Ed

CDM Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

Westshore Center
1715 North Westshore Boulevard, Suite 875
Tampa, Florida 33607
Tel: 813 281-2900 Fax: 813 288-8787

November 29, 2001

Mr. Scott Sheplak, P.E.
Administrator, Title V Section
Florida Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, Florida 32399-3000

Subject: DEP File No. 0570261-004-AC
Hillsborough County Resource Recovery Facility

Dear Mr. Sheplak:

Hillsborough County and Camp Dresser & McKee are in receipt of your Request for Additional Information regarding the subject facility. The following information is provided in support of all previously submitted information:

1. *Please provide another application certified by Mr. Kleman, or provide the required documents naming Mr. Smith as the Responsible Official.*

Response: Attached, please find a letter of authorization dated March 21,2000 naming Mr. Smith as the authorized representative as well as a revised page 3 of the application indicating the same.

2. *Provide reasonable assurance that the assumed velocity of 65,656 feet per minute can be maintained for the one-hour period of each material transfer. If this velocity cannot be maintained, provide revised calculations (including all assumptions) for potential emissions.*

Response: In the absence of control device airflow data, assumptions were made as to the amount of displaced volume during a filling operation. The 66,656 fps estimate is an extremely conservative estimate based on tanker blower pressure. In reality, this number can only be lower (given energy losses), resulting in lower displaced volumes. At the same time however, the assumed length of time necessary to fill the silo will increase as the off-loading pressure decreases. The attached table compares the values used to estimate emissions at differing blower efficiencies. The fundamental assumptions used in the calculations are the same as those previously presented. **Assuming a blower efficiency of 60%, the revised emissions estimates are 6.32 lbs/hr and 0.39 tons per year.** It has been our observation that lime silo fill times are typically on the order of 1 to 2 hours. Therefore, absent specific fan curves and/or control device airflow data, we believe that this emission estimate (for 60% blower efficiency) more closely approximates

reality and is consistent with the calculated potential emissions from similar sources where more data was available to perform the calculations.

As can be seen, the estimated potential emissions are well less than the 5 ton per year threshold established by the generic emissions unit permitting exemption found at 62-210.300(3)(b), F.A.C. Arguably, this proposed materials storage silo qualifies for the permitting exemption. Regardless, we ask that the Department continue processing the application with the intent of issuing a construction permit.

Please do not hesitate to contact me at (813) 281-2900 if you would like to discuss these matters further.

Very truly yours,

CAMP DRESSER & McKEE INC.

Jason M. Gorrie, P.E.

c: Tom Smith, Hillsborough County
Glenn Hoag, Covanta Hillsborough
Hamilton (Buck) Oven, FDEP
Bill Thomas, SW District
Alice Harmon, EPCHC

Hillsborough County
Florida

Office of the County Administrator
Daniel A. Kleman

March 21, 2000

Mr. Scott M. Sheplak, P.E.
Administrator, Title V Section
Department of Environmental Protection
Twin Towers Office Building
1600 Blair Stone Road
Mail Station 5505
Tallahassee, Florida 32399-2400

Re: Hillsborough County Resource Recovery Facility
Title V Authorized Representative

Dear Mr. Sheplak:

As the County Administrator for Hillsborough County, Florida, I am the responsible official for the above-referenced Title V source as defined in Rule 62-210.200 F.A.C. I hereby appoint Daryl H. Smith, Director, Hillsborough County Solid Waste Management Department, as the authorized representative for matters and certifications pertaining to the Title V permit for the Hillsborough County Resource Recovery Facility.

If you have any questions concerning this letter of authorization, please contact me at (813) 272-5750.

Sincerely,

Daniel A. Kleman, County Administrator
Hillsborough County, Florida

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
Daryl Smith, Director

2. Owner/Authorized Representative or Responsible Official Mailing Address:
Organization/Firm: Hillsborough County Solid Waste Management Dept.
Street Address: 601 East Kennedy Blvd.
City: Tampa State: Florida Zip Code: 33602

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
Telephone: (813) 276-2900 Fax: ( ) -

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Signature Date 10/26/01

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Jason M. Gorrie, P.E.
Registration Number: 55341

2. Professional Engineer Mailing Address:
Organization/Firm: Camp Dresser & McKee
Street Address: 1715 North Westshore Blvd., Suite 875
City: Tampa State: Florida Zip Code: 33607

3. Professional Engineer Telephone Numbers:
Telephone: (813) 281-2900 Fax: (813) 288-8787

blower efficiency (%)	pressure (in-H20)	pressure (psi)	velocity (ft/min)	flow (ft^3/min)	time to fill (min)	time to fill (hr)	volume displaced (ft^3)	emissions (lb/fill)	emissions (lb/hr)	emissions (ton/yr)	
100%	276.8	10	66632.42	5,698.9	60.0	1	342659	4.90	4.90	0.30	baseline assumption
80%	221.44	8	59597.85	5,097.2	67.1	1.118034	342659	4.90	5.47	0.33	
60%	166.08	6	51613.25	4,414.3	77.5	1.29	342659	4.90	6.32	0.39	
40%	110.72	4	42142.04	3,604.3	94.9	1.581139	342659	4.90	7.74	0.47	
20%	55.36	2	29798.92	2,548.6	134.2	2.236068	342659	4.90	10.95	0.67	

pressure is assumed

velocity = 4,005 x $(vp)^{0.5}$ where vp= velocity pressure (conservatively assumes no static pressure)

flow = area x velocity where area = pi x $D^2/4$ = 0.085 ft^2 for 4 in. piping

volume displaced = flow x 60 min/hr x time to fill

emissions (lb/fill) = 0.1 gr/dscf x volume displaced x lb/7000 grains

time to fill is the original assumed time (60 min) multiplied by the ratio of the original flow to the calculated flow
(i.e. @ 80%, time to fill = 60 x (5698.9/5097.2) = 67.1 min)