$

TABLE 1 (Continued)
Standard Sizes of Coarse Aggregate

Aggregate Size Number	Nominal Size Square Openings	Amounts Finer than Each Laboratory Sieve (Square Openings), percent by weight						
		19.0 mm	12.5 mm	9.5 mm	4.75 mm	2.36 mm	1.18 mm	300 µm
1	90 to 37.5 mm	0-5						
2	63 to 37.5 mm	0-5						
24	63 to 19.0 mm	0-10	0-5					
3	50 to 25.0 mm		0-5					
357	50 to 4.75 mm		10-30		0-5			
4	37.5 to 19.0 mm	0-15		0-5				
467	37.5 to 4.75 mm	35-70		10-30	0-5			
5	25.0 to 12.5 mm	20-55	0-10	0-5				
56	25.0 to 9.5 mm	40-85	10-40	0-15	0-5			
57	25.0 to 4.75 mm		25-60		0-10	0-5		
6	19.0 to 9.5 mm	90-100	20-55	0-15	0-5			
67	19.0 to 4.75 mm	90-100		20-55	0-10	0-5		
68	19.0 to 2.36 mm	90-100		30-65	5-25	0-10	0-5	
7	12.5 to 4.75 mm	100	90-100	40-70	0-15	0-5		
78	12.5 to 2.36 mm	100	90-100	40-75	5-25	0-10	0-5	
8	9.5 to 2.36 mm		100	85-100	10-30	0-10	0-5	
89	9.5 to 1.18 mm		100	90-100	20-55	5-30	0-10	0-5
9	4.75 to 1.18 mm			100	85-100	10-40	0-10	0-5
10	4.75 mm			100	85-100			

NOTE: The gradations in Table 1 represent the extreme limits for the various sizes indicated, which will be used in determining the suitability for use of coarse aggregate from all sources of supply. For any grade from any one source, the gradation shall be held reasonably uniform and not subject to the extreme percentages of gradation specified above.

901-2 Natural Stones.

Course aggregate may be processed from gravels, granites, limestones, dolomites, sandstones, or other naturally occurring hard, sound, durable materials meeting the requirements of this Section.

901-2.1 Gravels: Gravel shall be composed of naturally occurring quartz, free from deleterious coatings of any kind. The minimum dry-rodded weight (FM 1-T 019) shall be 1522 kg/m³.

Crushed gravel shall consist of 85%, by weight, of the material retained on the 4.75 mm sieve, having three crushed faces.

901-2.2 Granites: Coarse aggregate produced from the crushing of granites shall be sound and durable. For granites to be used in bituminous mixtures and surface treatment, the Los Angeles Abrasion requirement of 901-1.3 is modified to permit a maximum loss up to 50 (FM 1-T 096). Maximum amount of mica schist permitted is 5% (AASHTO T 189).

901-2.3 Limestones, Dolomites and Sandstone: Coarse aggregates may be produced from limestone, dolomites, sandstones, and other naturally occurring hard, durable materials meeting the requirements of this Section.

Pre-Cenozoic limestones and dolomites shall not be used as crushed stone aggregate either coarse or fine for Asphaltic Concrete Friction Courses, or any other asphaltic concrete mixture or surface treatment serving as the final wearing course. This specifically includes materials from the Ketona Dolomite (Cambrian) Newala Limestone (Mississippian), and Northern Alabama and Georgia.

As an exception to the above up to 20% fine aggregate from these materials may be used in asphaltic concrete mixtures other than Friction Courses which serve as the final wearing course.

901-2.4 Cemented Co-
bituminous mixtures, the
permit a maximum loss up
than 75 µm generated duri

901-3 Manufactured St

901-3.1 Slags: Coarse
products consisting essenti
such as air-cooled blast-fur
in density and quality, and

901-1.2. In addition it mu

Sulphur content .

Dry rodded weigh

Glassy Particles .

Slag shall not be use

For Air-Cooled Bla

901-1.3 is modified to per
amount of material finer t
less than 18%.

901-4 Lightweight Agg

Lightweight coarse aggr
as pumice, scoria and tuf
It shall be reasonably uni
as specified in 901-1.2, e
particles clearly foreign to

In addition, it must me

Material passing the

Dry loose weight (F

Los Angeles Abrasic

Ferric Oxide (ASTM

*Source shall maintain dry-l
dry-loose unit weight shall t

901-5 Reclaimed Portl

The reclaimed portland
provide a clean, hard, du
coatings, steel reinforcem
materials. The processin
Standard Operating Proce
Sources.

901-6 Exceptions, Adc

Pertinent specification
Sections of the specificat

depends on flow through leaks in the top liner. In this case, pipe size and spacing need to be sufficient to allow rapid transmission of liquids and need not be designed to remove some predetermined volume rate of flow (EPA, 1985). In the field, 2-in. diameter pipes have been used, particularly in early design. At present, 6-in. diameter pipes are generally used and are recommended since larger pipes allow for simpler system maintenance and greater protection against clogging (E. C. Jordan, 1984). Ramke (1986) recommends using 200-mm (8-in.) pipe in order to ensure that the pipes can be inspected by television probes and can be cleaned out with rinsing devices. Equations for using leachate flow rate to determine pipe size and spacing are presented in Appendix I.

The collection pipe design must consider the size, spacing, and orientation of holes or slots used to perforate the pipe. Perforations must allow the leachate or waste to pass but prevent the passage of granular drainage media into the collection pipe. The size or diameter of these perforations, therefore, must be matched with the particle size of the drainage media. Satisfactory performance can be expected (Young et al, 1982) if the drain gravel gradation and perforation, diameter, or slotting width selected for the drain pipe satisfies the following U.S. Army Corps of Engineers (1955) criteria for gradation of filter materials in relation to pipe openings:

For slots:

$$\frac{D_{85} \text{ of the drainage media}}{\text{slot width}} \geq 1.2.$$

For circular holes:

$$\frac{D_{85} \text{ of the drainage media}}{\text{hole diameter}} \geq 1.2.$$

The Bureau of Reclamation (1977, p 235) uses the following criterion for grain size of filter materials in relation to openings in pipes:

$$\frac{D_{85} \text{ of the drainage media nearest the pipe}}{\text{maximum opening of drain pipe}} \geq 2.$$

where D_{85} is the screen size through which 85% of the drain rock (by weight) can pass. Cedergren (1967) suggests that the above equations represent a reasonable range over which satisfactory performance can be expected. Another criterion for pipe hole size considers the movement of liquid in the pipe as a function of the ratio between slot width and the wall thickness of the drain pipe. Knobloch (1969) recommends that the ratio of the slot width to wall thickness should be greater than or equal to 1.5 in order to maintain the widest possible hole with low flow resistance. The spacing of perforations depends on flow as well as pipe strength considerations (Mohamed and Skaggs, 1983).

A horizontal decorative line composed of approximately 30 small black diamonds arranged side-by-side.

John A. Banks, P.E.
Date: _____

ADDENDUM NO. 1
PASCO COUNTY LEACHATE STORAGE TANK AND TREATMENT FACILITY.

A. IN THE SPECIFICATIONS

1. SECTION 00100 - INSTRUCTION TO BIDDERS

Article 9.1, delete the sentence which reads "The amount of subcontract work shall not exceed forty-nine percent (49%) of the work".

2. SECTION 00490 - PUBLIC ENTITY CRIME FORM

Delete in its entirety

3. SECTION 00500 - AGREEMENT

Article 3.2, third sentence: Change "...the amount of Three Thousand Dollars (\$1,000.00) for each..." to read as follows "...the amount of One Thousand Dollars (\$1,000.00) for each..."

Change "...and Two Thousand Dollars (\$500.00) for each..." to read as follows "...and Five Hundred Dollars (\$500.00) for each...."

Article 7.8, change "December 1995" to read "January 1996"

4. SECTION 00850 - DRAWING INDEX

Add after sheet No. S-1; "S-2 Leachate Treatment Facility Plans and Details."

5. SECTION 01010 - SUMMARY OF WORK

Page 01010-1, paragraph 1.02, subparagraph B, Item 4 change to read as follows:

"4. Installation of yard piping and connecting to existing yard piping."

6. SECTION 01100 - SPECIAL PROJECT PROCEDURES

Page 01100-4, paragraph 1.12, subparagraph A, delete the last sentence. Also, subparagraph C, delete in its entirety

7. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

✓
Page 13412-1, paragraph 4b, In the sentence that reads "The inlet diameter shall be . . .", change "4" to "6" inches and the outlet diameter shall be . . .", change "6" to "4" inches."

8. SECTION 13412 - FACTORY COATED BOLTED STEEL TANK

✓ Page 13412-2, paragraph 4f, In the sentence "Level indicator shall be located adjacent to the ...", change "6" to "4" . . . inch outlet.

9. SECTION 13414- PRESTRESSED CONCRETE TANKS

✓ Page 13414-6, paragraph E, In the sentence "Report of Geotechnical Investigation by Jammal and Associates", change "is appended to these specifications" to "is available with the purchase of Bid documents and for examination at the office of the ENGINEER".

10. SECTION 16191 - MISCELLANEOUS EQUIPMENT

Page 5, change Section "2.08" to read "2.02".

IN THE CONSTRUCTION QUALITY ASSURANCE MANUAL:

11. SECTION 10 - DEFINITIONS AND RESPONSIBILITIES

✓ Page 2, paragraph 1.1.3 , last sentence to read . . . "These geomembranes include 60 mil high density polyethylene (HDPE) membranes."

12. SECTION 5.0 - TESTING, EXECUTION AND FIELD QUALITY CONTROL

✓ Page 32, paragraph e, Change "5)" to "4)"

13. APPENDIX B - HDPE AND PVC MATERIAL PROPERTY AND FACTORY AND FIELD SEAMS PROPERTIES

2- Page 60, TABLE B-2, Is provided in its entirety with this Addendum No.1.

14. TABLE OF CONTENTS

✓ A revised Table of Contents is provided with this Addendum No. 1

15. TABLE 1-1 - PROJECT PERSONNEL RESPONSIBILITY

✓ Page 3, Replace in its entirety with new table provided with this Addendum No.1.

B. ON THE DRAWINGS

1. Sheet CD

- 1. Detail A, replace "3" plug valve (typ)" with "3" true union PVC Ball Valve (typ)", replace "1 ½ "plug valve" with "1 ½" true union PVC ball valve".
- 2. Sections 1 & 2, Delete the words "Uniflange"; also change sheet call outs from "C-2" to read "C-3".

2. Sheet CD-2

- 1. Detail A, change "6" or 12" non-perforated PVC Pipe" to read "4" or 12" non-perforated PVC Pipe". Add Note: "INV. EL. Is for 12" Gravity Pipe only."
- 2. Section 1, change "course sand" to read "concrete sand"
- 3. Bid Option Item Detail, Change "6" Outlet", "6" PGV" and "6" secondary outlet" to read, "4" outlet", "4" PGV" and "4" secondary outlet"

3. Sheet CD-3

- 1. Detail A, Distillate Storage Tank, add the following note:
"Steel tank shall be ¼" A36 C.S. painted inside with SP10 plus 2 coats Tnemec Pota Pox, external paint SP6 plus 2 coats Epoxy paint."
- 2. Detail B, delete "(Optional)"; also change the sheet call out from "C-2" to read "C-3".

4. Sheet P-2, All references which state: "See mechanical drawings for continuation" change to read as follows: "Coordinate location with process Equipment Contractor".

5. Sheet E-2, add note 9. to read as follows: "9. The method of installation across driveways is at the Contractor's option provided that traffic is maintained during normal solid waste delivery hours (7 a.m. - 5 p.m. Monday through Saturday). Any open cuts to pavement must be repaired to the same design as the existing pavement."

6. Sheet E-3, add note 5. to read as follows: "5. Notify facility operator of schedule for work within the power plant structure and provide every opportunity for facility operator to observe work."

7. Sheet E-4, The note for Exhaust fan EF-1 elementary diagram, "Site 1, 3P full voltage non-reversing combination motor starter w/NEMA 12 enclosure" shall be changed to read as follows; "Size 1, 3P Full Voltage non-reversing combination motor starter w/NEMA 4X Stainless Steel Enclosure"

8. Sheet E-5

Erase all bare copper home runs from the ground rods except for the bare copper home runs from the ground rod where the note is located.

Change note for bare copper home runs from ground rod from: "To equipment by others confirm location in field (TYP)" to read "To equipment by others confirm location in field (TYP of 22)"

**PASCO COUNTY UTILITIES SERVICES BRANCH
LEACHATE STORAGE TANK AND TREATMENT FACILITY
COUNTY BID NO. 96-033
CDM PROJECT NO. 6104-30**

**PRE-BID CONFERENCE
January 22, 1996**

The Pre-Bid Conference for the Pasco County Leachate Storage Tank and Treatment Facility was held on January 16, 1996 at 10:00 a.m. at the Pasco County Solid Waste Energy Recovery Facility Conference Room. Those in attendance were:

Vince Mannella	Pasco County
Peter Neustadt	Pasco County Purchasing
Dan Strobridge	Camp Dresser & McKee
John Banks	Camp Dresser & McKee
Jeff Streeter	Fabco Constructors
Daniel G. Hunt	Smith Environmental
Greg Mullins	Codi Environmental
Steve Voytoko	Moretrench Environmental Services
David G. Eldridge	Eclipse Construction
Mark Amsingen	Great Monument Construction
Mike Slaton	Spartan
Philip Gray	RM Williams Contractors

1. Introductions

Peter Neustadt introduced himself representing the Pasco County Purchasing Division. He stated the pre-bid conference was not mandatory and therefore, anyone not present may still be eligible to bid the project. He also stated that after this meeting all dialog stops. Any questions after the pre-bid meeting must be submitted in writing to the Purchasing Division. Technical questions will be forwarded to the Engineers for the appropriate response.

Vince Mannella introduced himself as Director of Contract Services and Solid Waste for Pasco County.

Dan Strobridge introduced himself as the Project Manager for Camp Dresser and McKee (CDM). John Banks introduced himself as the Project Engineer for CDM.

Pasco County is the Owner for the Leachate Storage Tank and Treatment System Facilities which is a part of the Pasco County Utilities Services Branch Solid Waste System located at this site.

1. **PURPOSE**

Dan Strobridge stated the purpose of this meeting is to ask questions regarding the Pasco County Leachate Storage Tank and Leachate Treatment System. These questions will be discussed and/or clarified in addenda. Nothing said during this meeting, as far as clarifications and/or answers is to be taken as an official answer and shall not modify the contract documents. The answers will be covered in an addenda and at that time will become an official clarification and/or answer to your question.

2. **PROJECT INFORMATION**

Dan Strobridge stated the project is to provide the civil sitework and building components to house process equipment to treat landfill leachate.

As advertised, bids shall be submitted for furnishing, delivering and installing all materials, equipment and services, including labor, for the work, to construct the Leachate Storage Tank and Treatment Facilities, in its entirety as shown on the drawings and specified herein:

- Scope of work shall include but not be limited to:
 1. Furnishing and installing a 2 million gallon Leachate Storage Tank complete with a 2.2 million gallon secondary containment system.
 2. Furnishing and installing a leachate transfer pumping system, pump control panel and associated piping .
 3. Furnishing and installing a distillate transfer pumping system, control panel, and associated piping.
 4. Furnishing and installing a water well, pump, bladder tank, control panel and associated piping.
 5. Furnishing and installing yard piping, valves and fittings and connections to pipelines provided by others.
 6. Furnishing and installing electrical power supply conduit and cable.
 7. Furnishing and installing a 10,000 gallon steel distillate storage tank.
 8. Providing site clearing, grading and earthwork.
 9. Furnishing and installing an approximate 2200 sq ft pre-engineered metal building and associated appurtenances.
 10. Construction of concrete foundation slabs for process equipment to be installed by others.
 11. Construction of asphalt pavement.
 12. Furnishing and installing sod.
 13. All miscellaneous work and cleanup.

Work shall include construction and modifications of all facilities required to complete, test and make ready for operations all work specified in the Contract Documents.

Bidders are advised that, because construction will take place within an operating landfill facility, care will be required during construction to minimize the impact of construction on existing traffic patterns. The project control provisions of the Contract shall be strictly adhered to and enforced.

The scheduling of the work is essential to project control and timely completion. Further, be advised of construction constraints included in Specification Section 01014. Please note, the listed constraints are not intended to release the Contractor from the responsibility to coordinate the work in any manner which will ensure project completion within the time allowed.

3. **CONTRACT TIME**

Dan Strobridge advised bidders that time is of the essence for this project. Section 00500, Article 3 states 180 calendar days to Substantial and 210 to Final Completion. Please be advised, Specification Section 01010, Paragraph 1.04 of "Work Sequence" states the definition of Substantial and Final Completion.

4. **QUESTIONS NON-TECHNICAL (BIDDING)**

Dan Strobridge stated the following bid documents are attached to and made a condition of this Bid:

1. Bid Form (Section 00300).
2. Bid Security (Surety bond, cashier's check or certified check; five(5) percent of maximum bid price, Section 00350).
3. Certification of Compliance with the Trench Safety Act Requirements (Section 00495).
4. Power of Attorney (for Surety Bond Only).

5. **SUBCONTRACTORS**

Dan Strobridge stated (Article 9 of Section 00100) - Instruction to Bidders states "The amount of subcontract work shall not exceed forty-nine percent (49%) of the work.

[However, upon further review it was determined that this requirement shall be waived for this project. This change is included in the changes in the specification listed in this addendum.]

6. **ADDENDA**

Mr. Strobridge stated we anticipate issuing an addendum by January 23, 1996, subject to other comments developed at this meeting.

7. **GENERAL DISCUSSION AND QUESTIONS**

Mr. Strobridge asked if you have a question related to the requirements of the project, please state your name, your organization and your question. The minutes are being recorded so speak clearly.

John Banks provided an overview of the project site plan. The overall site plan, sheet C-1 provides the location of the proposed facilities relative to existing structures. There are four options for the leachate storage tank. Two options include a geomembrane secondary

containment system which is shown on the drawings. The other two options include a dual tank secondary containment system. If the contractor selects one of the dual tank options, the location of the leachate storage tank and the limits of construction will be modified, as noted on the drawings, to decrease the area of construction as the secondary containment berm will not be required.

An existing fence must be relocated. The process building will be located in the area of the existing fence. The contractor must connect to the 6" leachate force main at the location shown on the drawings. There will be a 6" reuse pipeline and 4" wastewater force main to be provided by the county to which the contractor must connect yard piping. There is also a 2" distillate force main to be provided by the County and the contractor shall connect to at the location shown on the drawings. The power supply duct bank must be installed by the contractor to the power plant. A drainage swale shall be installed to the existing dry retention pond. A leachate transfer pump shall be installed to transfer leachate from the leachate storage tank to the treatment process building. There are two process equipment pads outside the process building and a for the distillate storage tank. There is also an asphalt driveway and parking area which the contractor must construct.

Mr. Banks pointed out that the bid form requires the contractor to select one leachate storage tank option. Should the contractor select one of the dual tank options, earthwork associated with the geomembrane secondary containment system will not be required nor will the 12" gravity drain line from the containment area be required. The drawings do provide a piping detail for the dual tank system to provide a drain from the secondary containment area.

There will be a gas pipeline to be provided by the gas company (People's Gas) and the contractor must coordinate construction activities with the gas company. The gas company has been given the information on the project.

There is additional information in the specifications from the process vendor, RCC (Resources Conservation Company) related to the process building slab and outside pads. The information from RCC provides the location of the equipment pads and anchor bolt information.

Questions/Answers

Question 1: Steve Voytko of Moretrench asked if the County had any preference as to the tank option and if that would have any determination on the award.

Answer: Mr. Mannella said No.

Question 2: Mike Slaton of Spartan asked if this project would be performed this year.

Answer: Mr. Mannella answered Yes.

Question 3: David Eldridge of Eclipse Construction asked if there will be any permits the contractor will have to pull to construct this project.

- Answer: Mr. Mannella said the contractor will be responsible for the standard building permits. He also said the County will waive the building permit fee.
- Question 4: Steve Voytko of Moretrench asked if startup and acceptance testing requirements include the process equipment to be provided by others.
- Answer: Mr. Mannella answered that startup and testing would include only the items included in this contract.
- Question 5: Steve Voytko of Moretrench asked how the process equipment package would be bid.
- Answer: Dan Strobridge answered that RCC would be taking bids for that part of the work and that the list of the pre-bid attendees would be provided to RCC.
- Question 6: Jeff Streeter of Fabco Construction asked if the leachate storage tank can be cast in place.
- Answer: John Banks answered that the Leachate Storage Tank options were prestressed concrete or glass fused steel bolted construction.
- Question 7: Jeff Streeter of Fabco asked if the geomembrane liner was required if the dual tank option was used.
- Answer: John Banks answered that if one of the dual tank options is selected, no geomembrane liner is required. Mr. Banks pointed out the dual tank option must include a double bottom in the tank with leak detection capability as shown on the drawings and that the tanks shall not have a common slab bottom.
- Question 8: Jeff Streeter of Fabco asked if the 6" drainline shown on sheet CD-2, dual tank detail, was correct.
- Answer: Dan Strobridge said that line should be a 4" line and this would be corrected in the addendum.
- Question 9: Steve Voytko asked if minority participation is required.
- Answer: Mr. Mannella answered that it is welcome but not mandatory.
- Question 10: Jeff Streeter of Fabco stated the amount of liquidated ~~drainage~~ damage referred to in Section 0500, page 1 was inconsistent between the written amount and the numerical amount shown.
- Answer: Dan Strobridge stated this would be clarified in the addendum.
- Question 11: Mike Slaton of Spartan asked if the terms and conditions requires the contractor to accept consequential damages.

Answer: Dan Strobridge answered that this issue will be addressed in the addendum. Mr. Mannella stated that the electrical revenues for the power plant are about \$900,000 per month. If divided by 30, you have the daily revenues the County stands to lose should the plant not be able to operate. The County would also have to buy 4 megawatts/hr of electricity for their operations.

Section 5.4.5 of the Construction Contract requires the Contractor to carry liability insurance for claims for damages other than to the work itself, because of injury to or destruction of tangible property wherever located, including loss of use therefrom. . . .

Question 12: Jeff Streeter of Fabco asked if the dirt for the berms is on-site.

Answer: John Banks answered that there is some excavation involved but that the site is not represented as a balanced site. Mr. Strobridge clarified that you should not plan on material for the berm being available on-site. Mr. Strobridge brought up an issue related to consequential damages. He stated that the Power Plant Operator would be responsible for the termination of the power supply wiring, inside their facility. The contractor's responsibility would end at the back wall of the facility. **(Subsequent review of the contract documents, found this statement to be not correct. The contract documents show the contractors responsibility inside the power plant structure including installation of the feeder breaker - see sheets E-2 and E-3 of the drawings. The contractor shall coordinate all work inside the Resource Recovery Facility with the facility manager, Mr. Bob Sitz.)**

Question 13: Jeff Streeter asked if land clearing debris can be disposed on-site by burning.

Answer: Dan Strobridge said on-site burning is allowed provided the contractor acquires the appropriate burn permits.

Question 14: An unidentified person asked for the engineer's cost estimate.

Answer: Dan Strobridge said the engineers estimate of this construction is 1.25 million and there is an additional identified \$50,000 contingency on the bid form subject to approval of the County.

Question 15: An unidentified person asked if ENGINEER was going to specify the method of constructing the duct bank under the driveways.

Answer: A response will be given in the Addenda. **(Method of construction is the Contractor's option. Open cutting is acceptable provided that traffic is maintained during normal solid waste delivery hours. See Item B.5. of this Addendum No. 1.)**

9. **COMMENTS FROM OWNER, ENGINEER AND OTHERS**

There were no additional comments.

10. **BIDS**

Mr. Strobridge stated Sealed Bids must be received in triplicate by the Pasco County Purchasing Department, Attn: Frank Fortino, Purchasing Director, either by mail or hand delivery, no later than 2:00 p.m. on Tuesday, February 13, 1996, at the following address:

Pasco County Purchasing Department
8919 Government Drive
New Port Richey, Florida 34654

Bids shall be submitted in triplicate at or before the time and at the place indicated in the Advertisement For Bids and shall be submitted in an opaque sealed envelope. The envelope shall be marked on the exterior "LEACHATE STORAGE TANK AND TREATMENT FACILITY, BID NUMBER: 96-033, OPEN DATE: FEBRUARY 13, 1996 AT 2:00 P.M., FRANK FORTINO, PURCHASING DIRECTOR" and other markings as required.

Opening and Reading: The Bids will be publicly opened and read aloud at 2:00 p.m. on Tuesday, February 13, 1996, in the Purchasing Department, 8919 Government Drive, New Port Richey, Florida 34654. Bids received after the above time will not be accepted under any circumstances. Any uncertainty regarding the time a Bid is received will be resolved against the Bidder.

11. **TOUR OF PROJECT**

Mr. Strobridge invited attendees to a site tour conducted today, January 16, 1996, immediately following the Pre-Bid Conference. Mr. Mannella gave instruction on how to attend the site tour.

12. **ADJOURN**

Mr. Mannella asked if you have not signed the Pre-Bid Attendance Sheet, please do so before leaving. On behalf of Pasco County; Thank you for your interest in this important Pasco County Project. Mr. Newstand stated that all questions be faxed to the attention of Frank Fortino at (813) 847-8065 and to please include the bid number on the fax (96-033).

TABLE B-2

MATERIAL PROPERTIES
POLYVINYL CHLORIDE (PVC) LINER

Properties	Test Method	Minimum Value
Thickness mils	ASTM D1593, Para 8.1.3	28.5
Specific gravity, min	ASTM D792	1.20
Minimum tensile properties (each direction)	ASTM D882	
Breaking factor (pounds/inch width)	Method A or B (1 inch wide)	69
Elongation at break (percent)	Method A or B	325
Modulus (force) at 100% elongation (pounds/inch width)	Method A or B	30
Tear resistance (pounds/minimum)	ASTM D1004	8
Low temperature, F	ASTM D1790	-20
Dimensional stability (each direction, % change, max)	ASTM D1204 (212 F), 15 min.	5
Water extraction (% loss, max)	¹ ASTM D3083	-0.25
Volatile loss (% loss, max)	ASTM D1203 Method A	0.7
Resistance to soil burial (% change, max in original value)	¹ ASTM D3083	--
Breaking factor	--	5
Elongation, at break	--	20
Modulus at 100% elongation	--	20
Hydrostatic resistance (psi, min)	ASTM D751 Method A	82
Factory and field seam requirements	--	--
Bonded seam strength (factory seam, breaking factor, ppi width)	¹ ASTM D3083	55.2
Peel adhesion	¹ ASTM D413	10
Resistance to soil burial	ASTM D3083	-
Peel adhesion	--	-20
Bonded seam strength	--	-20
¹ Test Method as modified in Annex A, Standard 54, November 1993.		

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Table 1-1: Project Personnel Responsibilities

PARTY	DEFINITION	RESPONSIBILITY	QUALIFICATION	REPORT TO
Contractor	Construct project in accordance with plans and specifications	Page 5	Licensed in Florida	Owner, Engineer, and EFR
Contractor's Representative (CR)	Assigned by the Contractor to act as the Contractor Representative onsite	Page 6	Prior and similar experience	Contractor and EFR
Engineer	Assigned by Owner for preparation of the total site design including plans and specifications for the lining system and to provide services during construction	Page 6	Registered professional engineer in Florida	Owner
Engineer's Field Representative (EFR)	Assigned by the Engineer for observing and documenting activities related to QA for production and installation of the geosynthetic system	Pages 6, 7, and 8	Prior and similar experience	ENGINEER and OWNER
Installation Supervisor (IS)	Provided by Geosynthetic Installer to provide supervision and guidance to the installation crews	Page 9	Managed installation of 2,000,000 ft ² of geosynthetic material	CR, and EFR
Installer	Firm responsible for installation of the geosynthetic products	Page 9	Five completed similar facilities totaling 2,000,000 ft ² and certified by the geosynthetic Manufacturer	CR and EFR
Manufacturer	Firm or corporation responsible for production of geosynthetic materials	Page 11	Identified on Pages 13, 14 and 15	CR and EFR
Quality Assurance Laboratory (QAL)	Assigned by OWNER to conduct required testing activities	Page 13	Experience in testing in accordance with ASTM, FTMS and NSF	EFR and Owner



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

January 25, 1996

Mrs. Susan Elko
13632 Treaty Road
Spring Hill, Florida 34610

**Subject: Groundwater monitoring at the West Pasco Resource Recovery
Landfill, Pasco County**

Dear Mrs. Elko:

In response to your telephone inquiry on January 19, 1996, I am enclosing the following data that you requested:

- Map of the Resource Recovery Facility showing the locations of groundwater monitoring wells
- Latest groundwater monitoring results from the facility (Class I and Class III landfills)
- Excerpt from the Class I landfill permit describing new groundwater monitoring parameters. The facility will implement these new parameters during the first 6 months of 1996. The FDEP will receive the results of this new testing in July 1996.

The Class III landfill is currently in permit renewal. Their current monitoring occurs quarterly for the wells and parameters shown on the last testing results. Groundwater flow at the site is generally to the northwest.

I contacted Mr. Rodney Phillips in the FDEP's Air Compliance/Enforcement section about your air testing/odor inquiries. Mr. Phillips stated that he had an open complaint on the odors of dirt and iodine that you reported, and will be handling that issue. The resource recovery facility has not tested their air emissions for dioxin, and is not required by the FDEP to test for dioxin because of the type of air pollution controls at the facility. If you have further air quality questions, please contact Mr. Phillips at 813/744-6100, ext. 124.

If you have further groundwater questions concerning the Resource Recovery facility, please contact me at 813/744-6100, ext. 336.

Sincerely,

Allison Amram
Solid Waste Section

cc: Rodney Phillips, FDEP - Air Compliance/Enforcement

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 1/19/96 Subject W. Paoco Resource Recovery
Time 4:50 Permit No. _____
County Paoco
M Susan Elko Telephone No. 813/862-8193
Representing self
☒ Phoned Me ☒ Was Called ☐ Scheduled Meeting ☐ Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting Returned her call

Groundwater tests showed sodium, chloride in mon. wells.

✓ Send her a map - well locations, gw flow
water quality results, testing requirements
MCL's

— Air - dioxin tests results
smelling iodine for last few months
dirt odor

(1/24 - Spoke w/ Thuey, Rodney - They have opened a
complaint for odors; ~~APC~~ APC equipment at the WTE

(continue on another
sheet, if necessary)

Signature Allison Ammann
Title PG1

PA-01
1/93
hjs

puts them out of dioxin emission
testing requirements (ESP's need
to test; scrubbers don't)

Susan Elko (813) 862-8193
13632 Treaty Road
Spring Hill, 34610

2 1/2 miles from
INCINERATOR

pH, heavy minerals

Ms. Elko phoned me regarding parameters tested for at Ozden Martin Resource Recovery Facility and Landfill. She wished to know what parameters were tested for and where monitor wells were located.

She wanted to know where salt and chlorides had been detected. I explained that the Shady Hills WWTP had a RRIE system monitored by a GWP and exceedances of Na^+ , Cl^- , TDS, Spec Cond, and NO_3^- had been recorded in those wells. I explained that the pH level to my best recollection ranged from approx. 4.5-5.5 and up to 7.5 units. I explained that this pH range was consistent with acidic sandy soils and was affected by effluent disposal. I explained that I didn't believe at this time, that this pH range constituted any kind of problem relative to the potable water supply.

I took down her questions for Allison Huron, and registered her complaint related air quality (see attached) and explained that I would forward them to Allison and Bill (Proses of time). The conversation concluded.

David B. Rhodes

ESII

1/19/96 @ 3:40pm

Susan Elko (813) 862-8193

13632 TREATY Rd

Spring Hill, 34610

Question: What parameters were tested for in ^{monitoring} ~~wells~~ wells around Ogden Marine Resource Recovery Facility and associated landfill.

Specifically, pH, Fe, As, Na, Cl⁻ and other Heavy Metals.

Air Quality Question: based on an order (consistent for several days) dirt (fresh) & Iodine

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 1/16/96

Subject USPACCO Tank

Time 1:45

Permit No. _____

County _____

M S Linde Remy

Telephone No. 2212833

Representing LDN

[] Phoned Me [☒] Was Called [] Scheduled Meeting [] Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting _____

I IDENTIFIED EACH OF MY NOTES IN
THE SPECIALIZATION AND REQUEST A
BROCHURE ON THE GEOTEX TIE.

(continue on another
sheet, if necessary)

Signature [Signature]

Title _____

Florida Department of
Environmental Protection

Memorandum

TO: Robert Butera, P.E., Solid Waste Manager
FROM: Susan Pelz, E.I. *SP*
DATE: January 17, 1996
SUBJECT: Pasco County Leachate Treatment Facility and Storage Tanks

CC: Kim Ford, P.E.

I have reviewed portions of the drawings submitted by CDM, received January 11, 1996. The purpose of my review was limited to verifying that the comments in my January 4, 1996 memorandum were adequately addressed. I have not reviewed technical specifications, QA plan, or other information which may have been submitted since the January 9, 1996 meeting. Subsequently, some of my comments may have been addressed in a separate submittal.

1. In general, it appears that comment #4 has been adequately addressed.
2. I have not received responses to the other comments for review. Kim has reviewed the responses submitted for the other comments and has indicated that the information submitted is sufficient. It is my understanding that a foundation analysis has not been provided, to date.

sjp

SUSAN

W. PASCO
→

COMMENT

- ① SMALL TYPICAL (TYPICAL)
- ② ARROW OR DRAWING
- ③ PVC SPEC NOT NEEDED.

→ ~~SAYS~~ I EXPLAINED

① & ② ARE OK,

③ DOES NOT EFFECT ANYTHING
SO IT'S OK

→

SUSAN RETURNED ALL PLANS
AND HAD NO MORE
COMMENTS.

→ 1/12/96

Susan

Any comments

on your comment?

from

1/11/96

To

Su

Bo

Su

sh

wi

ho

th

sy

sc

re

th

wa

I think
your comment
ARE Resolved

0 R
05
Al
AM
Sol
: 81
: 542

TERA_R

was con
evapora
ask th
not r
by the
spray
provide
be la
of all

I
th
We should expect to have periodic testing, sort of like
done with the Citrus and Hillsborough LTP's.



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833 Fax: 813 221-2279

D.E.P.

JAN 11 1996

SOUTHWEST
TAMPA

January 11, 1996

HAND DELIVERY

Mr. Kim Ford
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318

RE: Pasco County Leachate Storage Tank and Treatment Facility

Dear Mr. Ford:

The following information supplements the information forwarded to you on December 13, 1995 and is pursuant to our meeting with you on January 9, 1996.

Solids Handling

Below is the solids handling information supplied in our December 13 correspondence.

"The solids handling bags will be placed in the landfill at the rate of about one per day. They will be initially placed on an area prepared for their placement. The area may be an unused portion of the cell or it may be on the ash residue where large metal objects have been removed. The bags will be placed side by side until it is reasonable to begin another lift. Ash residue which has been subjected to ferrous extraction or clean fill will be used to fill voids between bags and to provide a cover cushion over the top of the layer of bags. A minimum amount of bag breakage in the form of punctures or small tears is expected and will not alter the quality of leachate to a degree that the treatment process will not function properly."

Two specially designed and constructed trailers will be used to transport the bags from the treatment facility to the landfill cell. The trailer will be towed using available equipment at the landfill. The specifications for the trailer are attached. The loading operation will occur under the baghouse where the empty bag will be placed in the trailer, the bag spout (fill leg) will be connected to the outflow sleeve on the baghouse hopper. The baghouse hopper has a rotary valve that can be manually closed to prevent discharge of the salts during bag changeover.

The facility operators, as part of their operations training during facility start-up, will be instructed on proper procedures to employ when operating the solids handling equipment. The operators will also be instructed on placement of the filled bags in the landfill. (Those procedures are outlined above). Due to the innovative nature of this facility and process, some experience with the solids handling system will need to be gained in order to fully develop standard operating procedures which are efficient and minimize bag breaches.

Mr. Kim Ford
January 11, 1996
Page 2

Spray Dryer and Baghouse

Preliminary plan and elevations of the spray dryer and baghouse are attached. These have been developed by the process system supplier and can be easily located on our facility layout drawings.

Process Flow

A process flow diagram is included. A review of this information together with our facility layout will reveal the flow of materials into and out of the facility.

Miscellaneous

A revised set of plans is transmitted herewith which addresses all of your comments on the facility details.


Proof of Publication

A copy of the proof of publication is attached.

We trust this information adequately explains and addresses the issues raised in our meeting on January 11, 1996.

Sincerely,

CAMP DRESSER & MCKEE INC.



Darwish El-Hajji, P.E.

Doug Bramlett/Pasco County
Vince Mannella/Pasco County
D. Strobridge/CDM
J. Banks/CDM

SECTION 11217

SOLIDS HAULING DUMP TRAILER

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. The CONTRACTOR shall design, manufacture and furnish all materials, equipment and incidentals required and deliver, put into operation, and field test two (2) trailer units and appurtenances as specified herein. The CONTRACTOR shall be the MANUFACTURER of the equipment and shall be fully responsible for making all design calculations necessary to ensure the equipment will perform as specified herein.
- B. These Specifications are intended to give a general description of what is required, but do not cover all details which will vary in accordance with the requirements of the equipment as offered. It is, however, intended to cover the furnishing, delivery and complete installation and field testing, of all materials, equipment and appurtenances for the complete units as herein specified, whether specifically mentioned in these Specifications or not.

1.02 DESCRIPTION OF SYSTEMS

- A. The trailer units shall be designed and manufactured to safely load, transport and off-load intact, by use of a dumping bed, a 3-oz. fabric weight, uncoated, polypropylene bag (supplied by others) with the general dimensions of 12 feet by 8 feet by 6 feet deep and containing up to 570 cubic feet of flowable powdered material weighing up to 15,000 lbs. The payload bed shall not snag, catch or damage the bag in any way during the off-loading process. The trailers shall be capable of full mobility while functioning in accordance with these specifications in loose sandy soils. The trailers will be used by OWNER exclusively within the limits of his own property which will include asphalt pavement and off pavement use.
- B. The units offered under these Specifications shall be covered by the MANUFACTURER'S standard warranty and shall meet the requirements of the Specifications set forth herein. Major exceptions to Specifications will be considered sufficient cause for rejection of the equipment.

1.03 QUALIFICATIONS

- A. The trailer units shall include to the extent possible the standard product or product components, as modified by these Specifications, of a MANUFACTURER regularly engaged in the production of this type of equipment. The units to be furnished shall be of proven ability and shall be designed, constructed, and placed into service in accordance with best practices and methods.
- B. The units shall be shipped to the job site by MANUFACTURER having a parts and service facility within a 200 mile radius of the job site. In addition, and in order not to penalize the OWNER for unnecessary or prolonged periods of time for service or repairs to a unit, the MANUFACTURER must have no less than eighty percent (80%) of all replacement parts locally available at all times. Certified proof of this requirement shall be furnished to the ENGINEER upon request.
- C. All materials and parts comprising the units shall be new and unused, of current manufacture, and of the highest grade, free from all defects or imperfections. Workmanship shall conform to the best modern practices. Only new and current model components will be considered. The units offered under these Specifications shall be the product of a firm regularly engaged in the production of similar equipment and shall meet the requirements of the Specifications set forth herein. Major exceptions to Specifications will be considered sufficient cause for rejection of the units.
- D. The equipment furnished under this Specification shall be the standard product of a MANUFACTURER having a successful record of manufacturing and servicing the equipment and systems specified herein for a minimum of five (5) years.

1.04 SUBMITTALS

- A. Submit to the OWNER for approval in a number as required in Section 01300, complete sets of MANUFACTURER's drawings, calculations, schematics, and diagrams which shall show details of manufacture, and brochures covering each item of equipment.
- B. In the event that it is impossible to conform with certain details of the Specifications due to different manufacturing techniques, describe completely all nonconforming aspects.

- C. The submittal data for each unit shall include, but not necessarily be limited to, the following:
1. MANUFACTURER's drawings showing plan and elevations of the complete unit.
 2. Trailer Data
 - a. MANUFACTURER
 - b. Model No.
 - c. Number of axles and load rating
 - d. Gross vehicle weight
 - e. Tire size, make and model
 - f. Make and model and descriptive literature of equipment including hydraulic equipment, air cylinder(s) and rollers, and/or conveyer equipment
 3. Hydraulic System:
 - a. MANUFACTURER
 - b. Model
 - c. Rated maximum pressure
 - d. Rated maximum load
 - e. Cylinder dimensions
 - f. Hydraulic connections
 4. Hitch System

1.05 OPERATING INSTRUCTIONS

- A. Operating and maintenance manuals shall be furnished. The manuals shall be prepared specifically for these units and shall include all required cuts, drawings, equipment lists, descriptions, etc. that are required to instruct operation and maintenance personnel unfamiliar with such equipment. The number of manuals to be furnished and any special requirements shall be as specified in Section 01730.
- B. A factory representative of the MANUFACTURER, who has complete knowledge of proper operation and maintenance, shall be provided for one day to instruct representatives of the OWNER and the ENGINEER on proper maintenance and operation. With the OWNER's permission, this work may be conducted in conjunction with the inspection of the units and test run as provided under Part 3 - EXECUTION. If there are difficulties in operation of the equipment due to the manufacturer's design or fabrication, additional service shall be provided at no cost to the OWNER.

1.06 SPECIAL TOOLS, SPARE PARTS AND LUBRICANTS

- A. The MANUFACTURER shall furnish any special tools required for normal operation and maintenance of the equipment being furnished (i.e., bottle jack, lug wrench, etc.).
- B. The MANUFACTURER shall furnish two (2) complete spare tires of the same make, model and size and mounted on the same type of wheel as supplied on the trailers, for each trailer.
- C. The MANUFACTURER shall furnish one (1) gallon of all lubricants required for the normal operation of each trailer.

1.07 PRODUCT HANDLING

- A. All equipment and parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until the units are operable at the site.
- B. Factory assembled parts and components shall not be dismantled for shipment unless permission is received in writing from the ENGINEER.
- C. Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.
- D. Proper care shall be taken to protect parts from the entrance of water during shipment, storage and handling.

1.08 WARRANTY

- A. All equipment supplied under this section shall be warranted for a period of two (2) years from OWNER acceptance (which is intended to be the successful conclusion date of the acceptance test for each unit), and in accordance with Section 01740 by equipment MANUFACTURERS.
- B. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced in the units and the unit(s) restored to service at no expense to the OWNER.

PART 2 - PRODUCTS

2.01 OFF-ROAD SOLIDS DUMP TRAILER

- A. Design and fabricate two (2) trailers for off-pavement use capable of transporting and dumping an enclosed woven, polypropylene container liner (bag) with dimensions of 8 feet wide, 12 feet long, and 6 feet tall and containing 15,000 lbs of flowable powdered material. The maximum width of the trailers shall be 8 feet, 6 inches. The trailer bed shall have 6-feet high sidewalls and front endwall with smooth interior surfaces. A method of securing and supporting the bag during filling and the end of the bag during transport shall also be provided. Lifting loops will be provided at each corner on the top side of the bag and at the midpoint of the top side of the bag.
- B. The trailer shall have a minimum of three axles with high flotation tires to provide adequate support in sandy soils. Tire size shall be designed by the MANUFACTURER to meet the requirements of this specification. The trailers shall be of adequate size for the weight of the intended payload. The trailer shall be furnished with standard accessories which shall include heavy duty jack stand with pneumatic tire for tongue, capable of supporting the fully loaded trailer, hydraulic surge brakes, and accessories necessary for attachment to the transportation vehicle.
- C. The trailer shall meet the following minimum requirements:
 - 1. Minimum payload shall be 15,000 lbs.
 - 2. Provide a minimum of three axles with a minimum of 24-inch diameter tires.
 - 3. Underframe including axles, springs and hardware shall be hot-dipped galvanized steel.
 - 4. Provide hydraulic system capable of tilting the bed to the dump position and returning to the parallel position.
 - 5. Locking mechanism to secure tilt bed to trailer frame and to release bed for dumping the contents.
 - 6. The bed of the trailer, including sidewalls, shall be constructed of material which will not corrode in the presence of salt (NaCl or KCl) after prolonged use as described in these specifications.
- D. The trailer bed shall be mounted on the subframe of the trailer with a single pivot point. The design of the trailer shall allow the bed to tilt, lowering the rear end of the bed to the ground resulting in a bed angle sufficient to allow the bag to slide out. Complete discharge of the bag may be accomplished by pulling the trailer forward as the bag continues to slide out.

- E. The trailer bed floor shall be equipped with a system capable of supporting the polypropylene bag during transportation and which will allow the bag to slide out of the bed when the bed is tilted to at least 80% of the design tilt angle on level ground.
- F. All metal surfaces of the trailer bed assembly shall be primed and painted (minimum total thickness 12 mils); no unpainted exposed metal parts will be acceptable unless a bare surface is necessary for the bed system to discharge the bag. In such case, the bare metal surface shall be constructed of metal which will not corrode when exposed to salt.
- G. The trailer hitch shall be a pintle ring type. The MANUFACTURER shall supply two pintle hooks for attachment to OWNER's vehicles.

PART 3 - EXECUTION

3.01 DELIVERY

- A. The MANUFACTURER shall supply the services of a factory representative to the check over the completed units after delivery, who will certify to the ENGINEER that the units meet the approval of the MANUFACTURER.
- B. The units must successfully pass acceptance testing.

3.02 PAINTING

- A. The trailer units and associated equipment shall be shop primed and finish coated (minimum total thickness 12 mils) in accordance with the MANUFACTURER's standard practice prior to shipment. Color shall be selected by the OWNER and a 1-gallon supply of touch-up paint shall be supplied by the MANUFACTURER.

3.03 INSPECTION AND TESTING

- A. Prior to final acceptance of the trailers, equipment shall be tested to show it is free of any defects and subjected to full load test. The full load acceptance test will include loading each trailer with the design load of material and hauling to the disposal site using the intended towing vehicle for the number of repetitions indicated in paragraph 3.03D.
- B. The final acceptance test will be subject to the availability of payload material for hauling or similar material as may be provided by the OWNER.

- C. The OWNER will provide the solids containment bag for the acceptance test.
- D. Final acceptance testing shall be done in the presence of the OWNER and the ENGINEER only after the unit is deemed by the ENGINEER to be in compliance with the plans and specifications. Testing shall include ten complete cycles of loading and unloading a filled bag from each trailer unit supplied under these specifications. The OWNER shall provide the towing equipment and personnel who will perform the acceptance tests under the direction of the MANUFACTURER's representative. Should any of the equipment supplied under these specifications fail to perform or otherwise meet the specifications, MANUFACTURER shall take all necessary actions, at his own expense, to modify the equipment until the equipment meets all of the requirements of these specifications.

END OF SECTION



PASCO COUNTY, FLORIDA

DADE CITY (904) 521-4274
LAND O' LAKES (813) 996-7341
NEW PORT RICHEY (813) 847-8145

UTILITIES SERVICES BRANCH
PUB. WKS./UTILITIES BLDG., S-213
7530 LITTLE ROAD
NEW PORT RICHEY, FL 34654

January 4, 1996

Dr. Richard D. Garrity, Ph.D.
Director of District Management
Southwest District
Florida Department of
Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318

RE: FDEP Pending Permit No. SC51-277316 - Construction
of a Leachate Storage Tank and Treatment Facility

Dear Dr. Garrity:

Pursuant to the Notice of Intent to Issue Permit, enclosed please find the original Proof of Publication for the above-referenced project, as required by Chapter 62-103.150, Florida Administrative Code.

We request issuance of permit as soon as the 14 days to file petitions has elapsed, so that we may proceed with this project.

Your assistance is appreciated and if you have any questions, please do not hesitate to contact me at the above-listed telephone number.

Sincerely,


Douglas S. Bramlett
Assistant County Administrator
(Utilities Services)

DSB/mvv

Enclosure

cc: Vincent Mannella, P.E., Solid Waste Facility Manager

3460470

STATE OF FLORIDA } S.S.
COUNTY OF PASCO }**pasco times**
Published Daily
Port Richey, Pasco County, Florida

Before the undersigned authority personally appeared G. Zawalich
 who on oath says that she/he is Legal Clerk
 of the Pasco Times
 a daily newspaper published at Port Richey, in Pasco County, Florida; that the
 attached copy of advertisement, being a Legal Notice
 in the matter RE: Notice of Application

in the _____ Court
 was published in said newspaper in the issues of December 13, 1995

Affiant further says the said Pasco Times is a newspaper
 published at Port Richey, in said Pasco County, Florida, and that the said news-
 paper has heretofore been continuously published in said Pasco County, Florida,
 each day and has been entered as second class mail matter at the post office in
 New Port Richey, in said Pasco County, Florida, for a period of one year next
 preceding the first publication of the attached copy of advertisement; and affiant
 further says that she/he has neither paid nor promised any person, firm, or cor-
 poration any discounts, rebate, commission or refund for the purpose of securing
 this advertisement for publication in the said newspaper.

Sworn to and subscribed before
 me this 13th day of

December, 19 95

SEAL

Notary Public



DIANA J. CAMP
 MY COMMISSION # CC302655 EXPIRES
 August 10, 1997
 BONDED THRU TROY FAIR INSURANCE, INC.

Personally Known ☒ or Produced Identification _____
 Type of Identification Produced _____

STATE OF FLORIDA
 Department of
 Environmental Protection
 Notice of Application
 The Department announces
 receipt of an application for
 permit from Mr. Douglas
 Bremlett of Pasco County
 Utilities Services to con-
 struct a leachate storage
 tank and treatment facility
 (approximately 2 acres) sub-
 ject to Department rules, lo-
 cated near the existing Re-
 source Recovery Facility,
 Hays Road, Pasco County,
 Florida.

This application is being pro-
 cesses and is available for
 public inspection during nor-
 mal business hours, 8:00 a.m.
 to 5:00 p.m., Monday through
 Friday, except legal holi-
 days, at the Department of
 Environmental Protection,
 Southwest District Office,
 3804 Coconut Palm Drive,
 Tampa, Florida 33619-6318.
 (813) 464-0700 12/13 TR

D.E.P.

JAN 11 1996

SOUT DISTRICT
Tampa

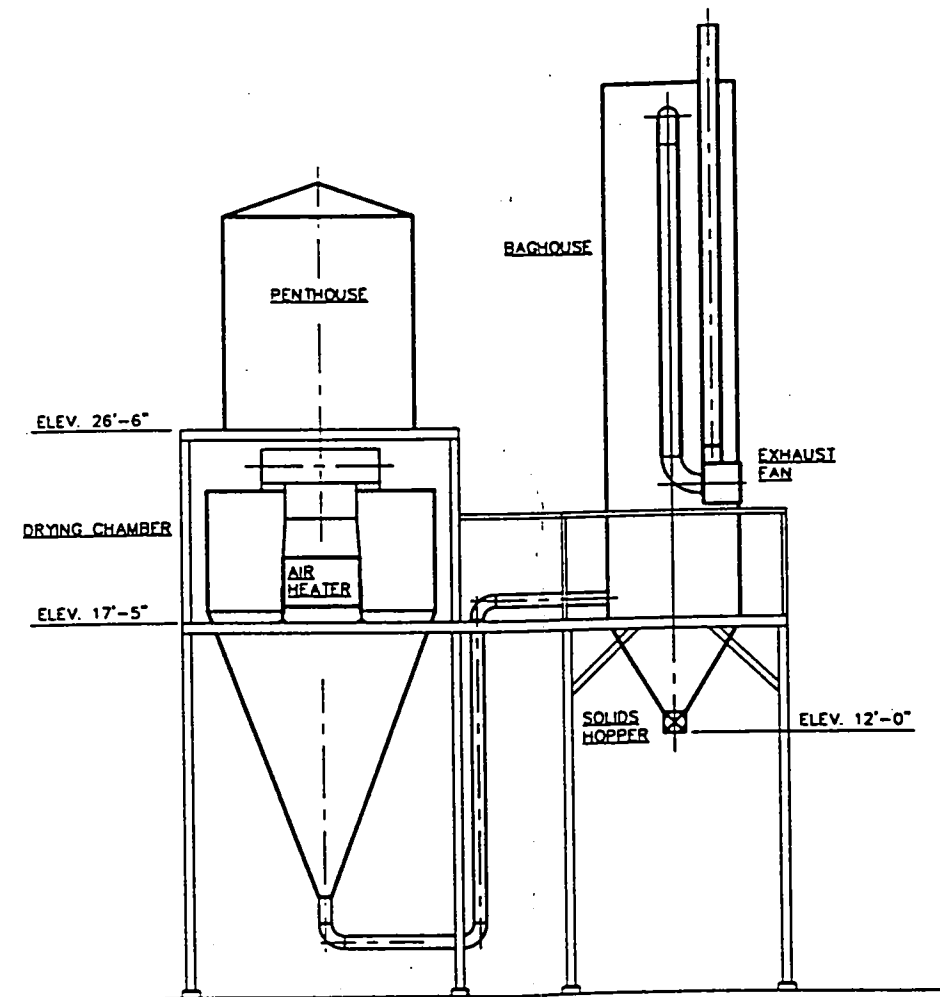
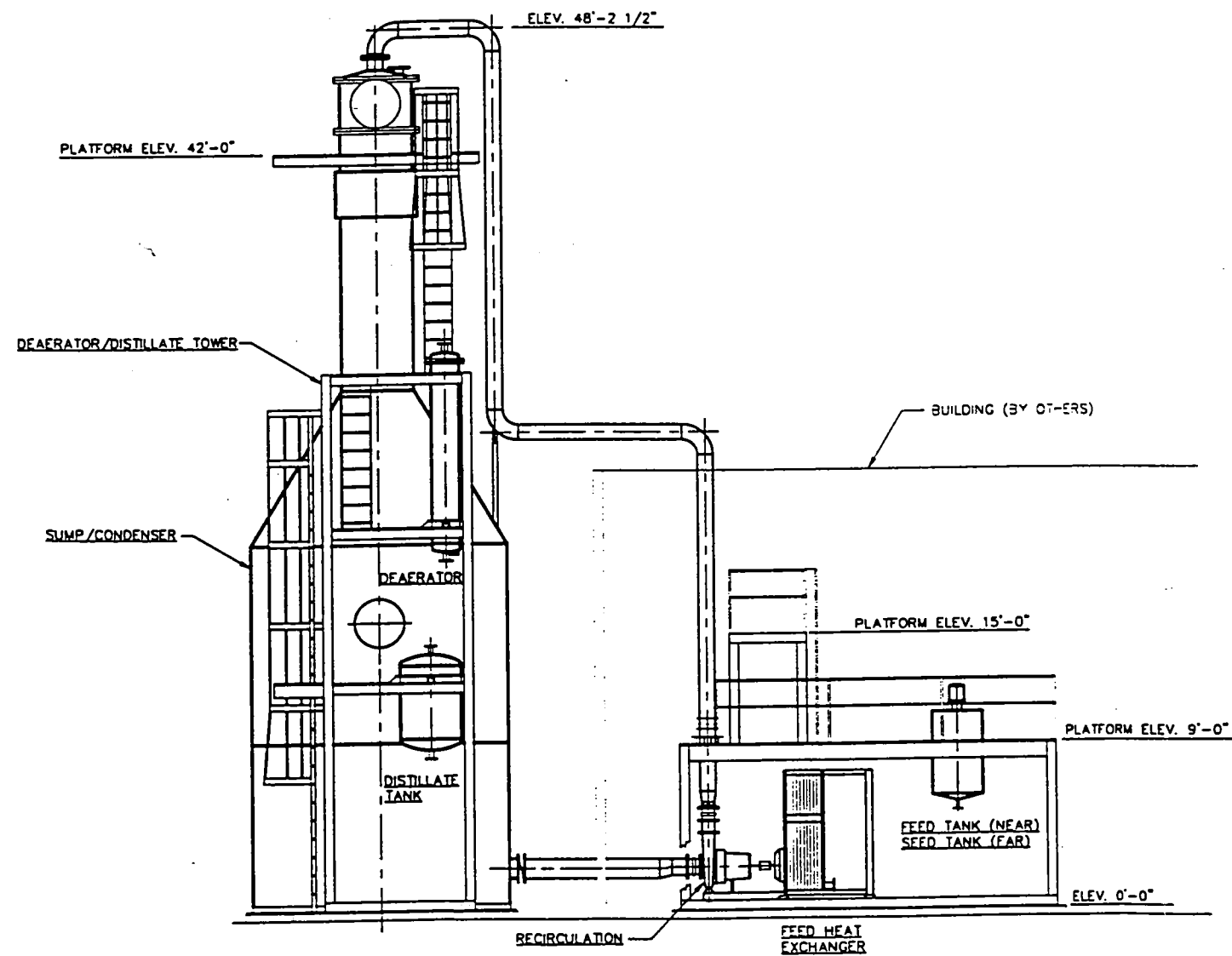


FIGURE 2-5 (CONTINUED)

REVISIONS						REVISIONS						ENG RECORD		DRAWING STATUS		PRELIMINARY GENERAL ARRANGEMENT		DRAWING NO.																													
LTR	BY	CHK	APP	DATE	LTR	BY	CHK	APP	DATE	ROTH	ISSUED	DATE	PASCO COUNTY		95-PD-2697																																
													BRINE CONCENTRATOR/SPRAY DRYER SYSTEM		SHEET NO.																																
													CUSTOMER ORDER NO. 94-2168B		2																																
													RESOURCES CONSERVATION COMPANY		SCALE 1/4"=1'-0"																																
															REV																																
8						7						6						5						4						3						2						1					

1/11/96
W. PASCO TANK

Met w/ DARWISHT

Review plan & specs for
SUSANS COMMENTS - OK

4/25/96 DARWISHT WILL SEND MANUFACTURING

BROCHURE ON SHOT CRITE TO MEET 101.400(b) C&I.

1) AGREE TO DO AN ADDENDUM
FOR MINOR CHANGES
LISTED ON ADVERT PAGE

I said everything looks OK
BUT I WILL LOOK AT SPECS A LITTLE MORE
AND LET HIM KNOW IF I FIND ANYTHING.

I WILL TRY TO SEND AWD RFE LETTER
LAST FORDWORTH ANALYSIS NEXT WEEK

to 1/11/96

WASCO TANK 1/11/96
- 130-

We will do addendum
for

(1)

CD-2 DETAIL A to include

4" OR 12" NOT 6"

1/25/96

{ And THICK IS FOR THE
12" CRACK, PIPE ONLY.

1/25/96

Detail D check
% #89 short > 19" (40%)

ALSO ADD SPEC FOR ~~GRAVEL~~

1/ COARSE SAND

1/ SECTION 1

give

ASTM

designation

1/25/96

Pg 13414-7

2.02 B. 3 1/4

" MICRO SILICA CONC.

" FORT 10,000

MANUAL FOR BROCHURE

TO MEET DEP RUL 17-201.400(b)(c)4.

Can form THURS FOR ANY OTHER
REVISION AND NEW RFI LETTER
FOR FOUNDATION ANALYSIS

checks indicate the upper liner is leaking at a rate greater than predicted by the design calculations, the Department shall be notified. If the leakage rate will result in the flooding of the leak detection and collection system, the impoundment shall be emptied and the liner repaired.

4. To preserve the liner integrity and prevent uplift, ballast material such as rounded gravel or sand, that will not cause damage to the geomembrane liner, shall be placed on top of any liner which is located below the water table.

5. A minimum of two feet of freeboard above the depth which would occur in the event of a 25-year, 24-hour storm shall be maintained in leachate surface impoundments.

6. Disease vectors and off-site odors shall be controlled.

(c) Above ground leachate storage tanks that are located at solid waste management facilities are subject to the following requirements:

1. Tanks shall be constructed of concrete or steel. Tanks shall be supported on a well drained, stable foundation.

2. Bottoms of steel tanks that rest on earthen material shall be cathodically protected with either sacrificial anodes or an impressed current system which is designed, fabricated, and installed in accordance with the engineering plan submitted to the Department.

3. The exterior surfaces of all steel storage tanks shall be protected by a primer coat, a bond coat, and two or more final coats of paint or other surface coating system designed to prevent corrosion and deterioration.

4. The interior of all tanks shall consist of a material or must be lined with a material, resistant to the liquid being stored.

5. All aboveground tanks shall have a secondary containment system which may consist of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps, or other systems capable of containing the stored leachate. The design volume for the secondary containment system shall be 110 percent of the volume of either the largest tank within the containment system or the total volume of all interconnected tanks, whichever is greater.

6. The secondary containment system shall be constructed of materials compatible with the liquid stored. The containment system shall be constructed of either:

a. A minimum three-foot layer of compacted soil with a maximum saturated hydraulic conductivity of 1×10^{-7} cm/sec or one foot of compacted soil with a maximum saturated hydraulic conductivity of 1×10^{-8} cm/sec with two feet of protective cover; or

b. A concrete pad that will maintain its integrity for the lifetime of the tank with a corrosion resistant coating; or

17-701.400(6)(b)3.(cont'd.) - 17-701.400(6)(c)6.b.

c. A geomembrane of a minimum thickness of 60 mils, with a maximum water vapor transmission rate of $0.24 \text{ g}/(\text{m}^2 \times \text{day})$.

7. A system shall be designed to contain and remove storm water from the secondary containment area. Provisions shall be included for the removal of any accumulated precipitation and be initiated within 24 hours or when 10 percent of the storage capacity is reached; whichever occurs first. Disposal of this stormwater shall be in accordance with the requirements of Rule 17-701.400(9), F.A.C.

8. All aboveground tanks shall be equipped with an overflow prevention system which includes level sensors and gauges, high level alarms, or automatic shutoff controls. The overflow control equipment shall be inspected weekly by the facility operator to ensure it is in good working order.

9. The exposed exterior of all aboveground tanks shall be inspected weekly by the facility operator for adequacy of the cathodic protection system, leaks, corrosion, and maintenance deficiencies. Interior inspection of tanks shall be performed whenever the tank is drained or at a minimum of every three years. If the inspection reveals a tank or equipment deficiency, leak, or any other deficiency which could result in failure of the tank to contain the leachate, remedial measures shall be taken immediately to eliminate the leak or correct the deficiency. Inspection reports shall be maintained and made available to the Department upon request for the lifetime of the liquid storage system.

(d) Underground leachate storage tanks that are located at solid waste management facilities are subject to the following requirements:

1. Tanks shall be constructed of concrete, fiberglass, reinforced plastic, steel that is cathodically protected, or steel that is clad with fiberglass.

2. A secondary containment and a continuous leak detection system shall be installed in the form of a double-walled tank, designed as an integral structure so that any release from the inner tank is completely contained by the outer shell.

a. The interstitial space shall be monitored at least once per week by the facility operator for tightness using pressure monitoring, vacuum monitoring, or electronic monitoring.

b. The tank system shall be protected from both corrosion of the primary tank interior and the external surface of the outer shell.

c. All resistant coatings applied to the primary tank interior shall be compatible with the stored leachate.

17-701.400(6)(c)6.c. - 17-701.400(6)(d)2.c.

NOTICE OF MEETING

Today's date: 1/9/96 Writer: K. Goad

Date of meeting: 1/11/96

Time: 2 PM

Place: WHITE CONF RM

Subject: W PASCO TANK & TREATMENT PLANT

Explanation: to discuss & review
REVISION plans 1/1 pgs

Requested by: K. Goad Ph.# _____

Names of attendees other than DER: DANWIT - CDM

Local Program notified: ☒ yes ☒ no Attending? _____

Copies to anticipated in-house attendees: _____

Information copies to: Bob Suttons

Bob

Here's the report you
were interested in.

W. PASE ASH UNIT
GENERATED 6.3 million gallon
in 1995

THE PROPOSED TREATMENT PLANT
WILL HANDLE :

$20,000 \text{ GPD} \times 350 \text{ DAY} = 10.5 \text{ million / year}$

$6.3 \approx 10.5 : 8k$

(THERE WILL BE 2 DISPOSAL UNITS
in operation, some
will be open, INTER, 1 CLOSED
SO SHOULD BE CLOSED TO

10.5 million / year GENERATED

for 1/9/96

Bob

OK

RB

Dismiss

Pump to WWTTP
OR
TREAT?

when will tank go on-line?

Here's the Report you
were interested in.

W. PASE ASH UNIT
GENERATES 6.3 million gallon
in 1995

THE PROPOSED TREATMENT PLANT
WILL HANDLE:

$20,000 \text{ GPD} \times 350 \text{ DAY} = 10.5 \text{ million / year}$

$6.3 \approx 10.5 : \text{OK}$

{ THERE WILL BE 2 DISPOSAL UNITS
in operation, some
will be open, INTER, & CLOSED
SO SHOULD BE CLOSED TO

10.5 million / year GENERATED

for 11/9/96

1/9/96
meeting W. PACE & TALK

Bob discussed other facilities.

Darwin described new design, Bob said OK, but

Bob say WE NEEDED FOUNDATION ANALYSIS
USUALLY PRIOR TO BID.

Darwin explained Bob knew THE
PERMIT WOULD NOT BE ISSUED UNTIL
FOUNDATION ANALYSIS.

I explained THIS PROJECT IS INCOMPLETE
1 -> 5 in my Dec 7, 1995 letter
NOT COMPLETELY RETOWED.

Bob wants a letter from TANK installer
to confirm HE HAS NO PROBLEMS WITH
THE DESIGN

COPIES OF ALLISON'S, SUSAN'S COMMENTS
GIVEN TO EACH

Bob ASKED me TO REVIEW THE DESIGN CAPACITY
FOR THE TANK SITE VS LEASTATE GENERATOR

NEED DETAILS OF
UNIT SETUP OUTSIDE
PROCESS BUILDING

I EXPLAINED ~~THE~~ MY
INTENTION IS TO MEET W/ DARWIST
REVIEW PLAN & SPEC REVISIONS

~~Now~~

WRITE AND INCOMPLETE LETTER
THAT THE REVISION ANALYSIS
IS THE ONLY REMAINING ITEM.

DARWIST BORROWED MY PLANS

W/ AUTO AND PROMISED

TO RETURN THEM ON THURSDAY

~~Now~~ 1/9/96



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

DATE: Jan 9, 1996

TIME: 9 Am

SUBJECT: W Pasco tank & treatment facility

A T T E N D E E S

Name

Affiliation

Telephone

Kim Koro

DEP

(813) 2446100 x382

D. ELHALI

CDM

221-2833

Vince Mannella

Pasco County

813-850-0119

Dan Stropbridge

CDM

221-2833

Suzanne Pelz

DEP

813-744-6100 x386

Bob Antun

DEP

" X 451

WATCO Tank

Need soil borings

Look for LR outcroppings

2-15' deep in tank location

NO permit until foundation analysis

Spec Section 02776 - where?

Fig 3-8 And permit is required. progress?

Use GTOGPILE under part,

want to look for stepout / discoloration

Along tank bottom

(Statement 4" or less, will use ROSSITER 2002 GTOGPILE)

How do plastic bags withstand

50' of ash w/o puncturing or tearing?

Also disposal plan -

① Along outside slopes only?

② Place sand 1st in disposal trench?

I N T E R O F F I C E M E M O R A N D U M

Date: 05-Jan-1996 10:39am EST
From: ~~AX~~ Allison Amram TPA
AMRAM_A
Dept: Southwest District Offi
Tel No: 813/744-6100, ext. 336
SUNCOM: 542-6100, ext. 336

TO: Robert Butera TPA

(BUTERA_R)

Subject: Pasco Tanks for Leachate Evaporation

Bob-

Susan & I discussed the leachate testing that was conducted to show that the solids produced by the proposed evaporation system will not be hazardous. I think that we should ask the applicant how the TCLP testing conducted relates (or does not relate) to the 3 solid waste streams that will be produced by the proposed system (baghouse solids, evaporated solids and spray dryer solids). If the testing does not show that it provides a representative test of the end solids that will be landfilled, then they should expect to see frequent testing of all wastestreams during startup.

I think that the test they conducted was probably as close as they can get w/o sending their leachate through a similar system. We should expect to have periodic testing, sort of like we have done with the Citrus and Hillsborough LTP's.

Florida Department of
Environmental Protection

Memorandum

TO: Robert Butera, P.E., Solid Waste Manager

FROM: Susan Pelz, E.I. *SP*

DATE: January 4, 1996

SUBJECT: Pasco County Leachate Treatment Facility and Storage Tanks

I have reviewed portions of the information submitted by CDM, dated December 13, 1995 and December 29, 1995. I have not reviewed all information submitted in support of the permit application. Subsequently, some of my comments may have been addressed in a previous submittal. I have briefly reviewed the information received September 11, 1995 and November 13, 1995, for general concepts.

*AS
SPEC
COND*

1. **Dewatering.** Dewatering is included in the specifications, although groundwater is not expected to be encountered. Since the consultant continues to use "standard" language for an application for a specific project, the permit can include a condition that if groundwater is encountered during any excavation, the Department shall be notified and calculations shall be submitted which demonstrate that the structure which is constructed in the affected excavation will not become buoyant.

*RES
PACED
TO
PERMIT*

2. **Foundation Analysis.** I do not believe that the applicant can provide reasonable assurance that the project will not adversely affect the environment, or will not cause exceedances of Department standards, without the submittal, and approval of, a foundation analysis for the tank. If the subsurface soils do not provide sufficient bearing capacity and stability, the tank may collapse, damage the underlying liner and potentially release contaminants into the environment.

*TESTING
AS
SPEC
COND.*

3. **TCLP tests.** The procedures described in the January 19, 1995 memorandum by RCC, do not seem to correlate with the proposed treatment process. The TCLP was performed on the "dried solids of the Ash Leachate Water". However, this does not seem to be representative of the solids which will be generated by the process and disposed back into the landfill (brine concentrate and baghouse solids). TCLP should be performed on the solids which are proposed for disposal (including brine concentrate and baghouse solids). If metals or other constituents are noted in some concentrations in the leachate, it seems unusual that these parameters would not also appear in the brine concentrate or the baghouse solids. It does not appear that an analysis for the "treated" water or treatment solids has been provided.

4. **Drawings.**

a. Sheet G-1. The project location is not shown.

b. Sheet C-2. The elevation of the bottom of the tank does not appear to be shown. Section 3/CD-1 does not appear to be oriented correctly.

c. Sheet C-3.

- 1) How is "1-1/2 inch service water PVC" connected to "2-inch PVC distillate FM"? It does not seem that a "service water" line should be connected to a "distillate" line. Clarification of "service water" and "distillate" should be provided.
- 2) The purpose of the arrow from the treatment building to the distillate storage tank should be clarified.
- 3) Detail B/CD-3. Does this reference include both the circular and square structures shown?
- 4) Detail A/CD-1. What are the effects, if any, of the turbulence caused by the 6" inlet to 3" outlet blind flange? Has cavitation been considered? What is the purpose of the "8 LF 6" PVC pipe"?
- 5) Detail A/CD-2. The pipe shown in this detail does not appear to correlate with other details. The reference for 6" or 12" should be clarified. Is the pipe HDPE or PVC? Detail C/CD-1 indicates a 6" PVC line, Sheet C-3 shows both a 6" and a 12" PVC line, and Detail A/CD-2 indicates a 6" or 12" HDPE pipe. Since a 6" PVC line will be connected to the penetration pipe, how will the HDPE pipe be connected to the PVC pipe?
- 6) The elevations (at the tank and at Detail A/CD-2) of the 6" gravity drain should be provided.
- 7) Detail D/CD-2. The distance between the tank sidewall and the location of the liner weld (where the two liners are joined) should be provided. The minimum separation distance between the bottom liner and the concrete pad should be provided.
- 8) Section 1/CD-1. The pipe penetration referenced to Detail A/CD-2 does not appear to show both pipes as shown in this section. The mechanical seal noted in Detail B/CD-1 should be provided. The volume of the LDS swale (which discharges through the pipe penetration) should be provided. It is not clear how the "6-inch PVC Gravity Drain" is a gravity drain since it is connected to the leachate transfer pump.

d. Sheet CD-2. Detail F. It is not clear where this detail is referenced on Sheet CD-4.

- ✓e. Sheet CD-4. The dimensions of the concrete under the exterior ladder should be provided. How will the geomembrane be protected from this concrete slab?
5. **Specifications.**
- ✓a. Site Preparation, Section 02100 was not provided.
- ✓b. Specifications for the geotextile were not provided.
- ✓c. Liner subbase material specified in Section 02220, page 8, Part 3.03.D.7. indicates that "subgrade shall consist of select common fill with the additional requirement that the fill material shall be free from all stones, shell or other sharp particles or objects." Since rocks up to 3-1/2 inches are acceptable for "select fill" material, it is not clear how the Contractor will remove all stones, etc. from the material which will be used in the liner subbase.
- ✓d. Specification Section 13412 specifically states that the glass-coated steel tanks will be used for leachate. However, specification section 13414 specifically states, "The Contractor shall furnish... to construct prestressed composite water storage tanks...." Part 1.01.A. It appears that the intent of the concrete tanks is for water storage, not leachate. It appears that the specifications for the concrete tank may not be appropriate for leachate storage.
- ✓6. **QA Plan. Section 5.** Since the liner material is HDPE, it is not clear why an extensive section on PVC liner testing procedures is provided. Since the specifications reference the QA document, this non-applicable information is indirectly incorporated into the specifications.

sjp

PASCO Leachate Tank

1/9/96

Bob contacted people com indicated had ~~similar~~ design
- glass lined steel tank w/ steel floor
on a concrete pad

Danwish Bottom of tank increased cost substantially
- explains proposed design vs. tank bottom

Bob We need foundation ANALYSIS

Danwish The tank mfg ~~may~~ have the foundation analysis

Vince CAN we pick the worst case tank & do a foundation ANALYSIS?

Dan The County will be charged twice - by com & by contractor - contractor will do foundation ANALYSIS

Anyway

Vince ~~Bob~~ correct in assuming that no foundation ANALYSIS = no permit?

Bob you are correct

~~Danwish~~ oooo

our comfort level... there are no other facilities like this in this state

Dan We haven't found any others in the state

Bob We can't be comfortable until we get all the info

Vince tank pressure - 2400 lb/sf for 40ft tank

Danwish we want an understanding where once we get a successful bidder we can get a permit...

Kim Dec 7, 1995 RAI #1, 2, 3, 4, 5

Vince Proof of publication sent to Garcity

Kim Foundation analysis; tank connection details; geomembrane protection; details of piping

Bob when you have picked a contractor - we'd like the eng & county to give us assurance from contractor & installer that the design is not an installation problem. Letter or meeting if any concerns. What is intent of top liner? exposed all the time? wind? UV?

Danwish 20 yr UV protection for HDPE from mfg.
Vince pre-bid conf. sched for 1/16/96.

Dewatering -
TCLP - (check this mass balance)

Bob perched water over bags?

Dan ~~over~~

... (discussed my memo)

Dan we will end up with empty tank after dry season then they will continue to operate w/ storage after rainy season until storage is depleted

Kim limerock outcropping in Class III - any in tank area?

Danwish we will have contractor do borings & geotech.

Kim 02776 specs not provided - ok
plastic bags - need disposal plan - how will bags not be punctured?

Danwish what will happen if bags puncture? some salt comes back in
don't anticipate any problems

Kim placement is important

Danwish we gave you some correspondence about operations

Danwish want to place them flat on the landfill so slope stability is not an issue

Kim what weight/pressure can it take before it bursts?
explain type of equipment used to place bags, give us description of procedures

oooo (Kim discussing plans)

Kim We won't send you another letter because Dec 7, 1995 letter hasn't been completely addressed -

Dan we have responded twice since then

Vince can my consultant's write a letter requesting additional time?

Kim Yes

Danwish items still incomplete

- foundation

Kim OK (- panel connections to concrete) this will not change
(- geomembrane protection) pending foundation analysis

Kim will discuss panel connections in-house

Danwish only issue is foundation analysis - (may impact gm. ^{pack}
\$ drawing changes

Kim It is incomplete from Dec 7th. After you submit next pkg - you only write letter telling us to write you a letter. \$ we will write you a letter saying foundation analysis is only thing missing.

Danwish taking plans with him - will return them on 1/11/96 Thursday

I N T E R O F F I C E M E M O R A N D U M

Date: 05-Jan-1996 10:39am EST
From: ~~PA~~ Allison Amram TPA
AMRAM_A
Dept: Southwest District Offi
Tel No: 813/744-6100, ext. 336
SUNCOM: 542-6100, ext. 336

TO: Robert Butera TPA

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sjp



PASCO COUNTY, FLORIDA

Waste
Bill

D.E.P.

JAN - 5 1996

DADE CITY (904) 521-4274
LAND O' LAKES (813) 996-7341
NEW PORT RICHEY (813) 847-8145

SOUTHWEST
TAMPA

UTILITIES SERVICES BRANCH
PUB. WKS./UTILITIES BLDG., S-213
7530 LITTLE ROAD
NEW PORT RICHEY, FL 34654

January 4, 1996

X

Dr. Richard D. Garrity, Ph.D.
Director of District Management
Southwest District
Florida Department of
Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318

RE: FDEP Pending Permit No. SC51-277316 - Construction
of a Leachate Storage Tank and Treatment Facility

Dear Dr. Garrity:

Pursuant to the Notice of Intent to Issue Permit, enclosed please find the original Proof of Publication for the above-referenced project, as required by Chapter 62-103.150, Florida Administrative Code.

We request issuance of permit as soon as the 14 days to file petitions has elapsed, so that we may proceed with this project.

Your assistance is appreciated and if you have any questions, please do not hesitate to contact me at the above-listed telephone number.

Sincerely,

A handwritten signature in dark ink, appearing to read "D. S. Bramlett", is written over the word "Sincerely,".

Douglas S. Bramlett
Assistant County Administrator
(Utilities Services)

DSB/mvv

Enclosure

cc: Vincent Mannella, P.E., Solid Waste Facility Manager

953460470

STATE OF FLORIDA
COUNTY OF PASCO

S.S.

pasco times
Published Daily
Port Richey, Pasco County, Florida

Before the undersigned authority personally appeared G. Zawalich
who on oath says that she/he is Legal Clerk
of the Pasco Times
a daily newspaper published at Port Richey, in Pasco County, Florida; that the
attached copy of advertisement, being a Legal Notice
in the matter RE: Notice of Application
in the _____ Court
was published in said newspaper in the issues of December 13, 1995

Affiant further says the said Pasco Times is a newspaper
published at Port Richey, in said Pasco County, Florida, and that the said news-
paper has heretofore been continuously published in said Pasco County, Florida,
each day and has been entered as second class mail matter at the post office in
New Port Richey, in said Pasco County, Florida, for a period of one year next
preceding the first publication of the attached copy of advertisement; and affiant
further says that she/he has neither paid nor promised any person, firm, or cor-
poration any discounts, rebate, commission or refund for the purpose of securing
this advertisement for publication in the said newspaper.

Sworn to and subscribed before
me this 13th day of
December AD 19 95

SEAL

Notary Public



DIANA J. CAMP
MY COMMISSION # CC302655 EXPIRES
August 10, 1997
BONDED THRU TROY FAIR INSURANCE, INC.

Personally Known ☒ or Produced Identification _____
Type of Identification Produced _____

STATE OF FLORIDA
Department of
Environmental Protection
Notice of Application
The Department announces
receipt of an application for
permit from Mr. Douglas
Bramlett of Pasco County
Utilities Services to con-
struct a leachate storage
tank and treatment facility
(approximately 2 acres) sub-
ject to Department rules, lo-
cated next to the existing Re-
source Recovery Facility,
Hays Road, Pasco County,
Florida.

This application is being pro-
cessed and is available for
public inspection during nor-
mal business hours, 8:00 a.m.
to 5:00 p.m., Monday through
Friday, except legal holi-
days, at the Department of
Environmental Protection,
Southwest District Office,
3804 Coconut Palm Drive,
Tampa, Florida 33619-8318.
(953460470) 12/13 TPA

E.P.

JAN - 5 1996

SOUTHWEST DISTRICT
TAMPA

NOTICE OF MEETING

Today's date: 1/5/96 Writer: K. Ford

Date of meeting: TUES, JAN 9

Time: 9 AM -

Place: WASTE CONFER

Subject: W. PASCO TANK 2! LEACHATE
TREATMENT

Explanation: to discuss unresolved
problem issues

Requested by: Bob Butler Ph.# _____

Names of attendees other than DER: DANIEL, STROBACH - CDM
& PASCO County - ?

Local Program notified: ☒ yes ☒ no Attending? _____

Copies to anticipated in-house attendees:	<u>Bob Butler</u>	Information copies to:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

12/29/95

Kian.

CONTACT MR DANESH EL HAJI FOR JOHN
BANKS TO COME IN FOR A MEETING NEXT WEEK - JAN. 5-7
TO DISCUSS A NUMBER OF MY CONCERNS. GIVE TO SUSAN
PEZZ FOR INPUT.

Bob

Contract Manual

Have Susan review.

Do not generate incomplete
ness letter until Norwich
submits additional info.

ity

Rank
ility

BA

December 13, 1995

Depo.

DEC 14 1995

WEST DISTRICT
Protection

WE MUST INCLUDE A
CONDITION WHICH CLEARLY
DEFINES THE LEVEL OF
DETAIL & TEST RESULTS
REQUIRED AS PART OF THE
LOWER QA/QC.

BA

12/28/95

ALLISON - PLEASE REVIEW RESPONSE
TO ITEM #7 AND RETURN TO ME.

THANKX

Bob

#7 - ok. They did a "bench
test" evaporating W. Pasco's
leachate + TCLP'd the solids.
All non-haz.

AA 12/29



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833 Fax: 813 221-2279

RECEIVED
DEC 29 1995

Department of Environmental Protection
SOUTHWEST DISTRICT
BY _____

December 27, 1995

Mr. Robert Butera, P.E.
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318

Subject: Pasco County Leachate Storage Tank and Treatment Facility
Pending Permit No. SC51-277316

Dear Mr. Butera:

This letter provides supplementary information to support the above referenced permit application in response to issues raised in recent telephone conversations with Mr. Darwish El Hajji of our office. Below we have listed your comments along with our response to address each issue.

1. Secondary containment volume calculation check shows less than 110% of the primary tank volume.

Response: The 160 ft. radius of the secondary containment berm provides more volume than is required. With a 2,000,000 gallon primary storage tank, 2,200,000 gallons are required of the secondary containment area. The calculations attached to this letter show the secondary containment area provides 2,455,543 gallons of secondary containment volume with a maximum depth of 5 ft.

2. Why do we have a dewatering section in the specifications if we expect the groundwater table to be 10-12 ft. below ground level.

Response: The dewatering section is included as a subsection of Section 02220, Structural Excavation, Backfill, and Compaction, and Section 0221, Trenching, Bedding, and Backfill for Pipe, because these sections contain "standard" language provided to address all contingencies that may arise. For dewatering, the specifications require placement of work in-the-dry, and provides the requirements to achieve this condition if required. This includes removing surface waters or

rainwater, which may enter the work area. This could occur on this project.

3. Indicate on the drawings that the water elevation within the secondary containment area is the maximum leachate level in the event of a catastrophic leak of a full tank with 10% of the containment area already full.

Response: The drawings sheet CD-1, Sections 1 and 2, show elevation 57 as the "maximum leachate EL 57 NGVD*". The asterisk note states "in case of tank leak or overflow."

We will change the note to read "maximum leachate level for catastrophic full tank failure."

4. Is 95% compaction under the tank enough?

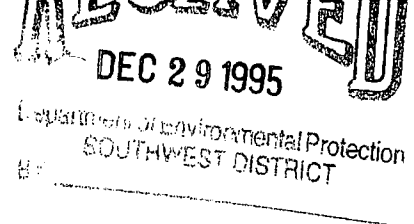
Response: The specified compaction density for structural fill is of 95 percent maximum dry density as measured by AASH70T-180 (modified proctor). This represents a compaction equivalent close to 100% standard proctor. Structural fill refers to fill under all physical structures, including buildings, tanks, slabs, roads, and treatment plants. This specification has been used for structures with greater loads than that of this particular tank.

5. FDEP needs to see the detail for the secondary containment tank, if used. This may be provided later, but will represent a major permit modification.

Response: We have provided the required secondary contain tank details on drawing sheet No. CD-2, Detail D. This detail requires a complete secondary bottom and leak detection if two tanks are proposed. The plans and specifications require the contractor to submit their structural details and calculations with the shop drawings. We will be happy to provide these shop drawings for FDEP at the time they are available. We disagree that a major permit modification will be required since this contract bid alternative is clearly contemplated in our permit application.

In addition, we are providing the attached record of groundwater elevations at your request. This report shows the elevation of groundwater at 19 monitoring wells since Quarter 1, 1992, three years of records. The highest recorded elevation is at 2MW2 for Quarter 4, 1995 at 35.91. This would place the water table 17.09 feet below ground level at the proposed storage tank location.

CDM Camp Dresser & McKee Inc.



We hope this information provides the necessary detail needed for approval of this permit application. Should you have any further questions or comments, please contact Mr. Darwish El Hajji, in our Tampa Office.

Very truly yours,

CAMP DRESSER & McKEE INC.

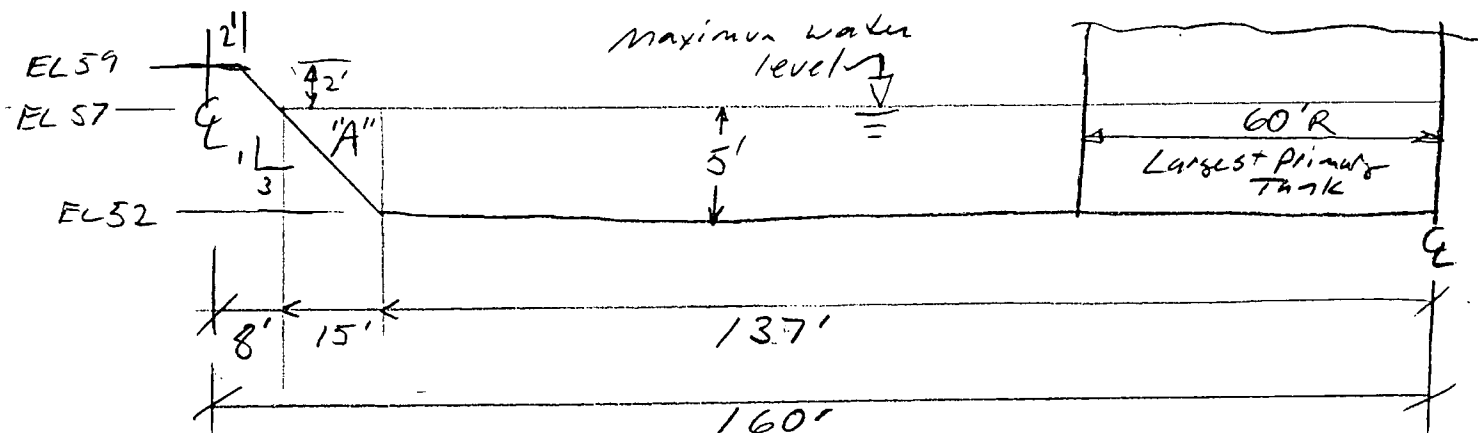
A handwritten signature in black ink, appearing to read "Daniel E. Strobbridge". The signature is fluid and cursive, with a long horizontal line extending to the left.

Daniel E. Strobbridge
Associate

cc: Doug Bramlett, Pasco County
Vincent Mannella, Pasco County
Darwish El Hajji, CDM
John Banks, CDM

Secondary Containment Volume

Radius of containment Beam = 160 ft



$$\begin{aligned}
 \text{Volume}^* &= 5' \times \pi (137)^2 + \text{Area "A"} \\
 &= 294,823 \text{ ft}^3 + \text{Area "A"} \\
 &= 2,205,277 \text{ gallons} + \text{Area A}
 \end{aligned}$$

Secondary Containment is more than the 2,200,000 gal required without calculating the volume of Area "A"

* Does not include containment volume under primary storage tank.

Area "A" Volume = Area \times Circumference

$$V_A = \frac{1}{2} (15 \times 5) \times 2 \pi R$$

$$\text{when } R = 137 + 5 = 142$$

$$\begin{aligned}
 V_A &= 37.5' \times 892' = 33,458 \text{ ft}^3 \\
 &= 250,266 \text{ gal}
 \end{aligned}$$

$$\text{Total volume} = 250,266 + 2,205,277 = 2,455,543 \text{ gal}$$

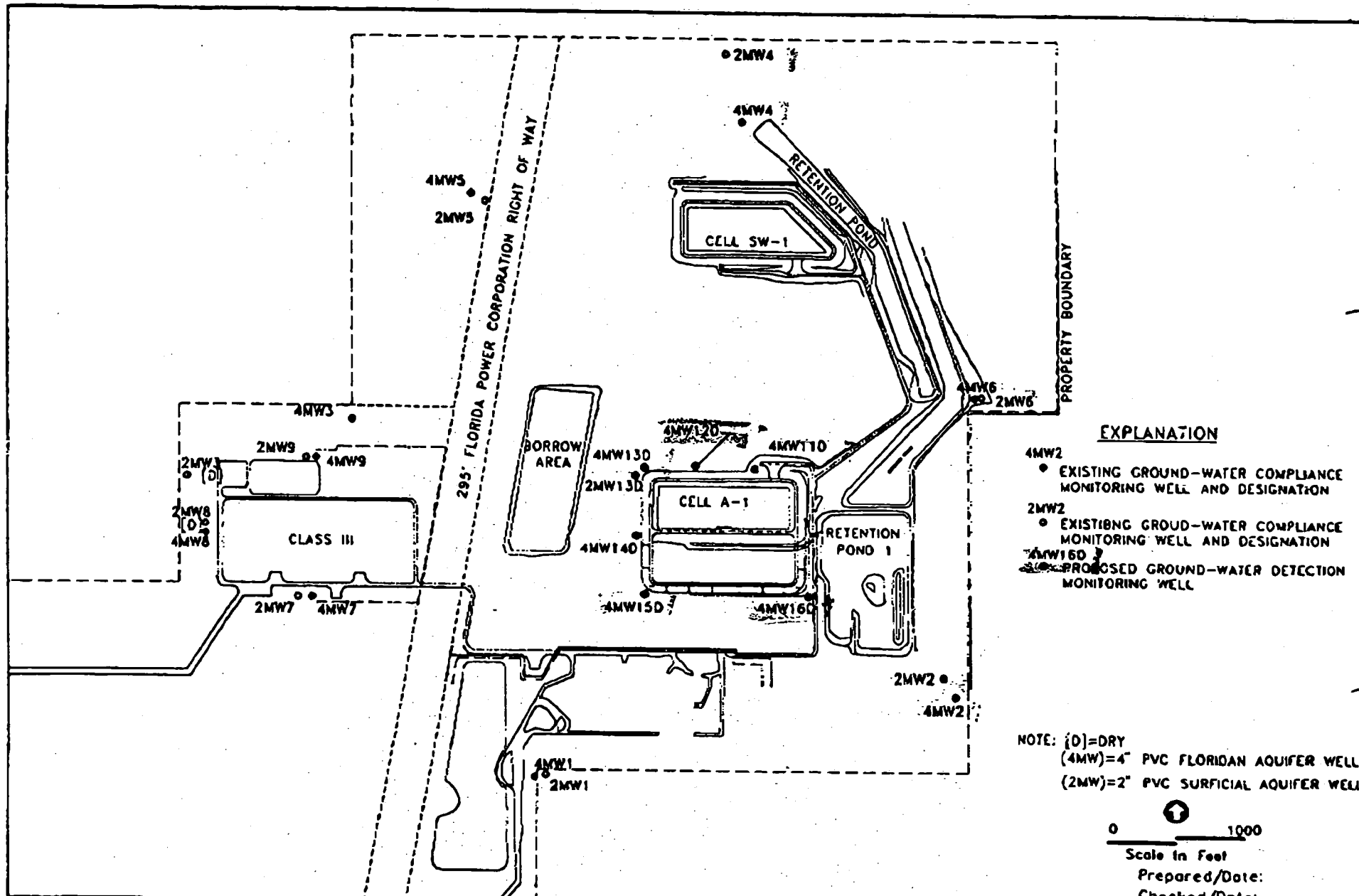
RESOURCE RECOVERY WATER LEVELS 1992 - 1995

	2MW1	4MW1	2MW2	4MW2	2MW4	4MW4	2MW5	4MW5	2MW6	4MW6
QTR I/92	14.75	14.95	21.15	21.30	DRY	22.75	DRY	20.15	DRY	23.60
QTR II/92	DRY	17.5	23.20	23.50	DRY	25.00	DRY	22.65	DRY	26.00
QTR III/92	DRY	14.2	19.40	19.60	DRY	21.20	DRY	18.50	DRY	22.00
QTR IV/92	15.45	15.65	20.65	20.90	DRY	22.50	DRY	19.95	DRY	23.15
QTR I/93	DRY	17	22.95	23.05	DRY	24.75	DRY	22.15	DRY	25.55
QTR II/93	DRY	17.45	22.85	23.10	DRY	24.70	DRY	22.10	DRY	25.55
QTR III/93	DRY	18.35	24.15	24.55	DRY	26.35	DRY	23.75	DRY	27.00
QTR IV/93	DRY	18.6	24.30	24.70	DRY	26.80	DRY	24.20	DRY	27.40
QTR I/94	DRY	31.49	31.41	30.71	DRY	23.56	DRY	24.61	DRY	27.63
QTR II/94	DRY	29.99	30.21	29.56	DRY	22.36	DRY	23.21	DRY	26.63
QTR III/94	DRY	34.34	33.66	33.21	DRY	27.26	DRY	28.21	DRY	30.53
QTR IV/94	DRY	34.19	35.11	34.51	DRY	27.31	DRY	28.46	DRY	32.13
QTR I/95	DRY	16.55	21.80	22.10	DRY	23.85	DRY	21.40	DRY	24.60
QTR II/95	DRY	32.54	33.06	32.41	DRY	25.26	DRY	26.06	DRY	29.68
QTR III/95	DRY	34.54	34.41	33.91	DRY	28.11	DRY	28.96	DRY	31.58
QTR IV/95	DRY	34.54	35.91	35.51	DRY	30.06	DRY	30.76	DRY	33.48

WEST PASCO CLASS III LANDFILL WATER LEVELS 1992 - 1995

	2MW7	4MW7	2MW8	4MW8	2MW9	4MW9	2MW10	2MW3A	4MW3A
QTR I/92	DRY	20.50	DRY	19.80	DRY	21.90	DRY	DRY	DESTROYED
QTR II/92	DRY	21.90	DRY	21.20	DRY	23.50	DRY	DRY	DESTROYED
QTR III/92	DRY	22.90	DRY	22.25	DRY	24.75	DRY	DRY	25.30
QTR IV/92	DRY	19.00	DRY	19.30	DRY	25.50	DRY	DRY	
QTR I/93	DRY	22.30	DRY	21.60	DRY	23.75	DRY	DRY	24.35
QTR II/93	DRY	22.00	DRY	21.35	DRY	23.90	DRY	DRY	24.45
QTR III/93	DRY	DRY	DRY	23.45	DRY	25.65	DRY	DRY	26.20
QTR IV/93	DRY	DRY	DRY	22.40	DRY	24.75	DRY	DRY	25.30
QTR I/94	DRY	DRY	DRY	24.30	DRY	26.60	DRY	DRY	27.15
QTR II/94	DRY	DRY	DRY	26.95	DRY	24.93	DRY	DRY	26.50
QTR III/94	DRY	DRY	DRY	26.85	DRY	24.53	DRY	DRY	26.00
QTR IV/94	DRY	30.23	DRY	31.95	DRY	29.88	DRY	DRY	31.45
QTR I/95	DRY	27.93	DRY	29.65	DRY	27.88	DRY	DRY	29.45
QTR II/95	DRY	27.68	DRY	29.50	DRY	27.53	DRY	DRY	29.10
QTR III/95	DRY	27.38	DRY	29.15	DRY	26.98	DRY	DRY	28.60
QTR IV/95	DRY	29.08	DRY	30.95	DRY	22.85	DRY	DRY	31.45

ACAD=3565F71



Pasco County
 Board of County Commissioners
 Utility Services Branch
 Pasco County, Florida



LAW

ENGINEERING AND ENVIRONMENTAL SERVICES

Resource Recovery Facility
 Pasco County, Florida

Ground-Water Monitoring
 Well Locations

Project 573565

Figure 1

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12-28-95 Subject LEACHATE COLLECTION & STORAGE TANK
Time 4:00 P.M. Permit No. _____
County PASCO
M.R. RICHARD TEDDER Telephone No. _____
Representing FDEP - TALLAHASSEE

☒ Phoned Me [] Was Called [] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting AFTER FAX TO RICHARD WE DISCUSSED
PROPOSED DESIGN:

- (1) CONCERNED THAT OUR REGULATIONS DO NOT REQUIRE A PROTECTIVE
SAND LAYER ON GEOMEMBRANE. - ACCESS TRAFFIC/UV/WIND COULD
BE A PROBLEM.
- (2) WOULD NOT ALLOW PENETRATION THRU GEOMEMBRANE WITH 6"
GRAVITY FEED LINE - SUGGESTED A SUMP & PUMPING OVER
BERM.
- (3) COULD NOT CLEARLY RATIONALIZE WHY THEY WOULD PLACE A
LINER UNDER TANK WITH LEAK DETECTION.
- (4) SUGGESTED AND SUPPORTED THAT THEY FOCUS ON PERMITTING
ONE-DESIGN TYPE - OVERFILL PROTECTION WILL HAVE TO
BE ADDRESSED WITH A DOUBLE WALL TANK.

(continue on another
sheet, if necessary)

Signature _____

Title _____

Richard Tedder
P.E. III.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12-28-95 Subject LEACHATE TANK SECONDARY CONTAINMENT
Time 10:10 A.M. Permit No. —
County PRINCE GEORGE COUNTY, MD.
M.R. LEWIS RONCA Telephone No. 610-759-5100
Representing RONCA ENGR.

[] Phoned Me [] Was Called ☒ Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting —

Documentation: SECONDARY CONTAINMENT - LEACHATE TANKS

Summary of Conversation/Meeting —

PRINCE GEORGE COUNTY LANDFILL: 2 - 750,000 GALLON GLASS-LINED STEEL BOLTED TANKS

(1) BOTTOM OF TANK IS STEEL - GLASS LINED

(2) SECONDARY CONTAINMENT IS A CONCRETE SLAB BELOW TANK WITH A RINGWALL TO KEEP TANK STRAIGHT

(3) SECONDARY CONTAINMENT IS A HDPE LINER MECH. ATTACHED TO THE RING WALL - MAY FAX DETAILS.

(4) LINER MUST HAVE A 2% SLOPE OR IT CAN NOT BE CONSTRUCTED WITH ADEQUATE TOLERANCES - MUST COVER LINER WITH 1 1/2 FEET OF SAND (INCLUDING DEBRIS) TO PROTECT LINER FROM TRAFFIC FOR REPAIR, UV, AND WIND LOADING.

(5) RECOMMENDED THAT BOLTED FLOOR BE SET ON 1" THK. INSULATION

(continue on another sheet, if necessary)

Signature Robert J. Antura

Title P.E., III

PA-01
1/93
hjs

SHEET # BITUMASTIC COMPOUND TO SEAL FLOOR TO BOTTOM.

I PRESENTED PROPOSED SECONDARY CONTAINMENT 5' BELOW TANK AND LEWIS STATED THAT LOADINGS UNDOUBTEDLY WILL CAUSE LINER FAILURE.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12-28-95 Subject LEACHATE TANK SECONDARY CONTAINMENT
Time 10:00 A.M. Permit No. -
County CHARLES CITY COUNTY LF
MR. WAYNE Telephone No. 804-966-7146
Representing SCS ENGRS.
[] Phoned Me [] Was Called ☒ Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting _____

MR. BILL SPERRY WAS NO LONGER WITH SCS BUT WAYNE
DID NOT KNOW ABOUT THE PROJECT OR DESIGN BUT WOULD
FAX ME A DETAIL OF THE ABSTRACTION

(continue on another
sheet, if necessary)

Signature Robert J. Antena
Title P.E. III

12/28/95

LEACHATE TANK COMMENTS - PASCO Cty.

- SUGGEST COVERING LINER WITH SAND (1'-1 1/2") - PROPOSED CONCRETE SLAB ON LINER IN WAY OF ACCESS LADDER?
- WHY NOT PROPOSE A TANK BOTTOM VS. EXCAVATION & LINER BELOW.
- 2% SLOPE FOR DRAINAGE REQUIRED - CANNOT CONSTRUCT A .2% SLOPE.

Bob Antena

- I suggest we draft specific conditions requiring resubmittal of ACT. #3 & #4 schemes. I also suggest once we all have our questions that we invite Dawish (CDM) and a County rep. to meet prior to issuing a permit.
- must address foundation analysis. - SP. let me see examples submitted prior to permit issuance.

CDM FAX

Date 12-27-95

Number of pages including cover sheet: 8

TO:

Bob Ryfina

FDEP Tampa

Solid Waste

Phone

Fax Phone

(813) 744-8198

FROM:

Dan Strobbridge

CAMP DRESSER & MCKEE INC.

ONE TAMPA CITY CENTER

SUITE 1750

TAMPA, FLORIDA 33602

Phone

813-221-2833

Fax Phone

813-221-2279

REMARKS:



Urgent



For your review



Reply ASAP



Please Comment

Hard Copy to Follow in Mail



Camp Dresser & McKee Inc.

environmental
servicesOne Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2853 Fax: 813 221-2279

December 27, 1995

Mr. Robert Butera, P.E.
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619-8318

Subject: Pasco County Leachate Storage Tank and Treatment Facility
Pending Permit No. SC51-277316

Dear Mr. Butera:

This letter provides supplementary information to support the above referenced permit application in response to issues raised in recent telephone conversations with Mr. Darwish El Hajji of our office. Below we have listed your comments along with our response to address each issue.

1. Secondary containment volume calculation check shows less than 110% of the primary tank volume.

Response: The 160 ft. radius of the secondary containment berm provides more volume than is required. With a 2,000,000 gallon primary storage tank, 2,200,000 gallons are required of the secondary containment area. The calculations attached to this letter show the secondary containment area provides 2,455,543 gallons of secondary containment volume with a maximum depth of 5 ft.

2. Why do we have a dewatering section in the specifications if we expect the groundwater table to be 10-12 ft. below ground level.

Response: The dewatering section is included as a subsection of Section 02220, Structural Excavation, Backfill, and Compaction, and Section 0221, Trenching, Bedding, and Backfill for Pipe, because these sections contain "standard" language provided to address all contingencies that may arise. For dewatering, the specifications require placement of work in-the-dry, and provides the requirements to achieve this condition if required. This includes removing surface waters or

rainwater, which may enter the work area. This could occur on this project.

3. Indicate on the drawings that the water elevation within the secondary containment area is the maximum leachate level in the event of a catastrophic leak of a full tank with 10% of the containment area already full.

Response: The drawings sheet CD-1, Sections 1 and 2, show elevation 57 as the "maximum leachate EL 57 NGVD*". The asterisk note states "in case of tank leak or overflow."
We will change the note to read "maximum leachate level for catastrophic full tank failure."

4. Is 95% compaction under the tank enough?

Response: The specified compaction density for structural fill is of 95 percent maximum dry density as measured by AASH70T-180 (modified proctor). This represents a compaction equivalent close to 100% standard proctor. Structural fill refers to fill under all physical structures, including buildings, tanks, slabs, roads, and treatment plants. This specification has been used for structures with greater loads than that of this particular tank.

5. FDEP needs to see the detail for the secondary containment tank, if used. This may be provided later, but will represent a major permit modification.

Response: We have provided the required secondary contain tank details on drawing sheet No. CD-2, Detail D. This detail requires a complete secondary bottom and leak detection if two tanks are proposed. The plans and specifications require the contractor to submit their structural details and calculations with the shop drawings. We will be happy to provide these shop drawings for FDEP at the time they are available. We disagree that a major permit modification will be required since this contract bid alternative is clearly contemplated in our permit application.

*NO DETAILS = SEE NOT ON DETAIL D.
CD-2*

In addition, we are providing the attached record of groundwater elevations at your request. This report shows the elevation of groundwater at 19 monitoring wells since Quarter 1, 1992, three years of records. The highest recorded elevation is at 2MW2 for Quarter 4, 1995 at 35.91. This would place the water table 17.09 feet below ground level at the proposed storage tank location. ✓



Camp Dresser & McKee Inc.

We hope this information provides the necessary detail needed for approval of this permit application. Should you have any further questions or comments, please contact Mr. Darwish El Hajji, in our Tampa Office.

Very truly yours,

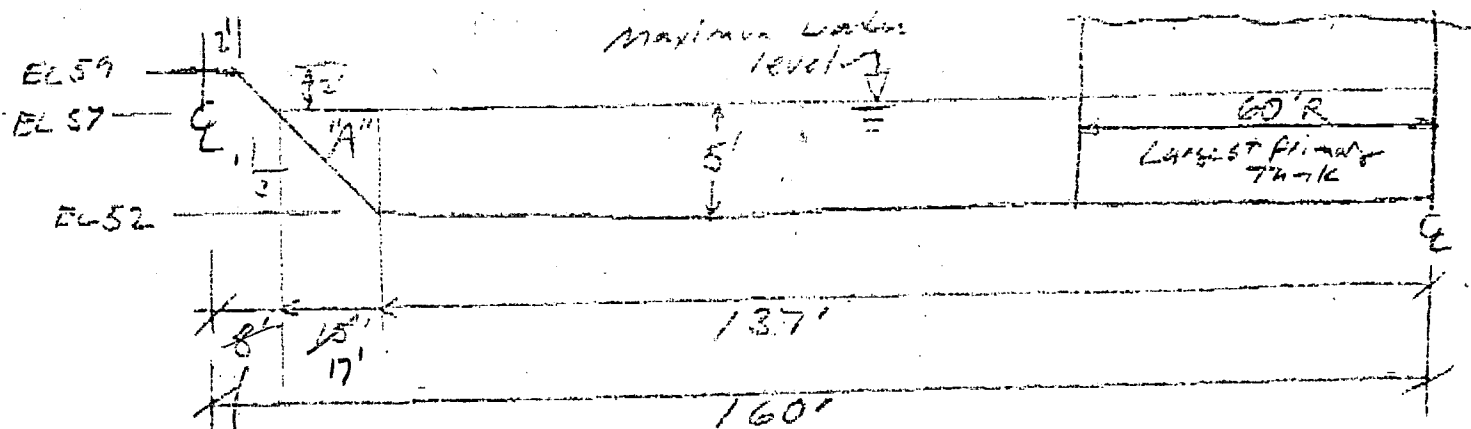
CAMP DRESSER & MCKEE INC.

Daniel E. Strobridge
Associate

cc: Doug Bramlett, Pasco County
Vincent Mannelia, Pasco County
Darwish El Hajji, CDM
John Banks, CDM

Secondary Containment Volume

Radius of containment Basin = 160 ft



$$\begin{aligned}
 \text{Volume}^* &= 5' \times \pi (137')^2 + \text{Area "A"} \\
 &= 294,823 \text{ ft}^3 + \text{Area "A"} \\
 &= 2,205,277 \text{ gallons} + \text{Area A}
 \end{aligned}$$

Secondary Containment is more than the 2,200,000 gal. required without calculating the volume of Area "A"

$$A = 36647.5 \times 7.48 / \text{GALS/FT}^3 = 274$$

* Does not include containment volume under primary storage tank

Area "A" Volume = Area x Circumference

$$V_A = \frac{1}{2} (15 \times 5) \times 2 \pi R$$

$$\text{when } R = 137 + 5 = 142$$

$$\begin{aligned}
 V_A &= 37.5' \times 892' = 33,458 \text{ ft}^3 \\
 &= 250,246 \text{ gal}
 \end{aligned}$$

$$\text{Total volume} = 250,246 + 2,205,277 = 2,455,543$$

RESOURCE RECOVERY WATER LEVELS 1992 - 1995

	2MW1	4MW1	2MW2	4MW2	2MW4	4MW4	2MW5	4MW5	2MW6	4MW6
QTR I/92	14.75	14.95	21.15	21.30	DRY	22.75	DRY	20.15	DRY	23.60
QTR II/92	DRY	17.5	23.20	23.50	DRY	25.00	DRY	22.65	DRY	26.00
QTR III/92	DRY	14.2	19.40	19.60	DRY	21.20	DRY	18.50	DRY	22.00
QTR IV/92	15.45	15.65	20.65	20.90	DRY	22.50	DRY	19.95	DRY	23.15
QTR I/93	DRY	17	22.95	23.05	DRY	24.75	DRY	22.15	DRY	25.55
QTR II/93	DRY	17.45	22.85	23.10	DRY	24.70	DRY	22.10	DRY	25.55
QTR III/93	DRY	18.35	24.15	24.55	DRY	26.35	DRY	23.75	DRY	27.00
QTR IV/93	DRY	18.6	24.30	24.70	DRY	26.80	DRY	24.20	DRY	27.40
QTR I/94	DRY	31.49	31.41	30.71	DRY	23.56	DRY	24.61	DRY	27.63
QTR II/94	DRY	29.99	30.21	29.56	DRY	22.36	DRY	23.21	DRY	26.63
QTR III/94	DRY	34.34	33.66	33.21	DRY	27.26	DRY	28.21	DRY	30.53
QTR IV/94	DRY	34.19	35.11	34.51	DRY	27.31	DRY	28.46	DRY	32.13
QTR I/95	DRY	16.55	21.80	22.10	DRY	23.85	DRY	21.40	DRY	24.60
QTR II/95	DRY	32.54	33.06	32.41	DRY	25.26	DRY	26.06	DRY	29.68
QTR III/95	DRY	34.54	34.41	33.91	DRY	28.17	DRY	28.96	DRY	31.58
QTR IV/95	DRY	34.54	35.91	35.51	DRY	30.06	DRY	30.76	DRY	33.48

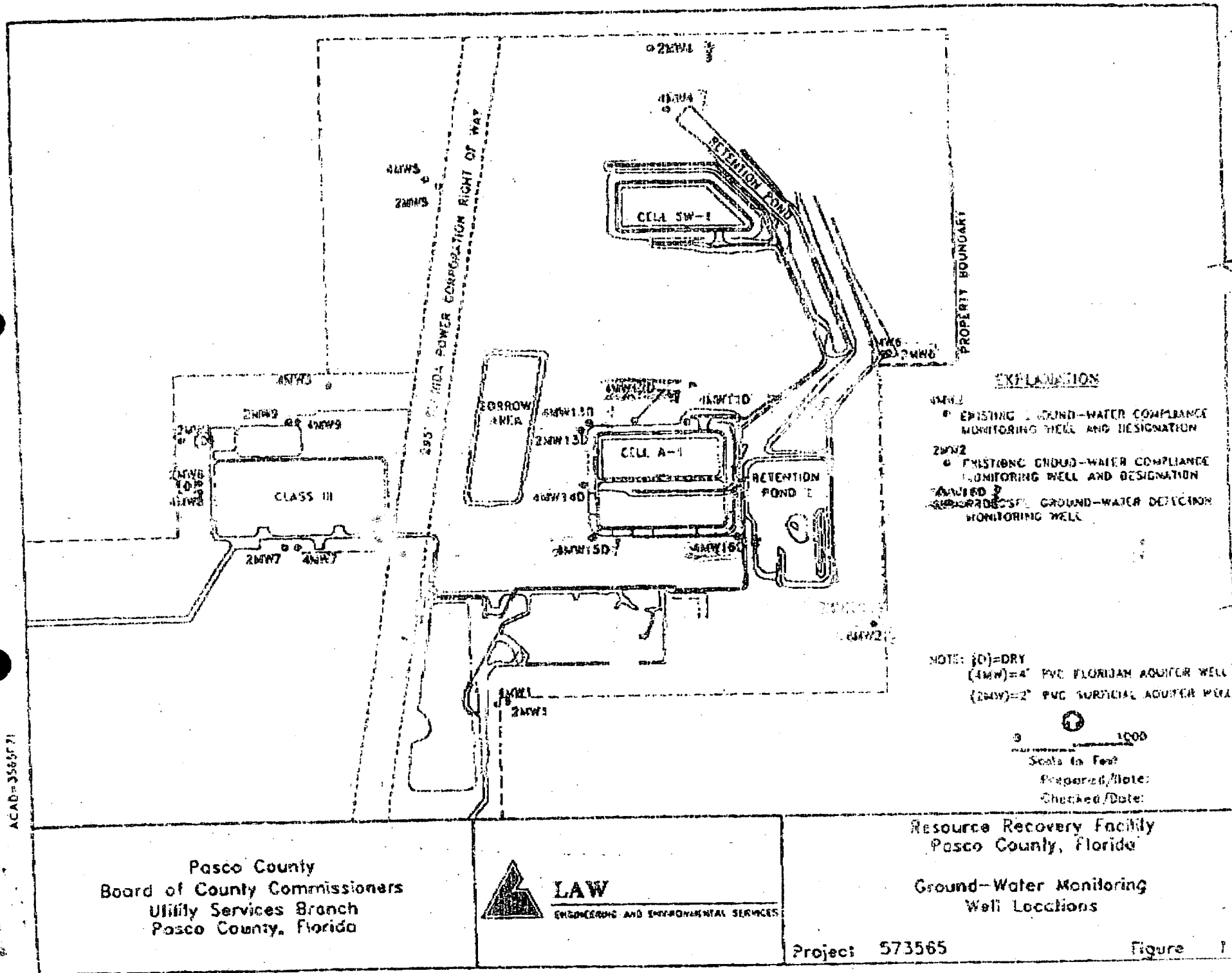
WEST PASCO CLASS III LANDFILL WATER LEVELS 1992 - 1995

	2MW7	4MW7	2MW8	4MW8	2MW9	4MW9	2MW10	2MW3A	4MW3A
QTR I/92	DRY	20.50	DRY	19.80	DRY	21.90	DRY	DRY	DESTROYED
QTR II/92	DRY	21.90	DRY	21.20	DRY	23.50	DRY	DRY	DESTROYED
QTR III/92	DRY	22.90	DRY	22.25	DRY	24.75	DRY	DRY	25.30
QTR IV/92	DRY	19.00	DRY	19.30	DRY	25.50	DRY	DRY	
QTR I/93	DRY	22.30	DRY	21.60	DRY	23.75	DRY	DRY	24.35
QTR II/93	DRY	22.00	DRY	21.35	DRY	23.90	DRY	DRY	24.45
QTR III/93	DRY	DRY	DRY	23.45	DRY	25.65	DRY	DRY	26.20
QTR IV/93	DRY	DRY	DRY	22.40	DRY	24.75	DRY	DRY	25.30
QTR I/94	DRY	DRY	DRY	24.30	DRY	26.60	DRY	DRY	27.15
QTR II/94	DRY	DRY	DRY	26.95	DRY	24.93	DRY	DRY	26.50
QTR III/94	DRY	DRY	DRY	26.85	DRY	24.53	DRY	DRY	26.00
QTR IV/94	DRY	30.23	DRY	31.95	DRY	29.88	DRY	DRY	31.45
QTR I/95	DRY	27.93	DRY	29.65	DRY	27.88	DRY	DRY	29.45
QTR II/95	DRY	27.68	DRY	29.50	DRY	27.53	DRY	DRY	29.10
QTR III/95	DRY	27.38	DRY	29.15	DRY	26.98	DRY	DRY	28.60
QTR IV/95	DRY	29.08	DRY	30.95	DRY	22.85	DRY	DRY	31.45

DEC 27 '95 1 01:14PM

DEC 27 '95 02:11PM CDM - TAMPA
PASCO ENV MGT DIV

ACAD=358571



Transmit Confirmation Report

No. : 004
Receiver : DEP SOL./HAZ. WA
Transmitter : WASTE MGT TAMPA SWDIST
Date : Dec 27 95 12:06
Time : 03'04
Mode : Fine
Pages : 04
Result : OK



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

12-21-95

Date

FAXED

TO:

RICHARD TEDDER

DEPT.: SOLID WASTE

FAX #: SC
904-291-8061

FROM:

BOB BUTERA

DEPT.: D.E.P., Tampa Office

PHONE: 813-744-6100 or SunCom 542-6100 Ext. 451
FAX(local) 744-6125 or (SunCom) 542-6125

SUBJECT:

LEACHATE STORAGE TANK (2,000,000 GALS)
PASCO COUNTY LF /WTE.

COMMENT:

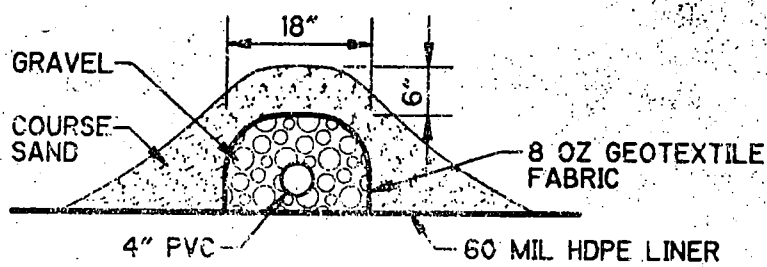
SEE MY "E-mail" - COMMENTS REQUESTED.

Have a happy holiday!
Bob

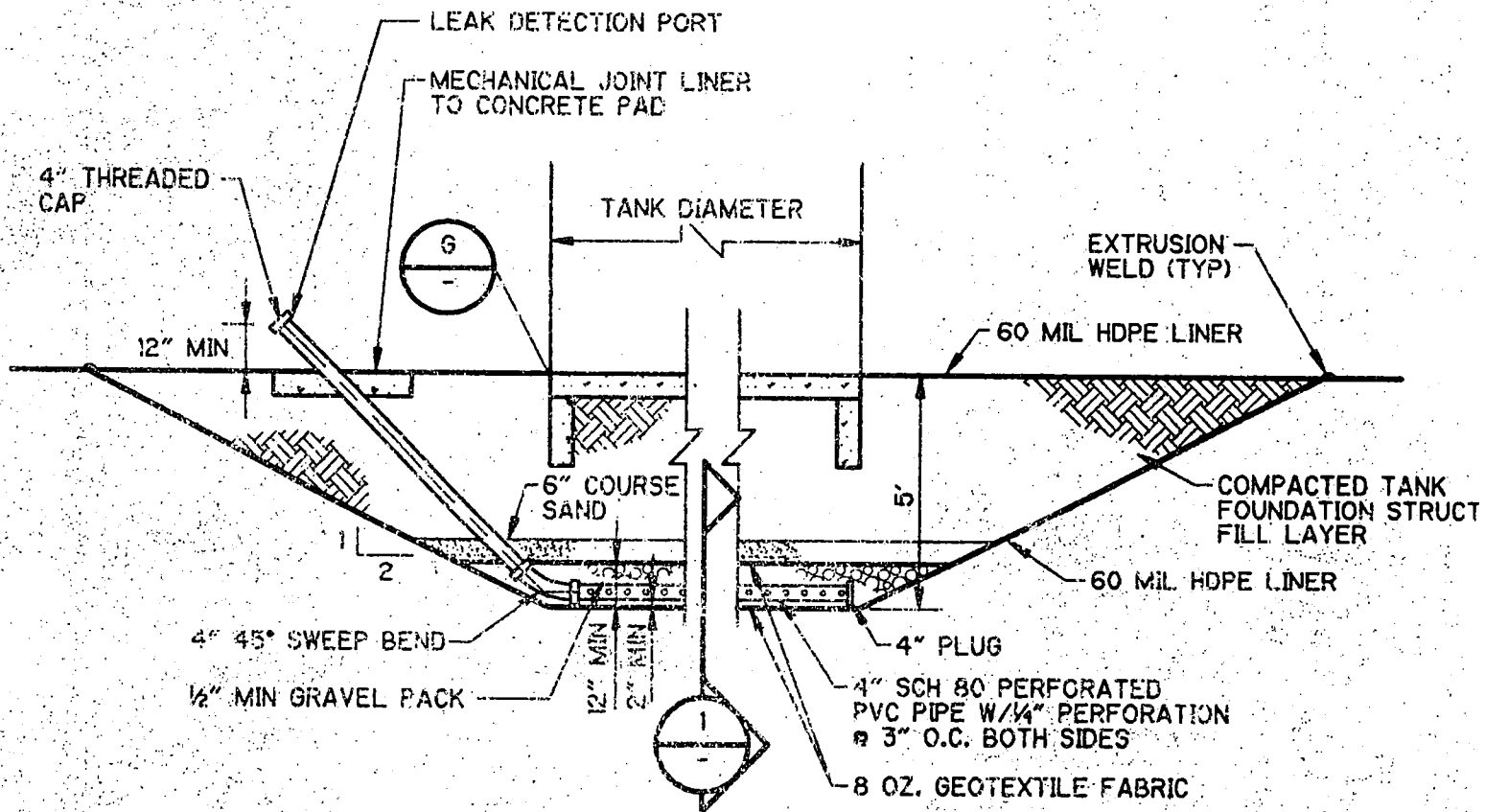
TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 4

RECEIVED BY: _____

PHONE: _____



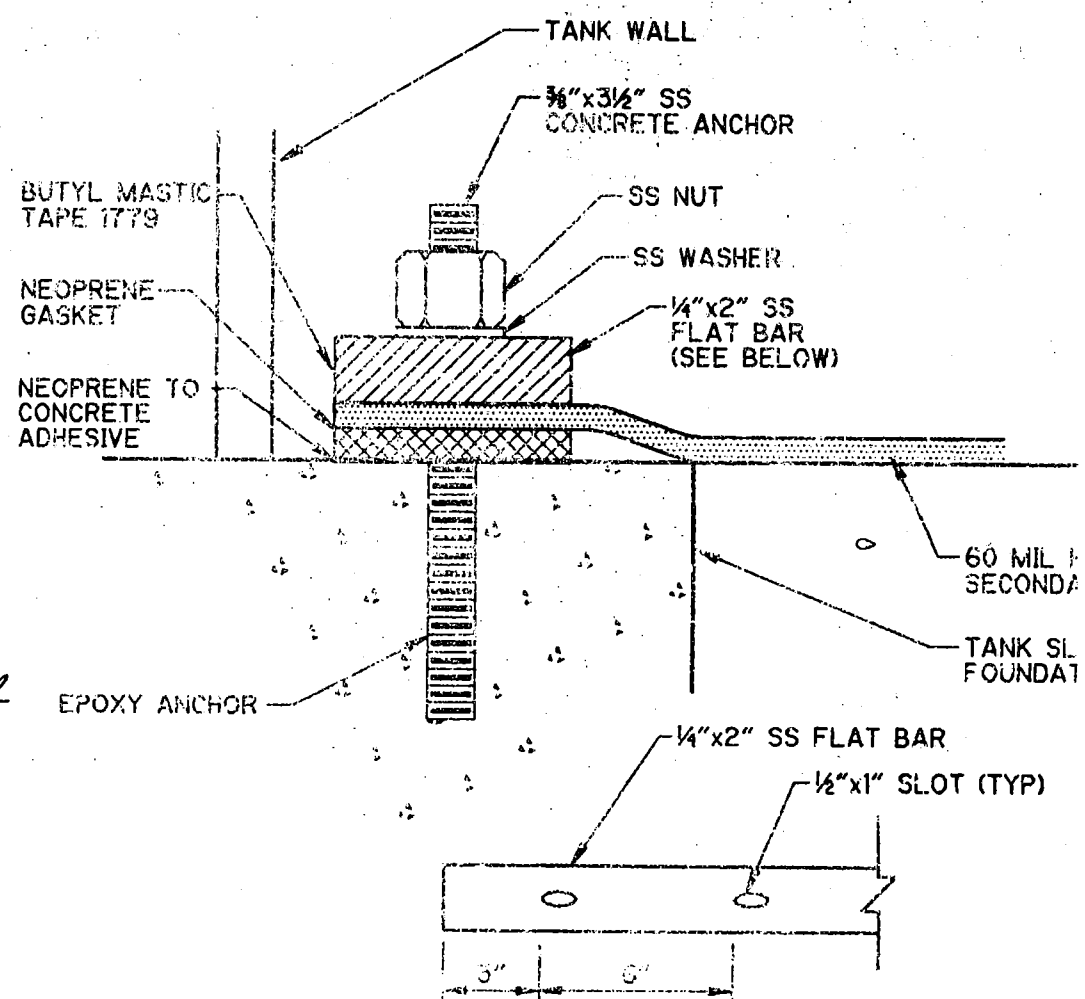
SECTION 1
NTS



SINGLE TANK

LEACHATE STORAGE TANK
LEAK DETECTION SYSTEMS

DETAIL D
C-2,CD-4



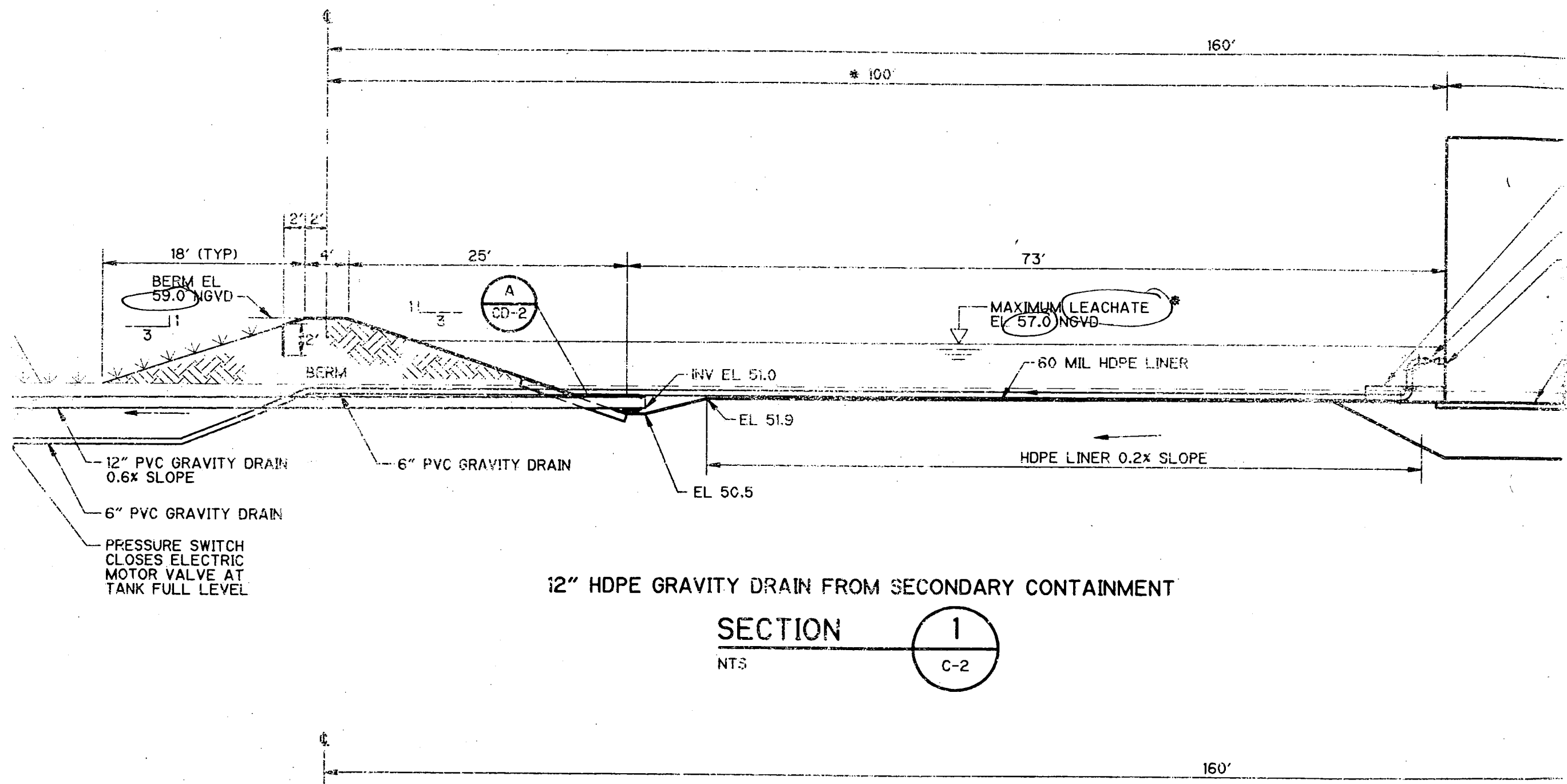
DETAIL G
SYNTHETIC LINER
TO CONCRETE
MECHANICAL
ATTACHMENT.

D

E

F

G



12" HDPE GRAVITY DRAIN FROM SECONDARY CONTAINMENT

SECTION

NTS

1

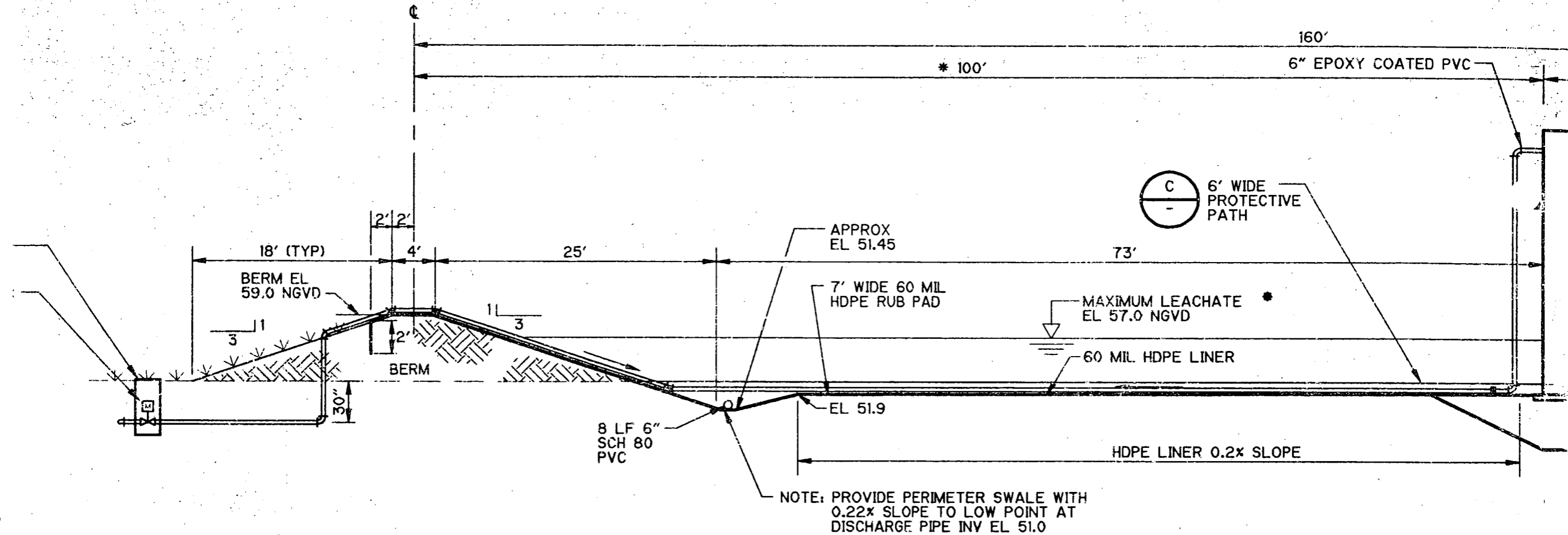
C-2

160'

SECTION

NTS

C-2



6" HDPE FORCE MAIN FROM PUMP STATION

SECTION

NTS

2

C-2

8' WIDE 60 MIL HDPE RUB PAD

FDOT ST. SANDBAG

I N T E R O F F I C E M E M O R A N D U M

Date: 20-Dec-1995 05:39pm EST
From: Robert Butera TPA
BUTERA_R
Dept: Southwest District Offi
Tel No: 813/744-6100
SUNCOM: 542-6100 Ext. 451

TO: Richard Tedder TAL (TEDDER_R @ A1 @ DER)
CC: Kim Ford TPA (FORD_K)
CC: Susan Pelz TPA (PELZ_S)

Subject: Pasco County Leachate Storage Tank Design - Secondary Cont.

I know you are quite busy and sincerely appreciate the time you have extended to me recently on a number of questions. Last week Kim and I faxed you a copy of a proposed secondary containment design for a 2,000,000 gallon leachate storage tank and Treatment Facility at the Pasco County WTE and Landfill. You may have sent Kim an e-mail on it but he has been on vacation since December 13, 1995 therefore if you have, just forward it to me. I do NOT need a response until Wednesday of next week. By the way plans received recently reflect the tank as 100' dia., 34' high (IF CONCRETE???-SEE BELOW) with overflows in the dome of the tank in case the overflow alarm malfunctions thereby exposing the upper non-continuous geomembrane and its mechanical attachment to the tank to loads above what is normally expected from a spill. Concerns I have to date is that the groundwater elevations have not been submitted so the Department can not determine exposure of the bottom liner to loadings from the underlying groundwater in addition to the tank loadings. The foundation analysis which was requested has not been submitted and will not be until the vendor is chosen by the contractor after the contract is awarded.

Other than a foundation analysis the plans are well detailed but they reflect two designs. One for a 100'dia. x 34' high concrete tank, one for a 120' dia. x 20' high steel tank and the kicker is a note on the plan that the contractor is requested to also bid a double wall steel tank and a double wall concrete tank. These plans could be revised significantly obviously if the low-bid presumably is for double wall tanks since no secondary containment will be required and no details are presented for monitoring the interstitial space, etc.

I have requested why the consultant (CDM) has not determined through their nationwide network of experience which design is the most cost effective for the tanks. Their response was that their past experience was not consistent with past bids received but yet they have determined that use of a geomembrance on a berm was more cost effective than a concrete secondary containment structure. I will fax you up-to-date details on the secondary containment

proposed and would appreciate your general comments. To save you time you can call me on this subject as I will be in the office most of tomorrow and commencing Wednesday, December 27, 1995.

Have a Happy Holiday!

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 12-22-95 Subject PASCO CY. LEACHATE TREATMENT FAC.
Time 10:20 A.M. Permit No. 5051-277316
County PASCO
MR. DARWISH EL-HAJJI Telephone No. 221-2833
Representing CDM INC.
[] Phoned Me ☒ Was Called [] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting REQUESTED THE FOLLOWING ADDITIONAL
INFORMATION: (1) GROUNDWATER ELEV. IN PROXIMITY OF TR. INSTALLATION - VANCE
MANOLA TO FURNISH RECENT PIETOMETER ELEV. TO CDM (2) CONSTRUCTION TOLERANCES
FOR .2% SLOPE OF HDPE LINER - MUST CONSIDER TANK SETTLEMENT - SUB-
SYSTEM @ LEAST 1%. (3) SUBMIT CALCS. SUPPORTING 110% VOLUME OF TANK
SPILL WITHIN SECONDARY CONTAINMENT. (REDEFINE 57'0" LEACHATE LVL AS MAX.
SPILL CONTAINMENT ^{LEACHATE} ~~WATER~~ LEVEL. (4) CHECK COMPACTION - 95% - STRONGLY
RECOMMENDED 98%. (5) NOTE: INFORMED DARWISH THAT F&E WILL
ONLY PERMIT THOSE TANKS W/ ADEQUATE DETAILS SUBMITTED - ALT. #1
& ALT. #2. DOUBLE WALL TANKS WILL REQUIRE A MAJ. MOD. & FULL
FEE. IN ADDITION IF THE SECONDARY CONTAINMENT IS REVISED TO
CONCRETE - WILL CONSIDER A MAJOR MOD. - FULL FEE.

(continue on another
sheet, if necessary)

Signature Robert J. Antero
Title P.E. III

12-20-95

PASCO CTY LEACHATE TANKS

120' DIA - 20' HEIGHT - STEEL

(1) TANK SIZE - 100' DIA. - 34' HEIGHT 3 1/2" THICK CORE WALL.

(a) ? - COLLAPSE STRENGTH - LDS HOPE PIPE (4" Ø)

(2) 13414-2 - C. & D. - WHICH VENDOR GENERATED DETAILS FOR TANK DESIGN?

(3) GROUNDWATER - HIGH WATER @ SITE IN LAST 3 YEARS - WHERE TAKEN.

10% slope (4) 13414-7 - 2.04 B. TOLERANCES?

(5) " - 2.05 C. OVERFLOWS - DOME ROOF? CHECK PLAN

(6) FOR WHAT REASON IS IT SPECIFICALLY STATED THAT INSIDE OF TANK SHALL NOT BE COATED OR SEALED - 13414-13 3.07 B.

(7) HOW DOES A CONTRACTOR BID FOR DEWATERING w/o KNOWING THE HIGH GROUNDWATER ELEVATION AT THE LOCATION - SEE 02220 - 6 (F) DEWATERING - MUST DEWATER 1 FT. BELOW EXCAVATION LEVEL.

(8) HAS A PROPOSED VENDOR FOR TANK APPROVED A 95% COMPACTION (PERCENT MAX. DENSITY) RATE IN 6" LIFTS?

I THINK 98% FOR THIS TYPE OF LOADING WHERE SETTLEMENT IS CRITICAL IS REQUIRED.

(9) CALCS - SECONDARY CONTAINMENT - 110% CAPACITY CALCS? MY CALCS. SHOW 1.906 MIL GALS VS. 2.2 MIL GALS. - STEEL TK.

NOTE: (1) CAN NOT FIND ORIGINAL PERMIT APPLICATION OR REQUEST LETTER DATED 9-11-95.

(2) NARRATIVE EXPLAINING OPERATION OF PROPOSED LEACHATE TREATMENT & STORAGE SYSTEM.

(over)

⑩ STEEL TANK CONSTR. DETAILS -

⑪ 4 ALTERNATES - 2 TANKS? - CAN ONLY PERMIT ONE TR
FOLLOWUP w/ MOD. REQUEST FOR CHANGE - CPM
SHOULD HAVE DETERMINED WHICH TANK DESIGN IS PROBABLY
THE MOST COST EFFECTIVE. HOW CAN YOU TELL
CONTRACTORS TO BID ONE OF 4 DESIGNS AND GET A
TIME COMPARISON IN COST & MAINTENANCE OVER TIME.
HOW DOES CPM KNOW THAT A SECONDARY CONCRETE
CONFINEMENT IS NOT CHEAPER THAN GEOREINFORCEMENT.



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833

RECEIVED
DEC 14 1995
Department of Environmental Protection
BY SOUTHWEST DISTRICT

December 13, 1995

Mr. Kim Ford
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318

RE: Pasco County Leachate Storage Tank and Treatment Facility

Dear Mr. Ford:

On behalf of Pasco County, we are pleased to provide the enclosed documents related to the referenced proposed improvements. In response to your request for additional information dated December 7, 1995, please find enclosed two copies of the following documents:

1. Item by item response to Mr. Kim Ford letter of request for additional information of December 7, 1995.
2. Attachments "A" through "C"

Attachment A:	Tanks Joints Details
Attachment B:	RCC Transmittals and TCLP Results
Attachment C:	Solid Disposal Bags Specifications

We trust this information will adequately address each of your comments and the requirements of the regulations.

Please feel free to call us, should you have any comments or questions.

Sincerely,

CAMP DRESSER & MCKEE INC.

Darwish El-Hajji, P.E.

cc: Doug Bramlett/Pasco County
Vincent Manella/Pasco County
Dan Strobridge/CDM
John Banks/CDM

**LEACHATE STORAGE TANK
AND TREATMENT FACILITY
RESPONSE TO DECEMBER 7, 1995
DEPARTMENT OF ENVIRONMENTAL
PROTECTION**

1. **DEP COMMENT:** Please provide proof of publication of notice of application as per F.A.C. 62-701.320(8) and 62-103.150, see attachment.

RESPONSE: Pasco County will publish a notice of application in a newspaper with local circulation in the County. Proof of the publication will be sent to the Department as soon as it is published. ✕

2. **DEP COMMENT:** Please provide a site specific foundation analysis to demonstrate that the filled tank will be supported on a well drained, stable foundation. Please include all design specific calculations relating to expected structural settlement.

RESPONSE: We cannot provide the requested information at this time. The construction plans are setup to allow the bidders the option of bidding either a steel or a prestressed concrete tank. The most cost effective tank material will be used for the tank construction. Once the contract is awarded, and as will be stated in the contract documents, the tank manufacturer will be required to submit a foundation analysis sealed by a Florida P.E. CDM will forward a copy of the analysis to the Department once it is received from the manufacturer.

CANNOT ISSUE PERMIT
PNDR TO APPROVAL
OF FDN. ANALYSIS.

3. **DEP COMMENT:** Please provide details of the panel connections and joints required for each type tank construction, including the specific watertight connecting to the tank bottom.

RESPONSE: For a prestressed concrete tank, a water stop will be used to ensure water tightness. For glass-fused to steel tanks, the foundation sheet is embedded in the concrete footing during concrete placement. A copy of both details are included in this submittal as attachment A. ✓

4. **DEP COMMENT:** Please provide details of the geomembrane protection between the tank bottom footing and secondary containment liner. List of similar installations with related construction details, name and phone numbers for each site.

RESPONSE:

The secondary containment leak detection system detail shown on our previously submitted plan sheets has been revised. Please refer to the enclosed revised drawings for details. It is our understanding from the glass fused steel tanks supplier that the following facilities have similar secondary containment system:

Chambers Development Company
Charles City County Landfill
Charles County, VA
Bill Sperry (804) 966-7146
SCS Engineers
Patty Strickland (703) 471-6160

- NO COVER WITH SCS
WAYNE - NEW
WILL PAT
DETAIL
WRONG #

must
contact for
info.

Prince George County Landfill
Upper Marlboro, MD
Lewis Ronca (215) 759-5100

- GUL. FROM

5. **DEP COMMENT:** Please provide details of all piping, collection laterals, floor drains, and component layout associated with the treatment process building.

RESPONSE: The plans have been revised to depict the details of all piping, collection laterals, floor drains and component layout associated with the treatment process building.

6. **DEP COMMENT:** Please provide two complete sets of construction plans with the revisions discussed on December 7, 1995 with Mr. Darwish El-Hajji.

RESPONSE: Two complete sets of construction plans addressing the revisions discussed on December 7, 1995 with Mr. Darwish El-Hajji are included.

7. **DEP COMMENT:** Please provide results of TCLP testing of solids remaining after the leachate distillation. Both site specific data and data from operating systems is requested, with the source of each sample identified.

RESPONSE: The TCLP sample results previously submitted are site specific to Pasco County. The sample developed by taking a leachate sample from the A-1 cell primary liner leachate lift station. The sample was forwarded to RCC in Seattle, Washington (RCC is the treatment process designer/vendor) where it was boiled

SP & AA
REVIEW

down and the resulting solids subjected to TCLP analyses. As the results indicate, the solids do not exhibit hazardous characteristics. With respect to providing other operating systems analytical results, we previously indicated that, to the best of our knowledge, no other ash pile leachate or MSW landfill leachate, is treated using this process. Consequently, providing TCLP analyses of the solids from other operating RCC systems would yield no information or indications of what can be expected in Pasco County. Other analytical results would simply reflect the elemental composition of the feedstock. For power plants the solid residuals are primarily sodium salts with a minimum of organic material. A copy of the transmittal letters and test results is included as attachment B.

8. **DEP COMMENT:** Please provide comprehensive description of the solids disposal method to ensure that the solids handling bag is protected from damage to prevent dissolution of the salts back into the landfill.

SP/4AA
Reman

RESPONSE:

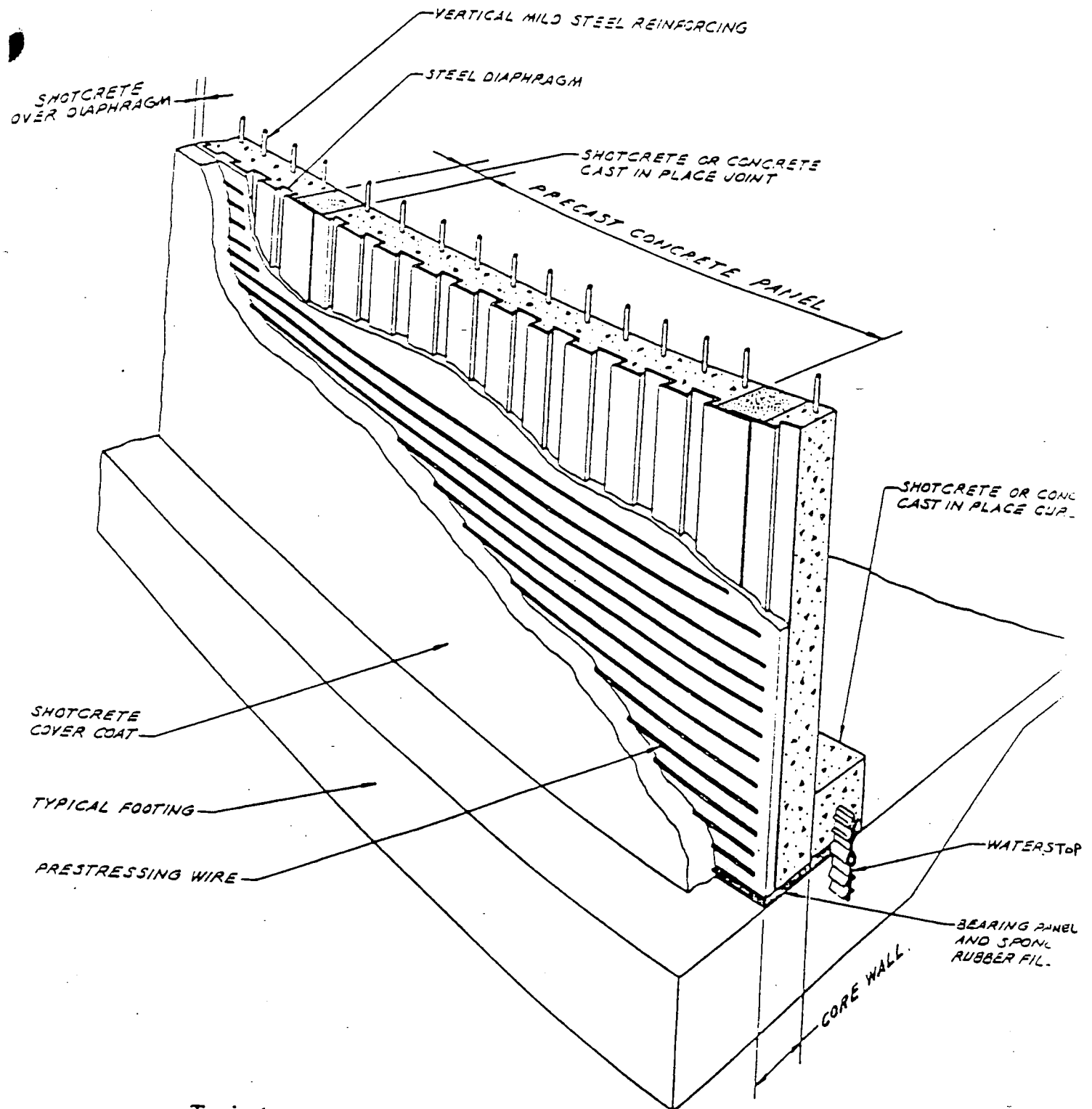
The solids handling bag material will be constructed of 3.0 ounce uncoated polypropylene material and 2 ply 6.0 mil polyethylene inner liner. A copy of the manufacturer catalog and price quote from a splicer are enclosed as attachment C. Also, a sample of the proposed bag material is enclosed. When filled with solids, each the bag will weigh approximately 5 tons. The solids handling bags will be placed in the landfill at the rate of about one per day. The bags will be initially placed on an area prepared for their placement. The area may be an unused portion of the cell or it may be on the ash residue where large metal objects have been removed. The bags will be placed side by side until it is reasonable to begin another lift.

— impact
on permeability
??
WHY NOT
BIDDERABLE?

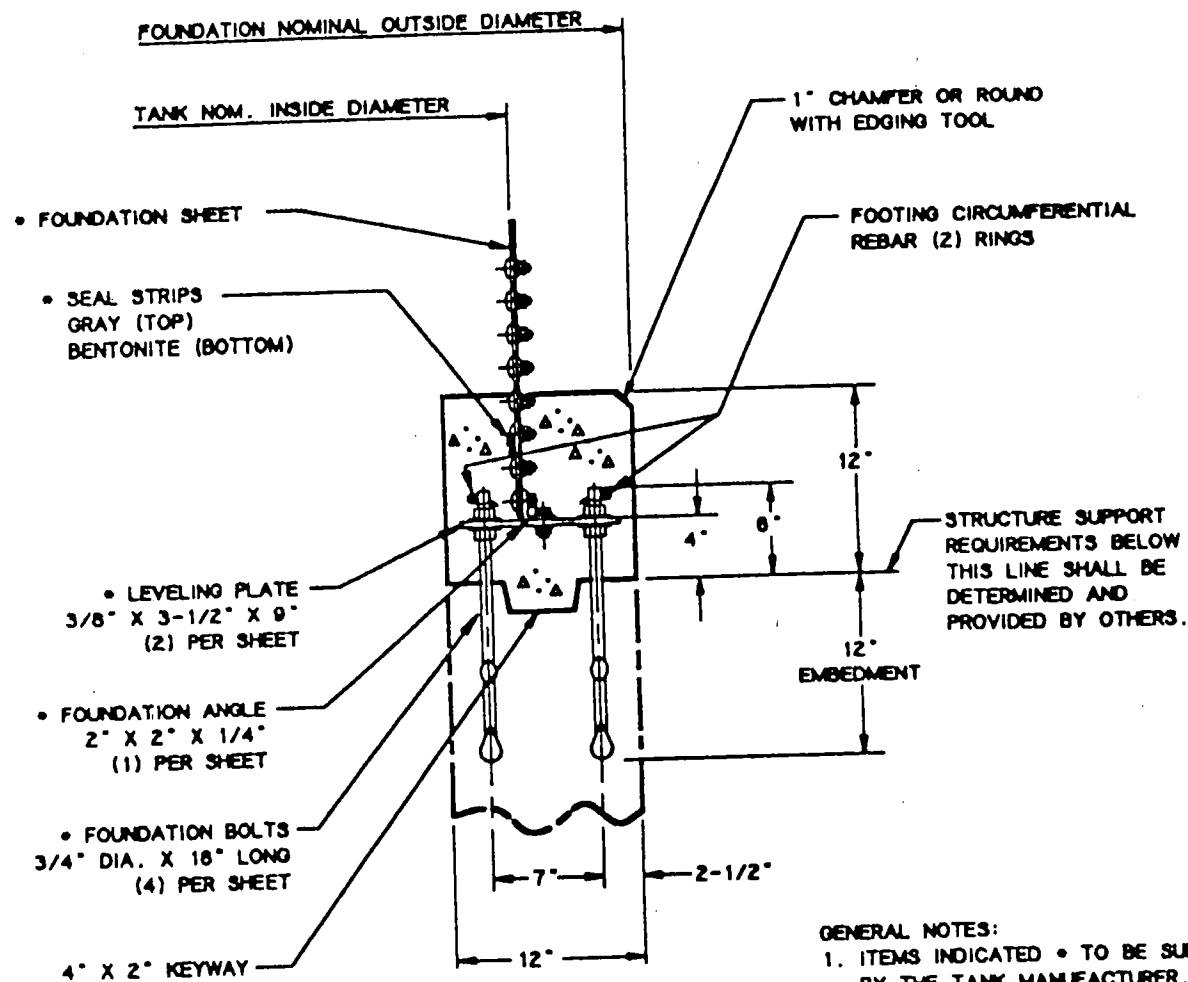
Ash residue which has been subjected to ferrous extraction or clean fill will be used to fill voids between the bags and to provide a cover cushion over the top of the bags layer. A minimum amount of bag breakage in the form of punctures or small tears is expected and will not alter the quality of leachate to a degree that the treatment process will not function properly.

AA

ATTACHMENT A
TANKS JOINT DETAILS



Typical wall section of a wirewound precast concrete water storage tank
Figure 1.2



SECTION THROUGH FOOTING

GENERAL NOTES:

1. ITEMS INDICATED • TO BE SUPPLIED BY THE TANK MANUFACTURER.
2. FOR TRICKLING FILTER TANK GENERAL DIMENSIONS AND CONSTRUCTION MATERIAL REQUIREMENTS SEE DRAWING NO. 261378.

REV	DESCRIPTION
1	RELEASED FOR M/I MARKETING SALES & PRE-SUBMITTAL USAGE 1-2-81. ROK
PROJECT NAME	
PROJ NO.	
A.O. SMITH HARVESTORE® PRODUCTS, INC. DEKALB, IL. AOSHP1 COPYRIGHT © 1991 ALL RIGHTS RESERVED	
TRICKLING FILTER TANK FOUNDATION 14' DIA. THRU 120' DIA.	
DRWG NO.	261377

ATTACHMENT B
RCC TRANSMITTALS & TCLP RESULTS



3006 Northrup Way
Bellevue, WA 98004-1407

Phone: 206 828-2400
Fax: 206 828-1126

A Division of Ionics, Incorporated

January 23, 1995

Mr. Douglas S. Bramlett
Pasco County
7536 State Street
New Port Richey, FL 34654

Subject: Ash Leachate and Solids TCLP Analysis

Dear Mr. Bramlett,

As we discussed in our meeting on December 22, 1994, Resources Conservation Company (RCC) has received a sample of the ash leachate wastewater from the county and has proceeded to chemically analyze the sample along with generating solids for additional tests. Please find a copy of our inter-office memo describing analytical results and TCLP results.

We have also generated 200 grams of evaporated solids and furnished these to Candia Mulhorn of the Pasco County Environmental Lab. She has indicated she has received these samples on January 19, 1995.

As is apparent, the water analysis certainly falls within the chemistry ranges furnished by CDM to RCC in early 1994. We see no changes to our basic process and equipment design as discussed in our meetings.

The TCLP test conducted by RCC has readily passed the criteria set forth in the environmental regulations.

RCC looks forward to the continued progress of this important project. Please contact us if you have additional questions.

Very truly yours,
RESOURCES CONSERVATION COMPANY

A handwritten signature in cursive script that reads "Joe Bostjancic".

Joe Bostjancic
Director, Sales and Marketing

Attachment

cc: Mr. Vincent Manella, P.E. (w/attach.)
Solid Waste Facility Manager

Mr. Daniel E. Strobridge (w/attach.)
Camp Dresser & McKee Inc.

**RCC** Resources
Conservation
Company

ANALYTICAL LABORATORY
INTER-OFFICE MEMO

TO: Bob Solomon

January 19, 1995

cc: Dan Peterson
Karen Schooley
Joe Bostjancic**SUBJECT:** Pasco County Florida, Ash Leachate Water & Solids Residue TCLP Analyses

Attached are the analytical results you requested for the water sample from the Solid Waste Plant project for Pasco County, Florida (RCC Lab Number 950102). The water was sampled by or under the authority of Vince Mannella (Pasco County) on December 22, 1994, and was received by RCC on January 5, 1995.

The sample, "Ash Leachate Water," arrived in two 20-liter plastic buckets. The initial inspection revealed that a major portion of the water had frozen during shipping. A small sample of the remaining liquid was collected and retained. There were no suspended solids visible in this liquid. After allowing the sample to fully thaw, an analytical sample was withdrawn after homogenization. Equal volumes were taken from each bucket and combined to form the sample analyzed. At this point, the water had a yellow tint and suspended solids were visible (18 mg/l TSS). The pH was 6.3. All reported analyses were performed by RCC except for TKN, O&G, Selenium and Mercury which were performed by Sound Analytical.

An ion-balance satisfactorily met established criteria (90 - 100%). The corresponding mass-balance was also satisfactory (100%) based on the TDS of 26,300 mg/l at 180° C. The TDS determination performed at 105° C. 32,000 mg/l, gave a low mass-balance (82%). This is attributed to incomplete drying of waters of hydration at 105° C.

A Toxicity Characteristic Leaching Protocol (TCLP) test was also conducted on dried solids from the Ash Leachate Water. One liter of the water was first reduced to one hundred milliliters on a hot plate. (A precipitate was first noticed at 400 mL during the boildown.) This concentrate was then placed in a 180° C oven until dry. The resulting solids (RCC Lab Number 950102) were extracted per the TCLP procedure. The results on the TCLP leachate, alongside the regulatory limits, are also attached, see page 3. The dried solids readily passed the TCLP test as predicted based on the low heavy metal concentrations in the Ash Leachate Water.

If you have any questions pertaining to these results, please do not hesitate to call.

Respectfully,

Torsten Erikson

Jay Swift

TE/JS/JN/ss

Analytical Laboratory Report

Project:	Pasco County	Results Sent To:	Bob Solomon Dan Peterson Karen Schooley Joe Bostjancic
-----------------	---------------------	-------------------------	---

Date Received:	January 5, 1995	Date Results Given:	January 19, 1995
-----------------------	------------------------	----------------------------	-------------------------

RCC Sample # 950102

<u>Analyte</u>	<u>Units</u>	<u>Results</u>
		12/22/94
		Ash Leachate
		<u>Water</u>
		(-01) ¹
pH	pH	6.3
Conductivity	µmhos/cm	43,800
Total Dissolved Solids (105° C)	mg/l	32,000
Total Dissolved Solids (180° C)	mg/l	26,300
Total Suspended Solids (105° C)	mg/l	18
Calcium	mg/l	4,900
Magnesium	mg/l	2.9
Potassium	mg/l	2,300
Sodium	mg/l	3,200
Silica	mg/l	6.5
Chloride	mg/l	15,200
Sulfate	mg/l	520
Total Sulfur	mg/l	178
Total Organic Carbon	mg/l	14
Alkalinity	mg/l as CaCO ₃	100
Total Phosphorus	mg/l	< 5
Fluoride	mg/l	0.19
Ammonia Nitrogen	mg/l	16
Total Kjeldahl Nitrogen	mg/l	17
Nitrate Nitrogen	mg/l	< 0.05
Nitrite Nitrogen	mg/l	< 0.02
Oil and Grease	mg/l	< 2.2

¹ Results reported in mg/l on a filtrate basis, except for TSS.

Analytical Laboratory Report**Project:** Pasco County**Results Sent To:**Bob Solomon
Dan Peterson
Karen Schooley
Joe Bostjancic**Date Received:** January 5, 1995**Date Results Given:** January 19, 1995**RCC Sample #** 950102

Page 2

Analyte**Units****Results**12/22/94
Ash Leachate
Water(-01)¹

Aluminum	mg/l	< 0.2
Arsenic	mg/l	< 1
Barium	mg/l	1.50
Boron	mg/l	0.7
Cadmium	mg/l	< 0.1
Chromium	mg/l	< 0.1
Copper	mg/l	< 0.05
Iron	mg/l	0.14
Lead	mg/l	< 0.3
Manganese	mg/l	0.08
Mercury	mg/l	< 0.0003
Nickel	mg/l	< 0.1
Selenium	mg/l	< 0.15
Silver	mg/l	< 0.1
Strontium	mg/l	27
Zinc	mg/l	0.1

¹ Results reported in mg/l on a filtrate basis, except for TSS.

Analytical Laboratory Report**Project:** Pasco County**Results Sent To:**Bob Solomon
Dan Peterson
Karen Schooley
Joe Bostjancic**Date Received:** January 5, 1995**Date Results Given:** January 19, 1995**RCC Sample #** 950102**Page** 3

<u>Analyte</u>	<u>Units</u>	<u>TCLP Results</u> <u>950102-03</u>	<u>Regulatory</u> <u>Level, mg/l</u>
Arsenic	mg/l	< 0.7	5
Barium	mg/l	2.6	100
Cadmium	mg/l	< 0.06	1
Chromium	mg/l	< 0.04	5
Lead	mg/l	< 0.2	5
Mercury	mg/l	< 0.0005	0.2
Selenium	mg/l	< 0.15	1
Silver	mg/l	< 0.06	5

ATTACHMENT C
SOLIDS DISPOSAL BAGS
SPECIFICATIONS

BAKER TECH

RECEIVED
9-7-95

September 7, 1995

Mr. John Banks
CDM, Inc.
201 Montgomery Avenue
Sarasota, FL 34243

Subject: Trailer Liners

Dear Mr. Banks:

Per your request, we are pleased to provide pricing and specifications on a disposable liner per your new dimensions. The enclosed drawing provides details. Pricing is as follows.

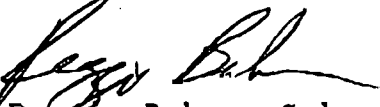
Item 1. Container liner, 3.0 ounce uncoated polypropylene, 2 ply 6.0 mil polyethylene inner liner, 8' x 10' x 6' high, two 14" diameter x 36" long fill spouts, eight 2" wide x 16" long support loops.

Price, each	1 - 9 pieces	\$163.04
	10 - 49	\$143.94
	50 - 99	\$125.91
	100+	\$111.93

These prices are FOB plant at Savoy Texas and are exclusive of freight or taxes. They are firm for 30 days acceptance.

We appreciate your patience and look forward to being of service.

Best regards,

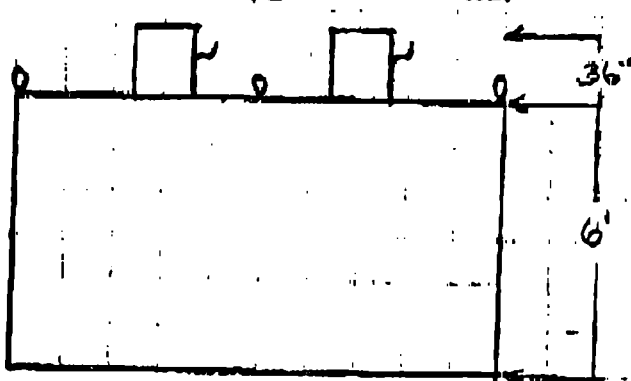
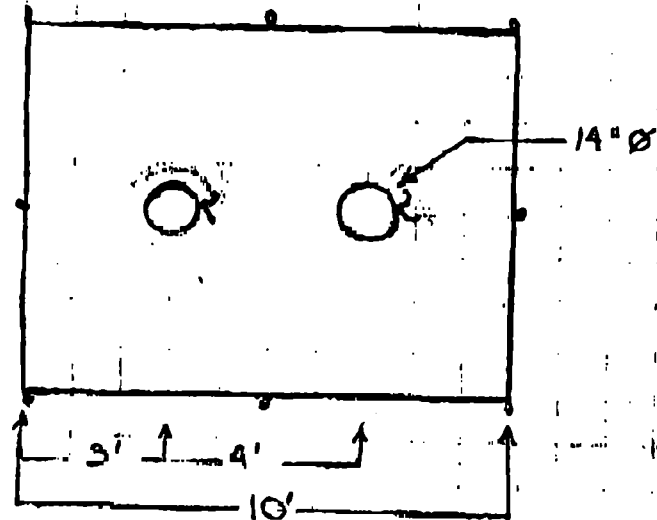


Reggie Baker, Sales Engineer

cc: BAG SALES

RECEIVED
DEC 14 1995
Department of Environmental Protection
BY SOUTHWEST DISTRICT

TOP

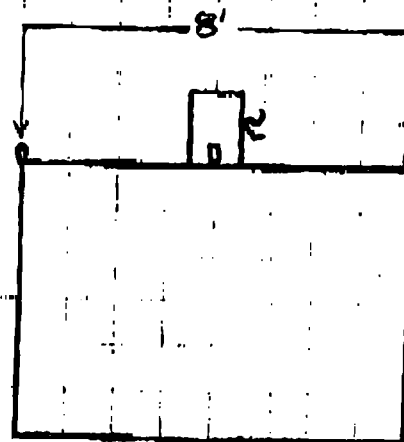


SIDE

CDM

9-6-95

5 OZ. UNCOATED POLYPROPYLENE
2 LAYERS 6 MIL POLYETHYLENE
8 - 2" WIDE, 6" SUPPORT LOOPS
2 - 14" x 36" FILL SPOOTS



END

*To Cindy
Jung
From Elaine*

SUPER SACK®

Woven Polypropylene

Flexible Semi-Bulk Container

for shipping/handling/storing

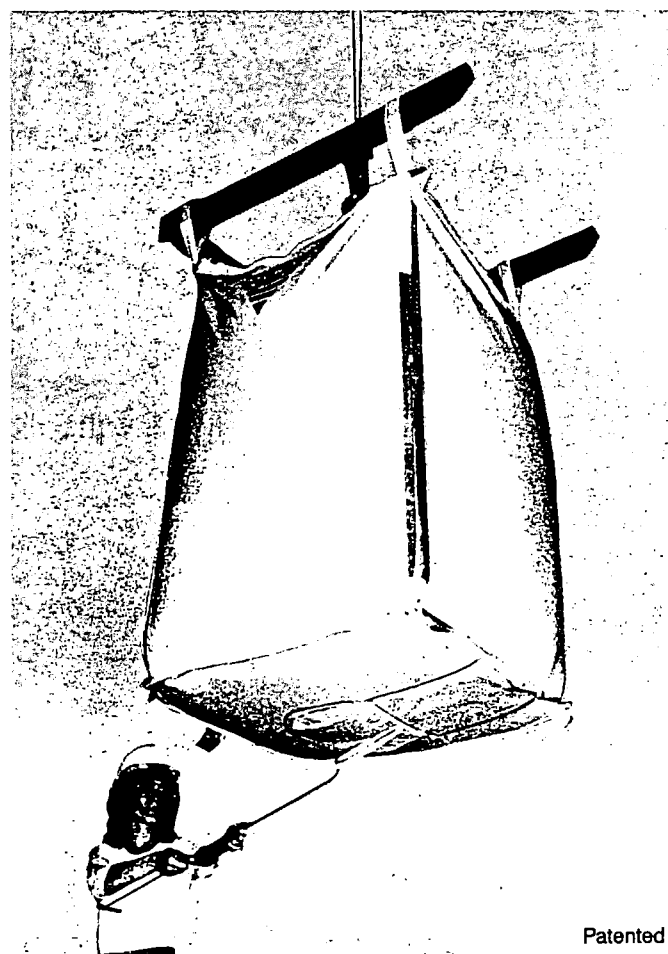
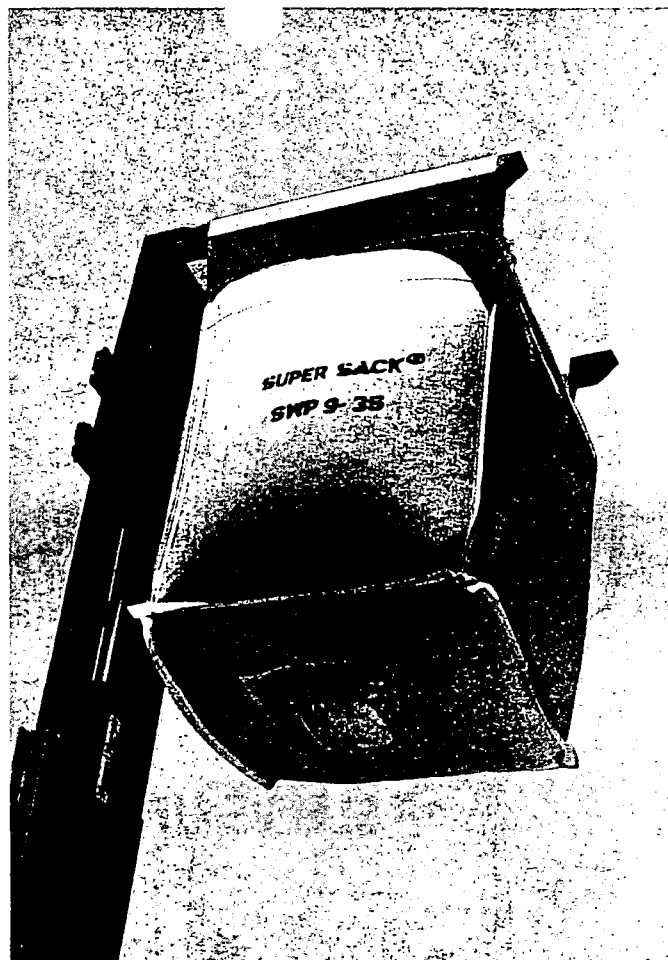
dry-flowable, semi-bulk materials

The real "Bag" that will stand up!



Photo shows operator grounding a GSS™ SUPER SACK® Container to the frame of a receiving hopper.

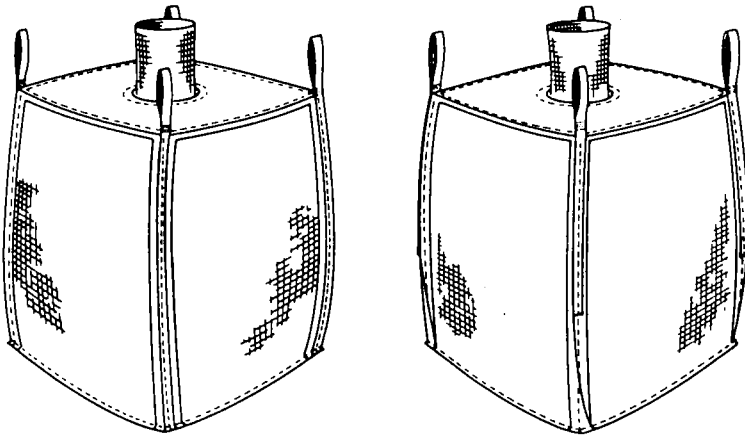
- **Customized**
- **Semi-Bulk System**
- **Completely Compatible With All Modes of Transportation**
- **Food Grade**
- **Advantages of a Package With the Economies of Bulk Shipping**



Operator preparing to dump load from R.O.D.S.™ SUPER SACK® Container (R.O.D.S.™ — Remote Opening Discharge Spout).

Model SWP LWP SUPER SACK® Containers

STRAP LIFT

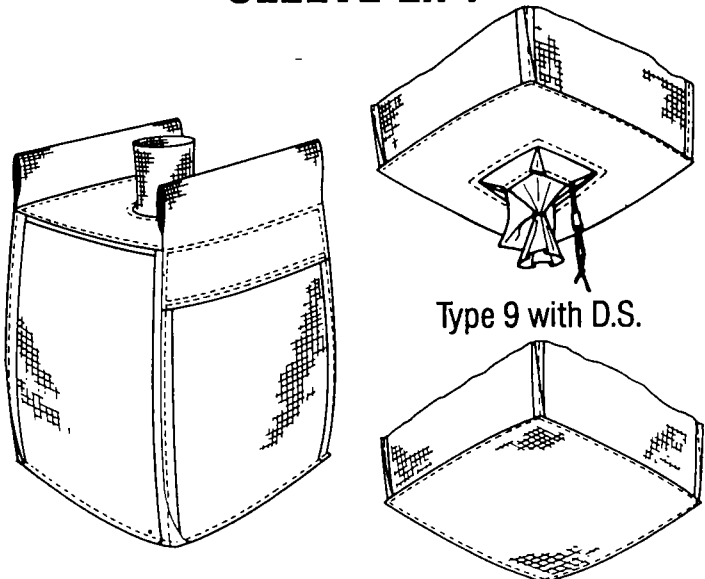


STRAP LIFT CAPACITIES

SWP — 3300 lbs.
LWP — 2200 lbs.

- Capacities up to 5000 lbs. available.
- Four panel construction with unique bonded hems on all side seams. This eliminates strength loss from sew lines.
- All fabric edges are turned to the outside. This reduces potential contamination.
- Standards and options are detailed on back cover.
- Tuff Strap™ woven polypropylene for cut resistance, or conventional polyester.

SLEEVE LIFT



Type 9 with D.S.

Type 9 with Solid Bottom

SLEEVE LIFT CAPACITIES

SWP — 3300 lbs.
LWP — 2200 lbs.

- Bonded hem construction same as above.
- Hemmed sleeve construction replaces straps
- Easy forklift entry
- Cargo strap available

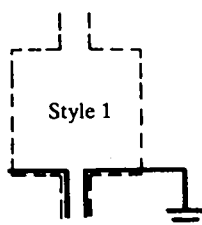
GSS™ SUPER SACK® Container

GSS™ (Grounded Super Sack) SUPER SACK® Containers are available in all popular sizes and configurations. (Refer to specifications for CP SWP™ and LWP SUPER SACK® Containers). This unique bag is made of woven polypropylene with a metalized laminated liner, put together with a patented process. The GSS substantially reduces dangers that may develop from static buildup during filling and dumping, yet it has all the advantages of other SUPER SACK® Containers. Please ask for Bulletin #60101. Patented.

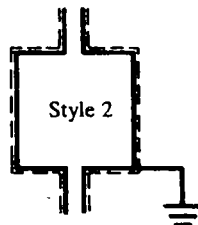
GSS™ SUPER SACK® Container

Available in all popular sizes and configurations.
Refer to specifications for CP SWP™ and LWP SUPER SACK® Containers.

Metalized Bottom & D.S.



Fully Metalized

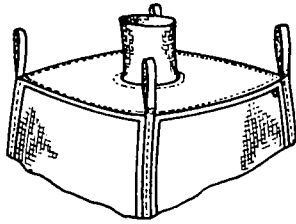


R.O.D.S.™ SUPER SACK® Container

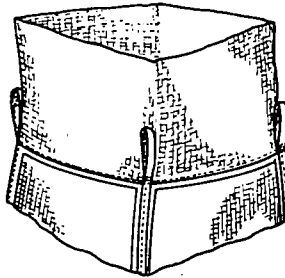
R.O.D.S.™ (Remote Opening Discharge Spout) SUPER SACK® Container gets the operator out from under the bag during discharge. It affords a new dimension in safety and time savings because of ease of operation. The R.O.D.S.™ SUPER SACK® Container also has all the features of other SUPER SACK® Containers. Ask for Bulletin #60201. Patented.

Model SWP LWP SUPER SACK[®] Containers

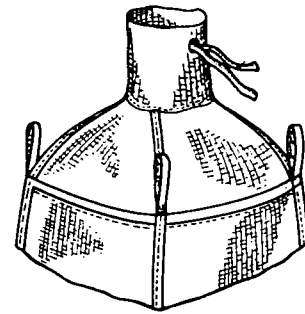
STRAP LIFT TOP DESIGNS



Standard Type 4

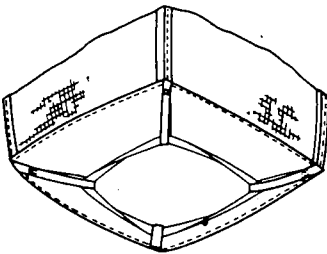


Duffel

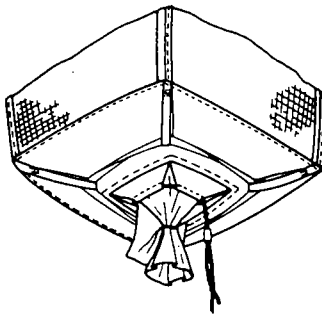


Cone

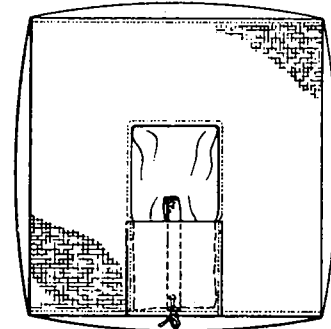
STRAP LIFT BOTTOM DESIGNS



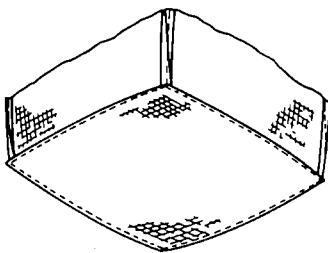
Type 2 with Solid Bottom



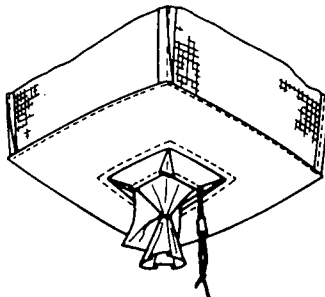
Type 2 with Discharge Spout



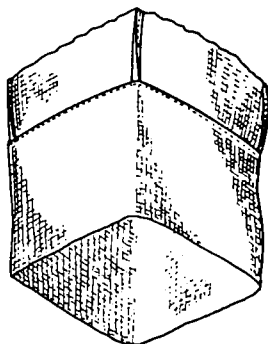
R.O.D.S.[™] Available in Type 4 or Type 9
Closed Remote Opening Discharge



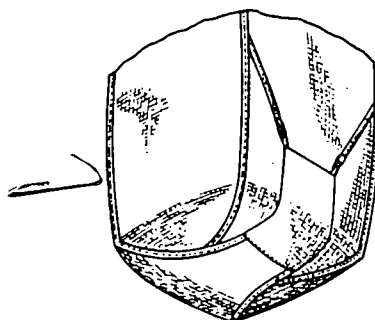
Type 4 with Solid Bottom



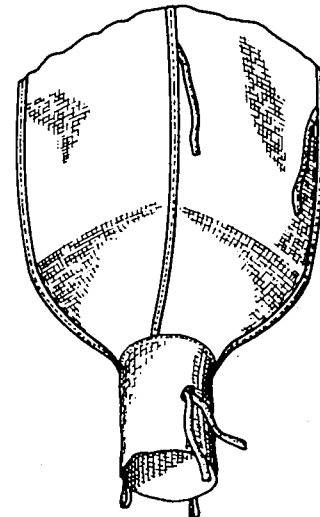
Type 4 with Discharge Spout



Full Open Discharge



Cone Bottom Closed



Cone Bottom Open

STANDARDS AND OPTIONS AVAILABLE*

SUPER SACK® CONTAINER DIMENSION OPTIONS

DIMENSION CODE	1	5	6	7
DIAMETER NOMINAL	36"	45"	55"	50"
CU. FT.				
10	17"			
15	25			
20	33	22		19
25	42	27	18	23
30	50	33	22	27
35	58	38	25	31
40		44	29	36
45		49	32	40
50		55	36	45
55		60	39	49
60		66	43	54
65		71	47	58
70		77	50	62
75		82	54	67
80		87	57	71
85		93	61	76

*Note: Code-7 is an oblong bag. If filled properly, it will have dimensions of 43-44" x 53-54". If it's rounded out it will be approx. 50" dia.

DEMONSTRATION FACILITY — maybe our Bag is your Bag!

Take part in loading and unloading your own material, under your conditions, at our unique test facility at Savoy, Texas. You'll be able to judge for yourself how the efficiency of SUPER SACK® Containers and proper handling equipment, as a system, can save you big money.

How to handle a SUPER SACK® Container

Learn more about how Super Sack® Semi-Bulk Containers can save you money. Write or call today.



SUPER SACK® Container and GSS™ SUPER SACK® Container are registered trademarks of B.A.G. Corp. of Dallas, Texas, U.S.A. These and other products manufactured by B.A.G. Corporation are protected by one or more of the following patents: 4,143,796 ; 4,194,652 ; 3,962,959 ; 4,113,146 ; 4,224,970 ; 4,253,507 ; 4,340,379 ; 4,457,456 ; 4,479,243 ; 4,691,371. Other patents pending. B.A.G. Corporation is a member of both the FIBC Association and the Packaging Institute.

Top: Standard Fill Spout — 14" fill spout diameter
Other fill spouts — 10", 18", 22" diameters
OT — Open "Duffel" top
NT — No top, full open
CT — Cone top

Bottom: Standard — 14" discharge spout
Other discharge spouts — 10", 18", 22" diameters
CB — Cone Bottom
Double bottom

Lift Designs: Standard — 10" sleeve or strap/polyester
Long Strap — for center pickup
Cargo Strap — on sleeve or strap bag
Heavy Duty Strap
Tuff Strap™ — durable rigid woven polypropylene strapping for cut resistance

Fabric: Standard — noncoated food grade, ultra-violet treated for limited outside storage
CP — coated polypropylene
Multiwall
GSS™ — woven polypropylene with aluminized film laminate conductive for grounding

Liners: Glued in liners available

Closures: Standard — 12" plastic coated wire tie
Plastic coated 16" wire tie
Strap tie
Rope tie with cordlock

HOW TO DETERMINE MODEL NUMBER WHEN ORDERING BAG

MODEL	TYPE BOTTOM	VOLUME CU. FT.	TYPE TOP	FABRIC			SPECIALS FEATURES
				CP	GSS	STD	
SWP	7	50	STD		✓		*18" DS

Example: Model SWP-7, standard GSS™ grounded woven polypropylene bag, with an *optional 18" R.O.D.S.™ bottom discharge, 50 cu ft capacity, and with a standard fill top.

Modifications available to meet individual needs.



11510 Data Drive • Dallas, Texas 75218
214/340-7060 • 800/331-9200 • Telex: 73-2671
FAX 214/340-4598

Printed in U.S.A.
Bulletin #871101



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

12/8/95
Date

FAXED

TO:

RICHARD TEBBEN

DEPT.:

SOLID WASTE

FAX #:

1 904 - 414 0414

~~(704) 488-0300 (S&I)~~

FROM:

EM CORP

DEPT.:

D.E.P., Tampa Office

PHONE:

813-744-6100 or SunCom 542-6100

Ext. 382

FAX(local) 744-6125 or (SunCom) 542-6125

SUBJECT:

TANK DESIGN

COMMENT:

Letter for Secondary Containment
PLS Comment.

THX RB

DUE TO THE PROPOSED UNCONVENTIONAL DESIGNS FOR
SECONDARY CONTAINMENT RECEIVED I ASK THAT YOU GIVE US ANY
COMMENTS YOU MAY HAVE. WHAT EVER HAPPENED TO RAISED BERMS
AND CONCRETE SECONDARY CONTAINMENT???

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE:

2 THANK
Rob

RECEIVED BY:

PHONE:

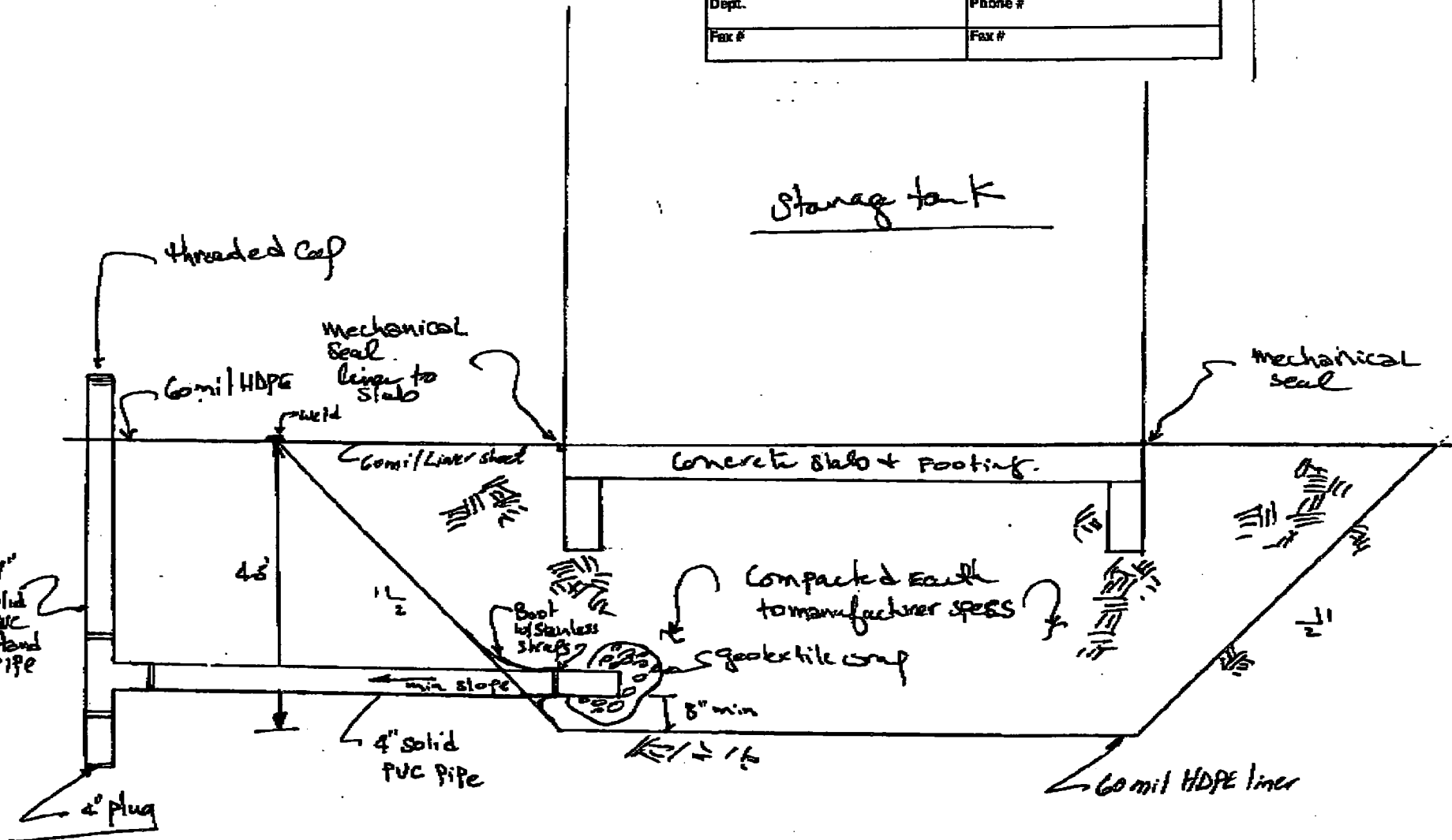
Kim modified layout

Post-It™ brand fax transmittal memo 7671		# of pages > 1
To	Kim Ford	
From	DARWISH	
Co.	Co.	
Dept.	Phone #	
Fax #	Fax #	

P.1
COMPUTED BY
DATE
PAGE NO.

JOB NO.
DATE CHECKED
CHECKED BY

PROJECT
DETAIL
DEC 08 '95
CAMP DRESSER & MINERALS



Kim - We can provide say 4 leak detection ports spaced evenly around the tank diameter

Transmit Confirmation Report

No. : 007
Receiver : DEP SOL./HAZ. WA
Transmitter : WASTE MGT TAMPA SWDIST
Date : Dec 11 95 10:05
Time : 01'25
Mode : Fine
Pages : 02
Result : OK

Transmit Confirmation Report

No. : 012
Receiver : 9-221-2279
Transmitter : WASTE MGT TAMPA SWDIST
Date : Dec 08 95 17:01
Time : 03'18
Mode : Fine
Pages : 04
Result : OK



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

12/8/95
Date

TO:

Darwin El Hajje

DEPT.:

COM

FAX #:

221 2279

FROM:

Jim Ford

DEPT.: D.E.P., Tampa Office

PHONE: 813-744-6100 or SunCom 542-6100 Ext. 382
FAX (local) 744-6125 or (SunCom) 542-6125

SUBJECT:

W Pasco tank, RVE Litch

COMMENT:

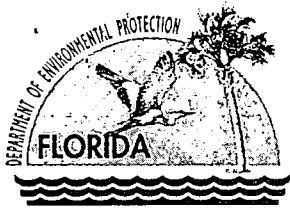
TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE:

7

RECEIVED BY:

PHONE:

RB



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

December 7, 1995

Mr. Daniel Strobridge
CDM
One Tampa City Center
Suite 1750
Tampa, FL 33602

**Re: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County**

Dear Mr. Strobridge:

This is to acknowledge receipt of the additional information submitted on November 13, 1995 in support of your permit application to construct a leachate storage tank and treatment facility.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit remains incomplete. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]. Please provide:

- (1) Proof of publication of notice of application as per F.A.C. 62-701.320(8) and 62-103.150, see attachment.
- (2) A site specific foundation analysis to demonstrate that the filled tank will be supported on a well drained, stable foundation. Please include all design specific calculations relating to expected structural settlement.
- (3) Details of the panel connections and joints required for each type tank construction, including the specific watertight connections to the tank bottom.
- (4) Details of the geomembrane protection between the tank bottom footing and secondary containment liner. List of similar installations with related construction details, name and phone numbers for each site.
- (5) Details of all piping, collection laterals, floor drains, and component layout associated with the treatment process building.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Mr. Daniel Strobebridge
CDM

December 7, 1995
Page 2

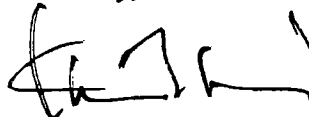
- (6) Two complete sets of construction plans with the revisions discussed on December 7, 1995 with Mr. Darwish El-Hajji.
- (7) Results of TCLP testing of solids remaining after the leachate distillation. Both site specific data and data from operating systems is requested, with the source of each sample identified.
- (8) Comprehensive description of the solids disposal method to ensure that the solids handling bag is protected from damage to prevent dissolution of the salts back into the landfill.

Please provide all responses that relate to engineering required for construction and operation, signed and sealed by a professional engineer. This includes all technical responses that require conclusions and recommendations regarding existing site conditions.

"NOTICE! Pursuant to the provisions of Section 120.600, F.S. and Chapter 17-12.070(5), F.A.C., if the Department does not receive a response to this request for information within 30 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 30 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

You are requested to submit your response to this letter as one complete package. If there are points which must be discussed and resolved, please contact me at (813) 744-6100, extension 382.

Sincerely,



Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab
Attachment

cc: Douglas Bramlett, Pasco County
Darwish El-Hajji, P.E., CDM Tampa
John Banks, P.E., CDM Tampa
Robert Butera, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa

62-103.150 Public Notice of Application and Proposed Agency Action

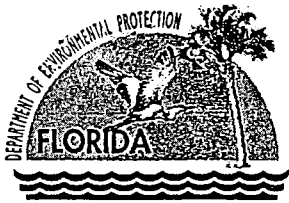
(1) Each person who files an application for a Department permit may publish, or may be required to publish, and provide proof of publication to the Department, at his own expense, a Notice of Application in a newspaper of general circulation in the county in which the activity will be located or take place. Publication of a Notice of Application shall be required for those projects which, because of their size, potential effect on the environment or natural resources, controversial nature, or location, are reasonably expected by the Department to result in a heightened public concern or likelihood of request for administrative proceedings. If required, the notice shall be published one time only within fourteen (14) days after a complete application is filed and shall contain:

- (a) name of applicant, a brief description of the project and its location;
- (b) where the application file is located and when it is available for public inspection;
- (c) the notice shall be prepared by the Department and shall comply with the following format:

**State of Florida
Department of Environmental Protection
Notice of Application**

The Department announces receipt of an application for permit for permit from Mr. Douglas Bramlett of Pasco County Utilities Services to construct a leachate storage tank and treatment facility (approximately 2 acres) subject to Department rules, located next to the existing Resource Recovery Facility, Hays Road, Pasco County, Florida.

This application is being processed and is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

December 7, 1995

Mr. Daniel Strobridge
CDM
One Tampa City Center
Suite 1750
Tampa, FL 33602

**Re: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County**

Dear Mr. Strobridge:

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12/14/95 (4) Details of the geomembrane protection between the tank bottom footing and secondary containment liner. List of similar installations with related construction details, name and phone numbers for each site.

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"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Mr. Daniel Strobridge
CDM

December 7, 1995
Page 2

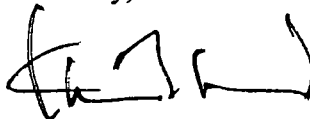
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- 1/11/96
✓(8) Comprehensive description of the solids disposal method to ensure that the solids handling bag is protected from damage to prevent dissolution of the salts back into the landfill.

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Sincerely,



Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab
Attachment

cc: Douglas Bramlett, Pasco County
Darwish El-Hajji, P.E., CDM Tampa
John Banks, P.E., CDM Tampa
Robert Butera, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa

62-103.150 Public Notice of Application and Proposed Agency Action

(1) Each person who files an application for a Department permit may publish, or may be required to publish, and provide proof of publication to the Department, at his own expense, a Notice of Application in a newspaper of general circulation in the county in which the activity will be located or take place. Publication of a Notice of Application shall be required for those projects which, because of their size, potential effect on the environment or natural resources, controversial nature, or location, are reasonably expected by the Department to result in a heightened public concern or likelihood of request for administrative proceedings. If required, the notice shall be published one time only within fourteen (14) days after a complete application is filed and shall contain:

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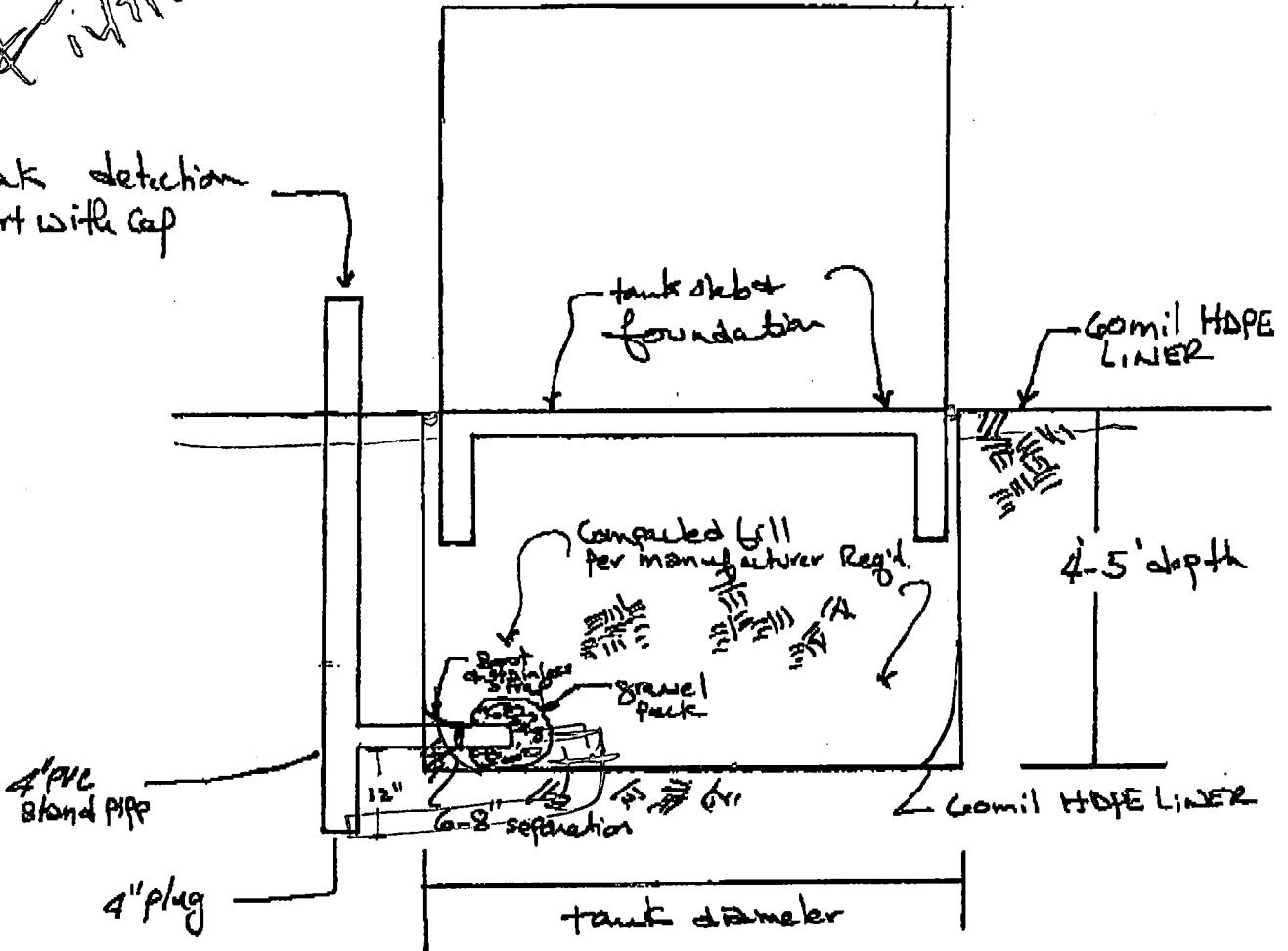
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Adh
 Any
 obs/notes
 1/4/96

Proposed Leak detection system

Pasco County Leachate Storage tank

Leak detection
 port with cap



Post-It™ brand fax transmittal memo 7671

of pages >

To Kim Ford	From DARWISH
Co.	Co.
Dept.	Phone #
Fax #	Fax #

Kim the lateral details you asked about are removed from our detail sheet + plan sheet.

Kim -

W. Pasco Leach. Treat. Plant

I looked @ comments 12, 13 & 15

12 - Measuring conductivity in the tank's 2^o containment looks like a good practice.

13 - We requested TCLP of the solids for both this site, & other operating systems. We got one set of TCLP results - from where??? (Results show non-hazardous)

15. TSS is low, BOD somewhat. Not really an important point, but nice to have the data to support their statement.

That's all!

A. A. M. M. M.
12/5/95

WASTE MANAGEMENT TECHNICAL SUPPORT
ROUTING FORM

PERMITTED FACILITIES

To: Allison Amram, P.G.
Solid Waste Program

From: Jim Ford

Date: 4/17/95

Subject: WPAEC Leachate Treatment Tank

Document Name: AL

Revision Number _____ County: PAISLO

Facility Name: AL

Type of Facility: AL

Permit Number: _____ Issue Date: _____

Copy of Permit attached: _____

Document submitted in compliance with permit condition. _____

Document subject to permit timeclock. YB

Day 1: 11/13/95

Day 30: 12/10/95

PATS sheet attached: _____

Enforcement Case/CO/NOV/ associated with this site: _____

Files and related documents can be found Attached (in files)

Please review and comment on the technical aspects of the attached document as you deem appropriate. In order to maintain progress with the permit review, please provide comments within 30 days or by DEC 5.

Comments: _____

Module _____

Attachments

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
SOUTHWEST DISTRICT

CONVERSATION RECORD

Date 10/11/95

Subject Lepasco Tank

Time 11 AM

Permit No. _____

County DAS

M R John Bank

Telephone No. (941) 3517100

Representing CDM

[] Phoned Me [☒] Was Called [] Scheduled Meeting [] Unscheduled Meeting

Other Individuals Involved in Conversation/Meeting _____

Summary of Conversation/Meeting _____

I ASKED FOR AN EXPLANATION OF
EFFECT OF SAND ON LINER (ABRASION)
UNDER TANK. JOHN SAID HE
WILL REPAIR.
ALSO I EXPRESSED THAT SECONDARY
CONTAINMENT IS REQUIRED UNDER THE
ENTIRE TANK BOTTOM.

(continue on another
sheet, if necessary)

Signature [Signature]

Title _____

I N T E R O F F I C E M E M O R A N D U M

Date: 18-Aug-1995 02:45pm EST
From: Robert Butera TPA
BUTERA_R
Dept: Southwest District Offi
Tel No: 813/744-6100
SUNCOM: 542-6100 Ext. 451

TO: Kim Ford TPA

(FORD_K)

CC: Susan Pelz TPA

(PELZ_S)

Subject: Secondary Containment

I do not agree with your proposed sand layer and liner below a concrete tank as a means for detection of a leak primarily because the repetitive loading and unloading of the tank may cause movement of the tank/sand interface which in turn will be abrasive to the liner. I suggest we keep it conventional such as an elevated supported tank.

I N T E R O F F I C E M E M O R A N D U M

Date: 18-Aug-1995 08:38am EST
From: Kim Ford TPA
FORD K
Dept: Southwest District Offi
Tel No: 813/620-6100
SUNCOM: 542-6100 Ext. 382

TO: Robert Butera TPA

(BUTERA_R)

Subject: FWD: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.400(6)(c)

Richard Tedder agrees with the requirement for secondary containment and goes further to suggest that a "liner" for secondary containment should extend completely under the tank. The use of a liner that is protected by a sand layer and that has a leak detection system under the tank may be the way to go rather than a tank on top of a concrete slab.

I N T E R O F F I C E M E M O R A N D U M

Date: 21-Jul-1995 09:01am EST
From: Richard Tedder TAL
TEDDER_R@A1@DER
Dept: Waste Management
Tel No: (904) 488-0300
SUNCOM:

TO: Kim Ford TPA (FORD_K@A1@TPA1)
CC: Chris McGuire TAL (MCGUIRE_C@A1@DER)
CC: Mary Jean Yon TAL (YON_MJ@A1@DER)

Subject: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.400(6)(c)

Kim, attached are Chris' responses to your questions. For the record, I'm also opposed to allowing a tank to penetrate the secondary containment system and be sealed with an expansion joint. It seems that our rule suggests the use of a liner for the secondary containment system which should be constructed under the tank not around it.

We recently received a design from Citrus County for a concrete above-ground leachate storage tank with secondary containment. The secondary containment pad (5"thick) is butted up to the concrete tank bottom (16"thick) by an expansion joint. The piping that will carry leachate in and out of the tank passes through the tank bottom.

The County has been asked to provide details for leak detection for the piping under the tank and the ability to make piping repairs, and to identify the portion of the concrete pad for secondary containment on which the tank will be placed. Our request causes the County to redesign with all piping thru the sides not bottom or to use double-walled piping, and to include an entirely separate concrete pad under the tank. I hope this complies with our rules.

Several questions remain:

1. Are above-ground leachate storage tanks required to have leak detection between the tank and secondary containment pad?

No. Rule 62-701.400(6)(c) contains our requirements for above-ground leachate storage tanks, and there is no mention of such leak detection.

2. Are above-ground leachate storage tanks required to have secondary containment under the tank's bottom?

Yes. Rule 62-701.400(6)(c)5. requires tanks constructed after January 6, 1993, to have secondary containment.

3. Are above-ground leachate storage tanks allowed to have the tank's bottom penetrate the secondary containment concrete pad and be sealed by an expansion joint and sealant?

I don't know. I think that if the design would allow leachate to flow out of a hole in that part of the tank which penetrates the concrete pad so that there was actually no secondary containment there, it would not be allowed. If I visualize this correctly, that area of the secondary containment pad which is penetrated and which is surrounded by sealant would not be able to contain 110% of the leachate in the concrete tank, as required by Rule 62-701.400(6)(c)5.

Please advise.

I N T E R O F F I C E M E M O R A N D U M

Date: 18-Aug-1995 08:22am EST
From: Kim Ford TPA
FORD K
Dept: Southwest District Offi
Tel No: 813/620-6100
SUNCOM: 542-6100 Ext. 382

TO: Robert Butera TPA

(BUTERA_R)

Subject: FWD: RE: FWD: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.40

Here are comments from Chris McGuire's earlier research into the subject of secondary containment. I would like to add that if a tank is placed directly on top of a concrete slab for secondary containment it would be impossible to test the secondary slab to demonstrate that it is not cracked and does not leak.

I N T E R O F F I C E M E M O R A N D U M

Date: 21-Jul-1995 09:14am EST
From: Chris McGuire TAL
MCGUIRE_C@A1@DER
Dept: Office General Counsel
Tel No: 904/488-9730
SUNCOM:

TO: Richard Tedder TAL (TEDDER_R@A1@DER)
TO: Kim Ford TPA (FORD_K@A1@TPA1)
TO: Mary Jean Yon TAL (YON_MJ@A1@DER)

Subject: FWD: RE: FWD: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.40

FYI, here is what our tanks people say. Of course, leachate is not considered a pollutant for purposes of 62-762, so that rule doesn't apply. But if you think parts of it should be added to 62-701, let me know.

I N T E R O F F I C E M E M O R A N D U M

Date: 20-Jul-1995 02:41pm EST
From: Mary Stewart TAL
STEWART_M@A1@DER
Dept: Office General Counsel
Tel No: 904/488-9730 921-9935
SUNCOM:

TO: Chris McGuire TAL

(MCGUIRE_C@A1@DER)

Subject: FWD: RE: FWD: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.40

I N T E R O F F I C E M E M O R A N D U M

Date: 19-Jul-1995 04:30pm EST
From: John Svec TAL
SVEC_J@A1@DER
Dept: Waste Management
Tel No: (904)488 3935
SUNCOM:

TO: Mary Stewart TAL

(STEWART_M@A1@DER)

Subject: RE: FWD: ABOVE-GROUND LEACHATE STORAGE TANKS / 62-701.400(6)(c)

Assuming that leachate meets the definition of pollutant, then Chapter 62-762, F.A.C. would apply to this tank. In answer to the questions:

1. Yes, interstitial monitoring is required for all secondary containment systems (Section 62-762.600(4))
2. Yes, Sections 62-762.500(3)(a) and 62-762.500(6)
3. No, unless another secondary containment system was being constructed underneath this concrete pad.



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

October 5, 1995

Mr. Daniel Strobridge
CDM
One Tampa City Center
Suite 1750
Tampa, FL 33602

**Re: Leachate Storage Tank and Treatment Facility
Pending Permit No.: SC51-277316, Pasco County
Case No.: PA87-23**

Dear Mr. Strobridge:

This is to acknowledge receipt of your permit-application received September 11, 1995 to construct a leachate storage tank and treatment facility.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit is incomplete. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]. Please provide:

- (1) A foundation analysis to demonstrate that the filled tank will be supported on a well drained, stable foundation. Please include site specific information and calculations.
- (2) Complete details for all piping in and out of the tank, containment area and treatment facility to demonstrate that leakage through and under the tank, containment structure, and treatment facility can be detected and piping repaired.
- (3) Documentation to demonstrate that the exterior and interior surface protection of the glass-fused steel tank meets the requirements of F.A.C. 62-701.400(6)(c)3 and 4. Please provide the manufactures names, addresses, and telephone numbers.

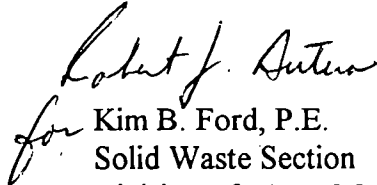
- (4) Details of the panel connections and joints required for each type tank construction.
- (5) The secondary containment geomembrane material specifications including details of the geomembrane continuous under the storage tank slab ring and the drainage layer. Identify procedures or methods that will be used to protect the exposed liner from UV light.
- (6) All procedures for inspecting the tank and containment system geomembrane demonstrating that the geomembrane will be protected from damage.
- (7) The design for the overfill prevention system.
- (8) The design details and operation and maintenance plans for the contingency system pumps and piping. Note: Please clarify the leachate pipe specification. The specifications indicate 6" HDPE (SDR 17) will be used while the drawing indicates 6" PVC (SCH 80).
- (9) An explanation in support of the proposed tank capacity and treatment facility.
- (10) A list of similar treatment facilities in operation, preferably in Florida, and the names, addresses and telephone numbers of the owner or operator.
- (11) Two complete sets of construction plans, specifications and construction quality assurance manuals for the storage tank and treatment facility.
- (12) A table showing the stormwater and leachate conductivity values. This information is required to support proposed plans for discharging water from the leachate tank's secondary containment area.
- (13) Results of TCLP testing of solids remaining after the leachate distillation. Both site specific data and data from operating systems is requested. Describe plans for periodic characterization of these solids.
- (14) Describe how the solids handling bag is sealed to prevent dissolution of the salts back into the landfill leachate.
- (15) Leachate concentrations of BOD and TSS. This information was not provided in Table 3-1 and is not on file at FDEP.
- (16) Pilot test procedures and solids testing results.

Please provide all responses that relate to engineering required for construction and operation, signed and sealed by a professional engineer. This includes all technical responses that require conclusions and recommendations regarding existing site conditions.

"NOTICE! Pursuant to the provisions of Section 120.600, F.S. and Chapter 17-12.070(5), F.A.C., if the Department does not receive a response to this request for information within 30 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 30 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

You are requested to submit your response to this letter as one complete package. If there are points which must be discussed and resolved, please contact me at (813) 744-6100, extension 382.

Sincerely,


for Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab

cc: Douglas Bramlett, Pasco County
Darwish El-Hajji, P.E., CDM Tampa
John Banks, P.E., CDM Tampa
Robert Butera, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa

I N T E R O F F I C E M E M O R A N D U M

Date: 05-Oct-1995 02:36pm EST
From: Hamilton Buck Oven TAL
OVEN_H@A1@DER
Dept: Office of Secretary
Tel No: 904/487-0472
SUNCOM:

TO: Kim Ford TPA

(FORD_K@A1@TPA1)

CC: Robert Butera TPA

(BUTERA_R@A1@TPA1)

CC: Allison Amram TPA

(AMRAM_A@A1@TPA1)

Subject: RE: WEST PASCO W-T-E / PA87-23 / NEW PLANS FOR LEACHATE

If approving the new facilities means adding to or revising the conditions of certification, then they need to file for a modification of certification and furnish the \$10,000.00 modification fee. If they want to use the cheaper, normal permitting system, I don't object.

I N T E R O F F I C E M E M O R A N D U M

Date: 04-Oct-1995 03:45pm EST
From: Kim Ford TPA
FORD K
Dept: Southwest District Offi
Tel No: 813/620-6100
SUNCOM: 542-6100 Ext. 382

TO: Hamilton Buck Oven TAL (OVEN_H @ A1 @ DER)

CC: Robert Butera TPA (BUTERA_R)

CC: Allison Amram TPA (AMRAM_A)

Subject: WEST PASCO W-T-E / PA87-23 / NEW PLANS FOR LEACHATE

CDM has submitted plans for a new leachate storage tank and treatment facility. They first sent in \$1000 fee to process the application but have since requested a refund. They have requested the new construction be authorized as part of the Site Certification which does not mention the new facilities. The question is:

Should construction and operation permits and permit fees be required for DEP's review and authorization?

The current Class III landfill and wastewater treatment facility on the same property as the W-T-E facility have separate permits and are not included as part of the Site Certification.

Please advise. Thanks in advance.

sser & McKee

Bob
Enclosed you
circulate
for comments and
concept
distillation
as
treatment
solid to LF

✓
10/3/95

WEST PASCO COUNTY LANDFILL
PERMIT MODIFICATION APPLICATION FOR
LEACHATE MANAGEMENT SYSTEM

August, 1995

RECEIVED

WASTE MANAGEMENT TECHNICAL SUPPORT
ROUTING FORM

PERMITTED FACILITIES

To: Allison Amram, P.G.
Solid Waste ProgramFrom: San BrunoDate: 9/14/95Subject: WPAILO LEACHATE TREATMENTDocument Name: 2/1-Revision Number 1 County: PASCOFacility Name: TPType of Facility: TP

Permit Number: _____ Issue Date: _____

Copy of permit attached: _____

Document submitted in compliance with permit condition. _____

Document subject to permit timeclock. YesDay 1: 9/11/95Day 30: 10/10/95PATS sheet attached: YesEnforcement Case/CO/NOV/ associated with this site: NoneFiles and related documents can be found Attachment ReportPlease review and comment on the technical aspects of the attached document as you deem appropriate. In order to maintain progress with the permit review, please provide comments within 30 days or by Oct 5.

Comments: _____

Module _____

Attachments



Camp Dresser & McKee Inc.

environmental
services

One Tampa City Center, Suite 1750
Tampa, Florida 33602
Tel: 813 221-2833 Fax: 813 221-2279

RECEIVED
SEP 11 1995

Depar. Environmental Protection
BY SOUTHWEST DISTRICT

September 11, 1995

Mr. Kim Ford, P.E.
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

Subject: West Pasco County Landfill Permit Modification Application
for Leachate Management System

Dear Mr. Ford:

Enclosed please find six copies of the above captioned application. Also enclosed is a check for the permit fee of \$1,000.

If you have any questions or comments, please give me a call.

Sincerely,

CAMP DRESSER & McKEE INC.

Darwish El-Hajji, P.E.

jcd
PS3T1.54

c: Daniel Strobridge
Douglas Bramlett

INTEROFFICE MEMORANDUM

*Copy For
Kim Ford*

Date: 28-Jun-1995 11:00am EST
From: Hamilton Buck Oven TAL
OVEN_H@A1@DER
Dept: Office of Secretary
Tel No: 904/487-0472

TO: Allison Amram TPA

(AMRAM_A@A1@TPA1)

CC: 5 addressees

Subject: RE: Pasco County Resource Recovery - New Construction

The addition of the crystallizer is an amendment to the application. If you feel that its operation should be covered by specific conditions/permit provisos, the Conditions of Certification will have to be modified.

If it does not discharge and no conditions are needed, the Consent Order may be sufficient.

*Kim: Correction: I asked for comments 6/95 and
The entire range of comments I received are here with the
attached L.O. /Note: The CAP/CAR/RAP et al.
referenced as Exhibit #1 in para 9
is NOT included here, as it is a
boilerplate attachment.*

Out

I N T E R O F F I C E M E M O R A N D U M

Date: 26-Jun-1995 03:04pm EST
From: Allison Amram TPA
AMRAM_A
Dept: Southwest District Offi
Tel No: 813/744-6100, ext. 336

TO: Hamilton Buck Oven TAL

(OVEN_H @ A1 @ DER)

CC: 5 addressees

Subject: Pasco County Resource Recovery - New Construction

Buck-

Pasco County has contracted the construction of an evaporator/crystallizer unit to treat leachate coming from the ash monofill associated with the Pasco County Resource Recovery Plant (PA87-23). This has been prompted by groundwater violations of salts at the Shady Hills Wastewater Treatment Plant.

I do not believe that this evaporator/crystallizer was part of the original PPSA certification. Because the unit will be built at the Resource Recovery, and it's for the landfill that is included in the site certification for the Resource Recovery, wouldn't this construction be a modification of their certification conditions? Our Domestic Wastewater group received the contract documents May 19th, and is currently asking for input from the other sections. They are including this construction in a consent order for the Shady Hills WWTP.

I'd appreciate your suggestions as soon as you can reasonably get to this! If they need to modify their conditions, a paragraph in the consent order will require them to square this all up with the PPSA program.

Thanks once more, Buck!

Allison Amram, P.G.
Solid Waste, Tampa