

BRIAN BAHOR
Vice President
Environmental Permitting

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Fairfield, NJ 07004
973 882 7236
Fax 973 882 4167
Email brian_bahor@ogden_energy.com

RECEIVED

OCT 25 2000

October 24, 2000

BUREAU OF AIR REGULATION

Mr. Scott M. Sheplak, P.E., Administrator
Title V Section
Florida Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Reference: Ogden Martin Systems of Lake, Inc.
DRAFT Initial Title V Air Operation Permit No. 0690046-001-AV
Supplemental Response Document Dated October 19, 2000

Dear Mr. Sheplak,

The attached Supplemental Response Document (Document) is being provided in response to your August 15, 2000 email. The Document contains two parts; Part 1 is the email and Part 2 is the response to each comment.

We are available to meet to discuss this information at your convenience or we can schedule a conference call. Please do not hesitate to contact me direct with any questions.

Sincerely,



Brian Bahor, QEP
Vice President, Environmental Permitting

Distribution

Cecil Boatwright (OMSL)
Mary Smallwood

Joe Treshler
Nancy Tammi

Karen Stepsus

Ogden Martin Systems of Lake, Inc.

DRAFT Initial Title V Air Operation Permit No. 0690046-001-AV Supplemental

Response Document Dated October 19, 2000

**PART 1 : August 15, 2000 EMAIL
From Scott Sheplak of FLDEP to
OMSL Representative Brian Bahor**

Original Message-----

From: Scott Sheplak TAL 850/488-1344 [mailto:Scott.Sheplak@dep.state.fl.us]
Sent: Tuesday, August 15, 2000 3:31 PM
To: bbahor@ogden-energy.com
Cc: drew_lehman@ogden-energy.com; Bruce Mitchell TAL; Clair Fancy TAL; Doug Beason TAL
Subject: Ogden Martin Systems of Lake, Inc. - DRAFT Title V Permit
Sensitivity: Confidential

Mr. Bahor:

Pursuant to our telephone conversation yesterday, below is a permitting summary of the DRAFT permit for the Lake facility. With the departure of Jason Gorrie and his pending replacement, I assume you are now responsible for the Lake project.

Ogden Martin Systems of Lake, Inc. (OMSL)
DRAFT Permit No. 0690046-001-AV
Title V Permitting Summary

- Intent to Issue DRAFT permit clerked on May 12, 2000.
- Intent received by OMSL on May 15, 2000.
- Public Notice published on May 14, 2000.
- Hearing deadline was May 30, 2000.
- Public comment deadline was June 13, 2000.
(No public comments were received.)
- Meeting to discuss OMSL concerns and issues on June 6, 2000.
- OMSL filed a petition for administrative hearing on May 25, 2000.
- Comments from OMSL were received June 16, 2000.

On June 6, we met with Ogden Martin Systems of Lake, Inc. (OMSL) representatives and Lake County representatives to discuss the DRAFT Title V permit. OMSL agreed to provide to the department the following reports to resolve issues associated with the DRAFT permit: 1) a correlation report of roof temperature to furnace temperature certified by a Florida professional engineer; 2) copy of the Lake County Department of Health report that allegedly deemed the unburned biomedical waste not a biohazard threat to humans; and, 3) a definition and practices of complete combustion.

These documents have not yet been received by DEP as promised at our meeting.

** Please note that we have an EPA deadline to issue all Title V permits by October 25 of this year. **

Scott M. Sheplak, P. E. Administrator
Title V Section
Department of Environmental Protection
850/921-9532
scott.sheplak@dep.state.fl.us

PART 2 : RESPONSES TO COMMENTS

PART 2 : RESPONSES TO COMMENTS

OVERVIEW

A meeting was held between representatives of the Florida Department of Environmental Protection ("DEP" or "the Department") and Ogden Martin Systems of Lake, Inc. ("OMSL") on June 6, 2000 to discuss the Draft Title V Permit issued by the Department in May, 2000. Subsequent to that meeting, on August 15, 2000, Mr. Scott Sheplak of the Department directed an electronic mail message to OMSL representative Brian Bahor seeking certain additional information that DEP asserts was requested of OMSL during the June 6 meeting. Mr. Sheplak's three additional information requests are summarized below;

1. A definition and practices of "complete combustion"
2. A correlation report of flue gas time and temperature certified by a Florida professional engineer
3. A copy of the Lake County Department of Health report that allegedly deemed the unburned biomedical waste not a biohazard threat to humans.

Responses to these requests are provided below.

RESPONSES

1.0 Definition and practices of complete combustion.

The "complete combustion" discussion at the June 6 meeting originated from the Department's decision to include a requirement for "complete combustion" in the Draft Permit. OMSL asked the Department how it would determine compliance with such a subjective permit term, which is not defined in regulation or statute. The Department in turn asked OMSL for a definition of complete combustion.

OMSL understands that the Department's sole reason for attempting to insert such a definition into the Draft Permit is to ensure destruction of biomedical waste. As we stated at our meeting, there is no definition of "complete combustion" in the Florida regulations or statutes, nor are we aware that such a definition is used in the industry. Moreover, the federal standards for new and existing municipal waste combustors (MWC) (subpart Eb and Cb, respectively) do not include a definition of "complete combustion." The federal standards for new and existing Hospital/Medical/Infectious Waste Incinerators (subpart Ec standards and subpart Ce respectively), also do not include a requirement for or a definition of "complete combustion." While these latter standards do not apply to MWCs regulated by subpart Cb, the absence of any reference to "complete combustion" indicates that on a federal level there is no such standard.

OMSL submits that the character and quality of solid residue from the processing of MSW and/or biomedical waste is one that is properly within the jurisdiction of the Department's Solid Waste Bureau, and not the Air Bureau. Likewise, questions regarding the potential for an infectious hazard posed by biomedical waste residue are

properly within the jurisdiction of the Florida Department of Health. There is no basis in law or fact for the Air Bureau to include terms or conditions in a Title V Permit with respect to the character and quality of solid residues from OMSL's operation. For all these reasons, the "complete combustion" conditions must be stricken from the draft permit.

2.0 Flue gas time and temperature study results.

A copy of the original test flue gas time and temperature study results are provided herein as Appendix A. This testing was performed in response to Specific Condition 6.a of Permit Number AC 35-115379 and PSD-FL-113 dated February 12, 1988. This permit condition required a correlation between the furnace flue gas exit temperature and the temperature monitor in the overfire air fully mixed zone. The permit condition did not require a report certified by a Florida Professional Engineer and the report submitted to the Department in February 1991 did not include such a certification. This submittal is limited to only Volume 1 of the original report (Report No. 326). Volumes 2 and 3 of report No. 326 are not contain information on the temperature correlation.

OMSL would like to point out that the reported correlation has been in used by OMSL in compliance reports since the time that the above described report was first submitted and that the Department has been actively aware of its use. As an example, the Department agreed in 1995 to "spot check" the correlation through the use of a hand-held pyrometer. This testing, which was observed by the Department, demonstrated that the correlation was still appropriate.

Regardless of historical tasks completed to establish the cited correlation, the most germane question is whether the correlation is an appropriate surrogate for good combustion and therefore facility emissions. The EPA has determined that the appropriate operating practices for good combustion include 1) municipal waste combustor load level measured as steam generation rate, 2) the inlet temperature to the particulate control device, and 3) carbon monoxide levels. Neither subpart Cb or subpart Eb includes a requirement to monitor furnace temperature. The conclusion reached by industry and the EPA is that monitoring of furnace flue gas temperature is an unnecessary requirement and that it does not provide any insight to facility operations and associated air emissions.

our SIP rule requires T₁ time

3.0 Confirmation from the Florida Department Of Health regarding the lack of infectious hazard posed by "red bag" waste found at the Lake County Landfill on October 29, 1999.

The June 6, 2000 meeting included discussion about a photograph of waste found during an inspection by DEP and Lake County personnel at the Lake County Landfill on October 29, 1999. Two articles of waste, plastic gloves and a piece of plastic, were reportedly discovered in ash residue delivered to the landfill from OMSL. Department personnel described the photograph as "evidence" that incompletely incinerated solid waste was delivered to the Landfill. From this, the Department infers that there was an

associated infectious threat. The Department did not provide copies of the photograph, and OMSL was not present at the time that the waste was discovered. We are thus providing a response herein based on our general knowledge of the October 29th inspection, our interaction with Department and DOH representatives in the wake of that occurrence, and the discussion at the June 6 meeting.

As we discussed on June 6, neither OMSL nor the DOH was invited to the inspection, nor was either party even aware of the event. Upon learning of the event, OMSL informed the DOH and representatives of both parties arrived at the Landfill to inspect the items cited by the Department as being alleged biomedical or infectious waste. The DOH was represented by Mr. Jim Robinson, a field inspector with over ten years of experience with the DOH's biomedical waste program. Mr. Robinson's opinion, expressed at the time of that site visit, was that the articles in question did not present an infectious threat. In fact, Mr. Robinson expressed doubt that the waste was even biomedical in origin. Mr. Robinson further elaborated that the benign nature of the material found during the investigation did not warrant a letter from the DOH to the landfill. To confirm this opinion, the Department may contact Mr. Robinson directly at 352-622-7744.

In the wake of the October 29, 1999 Landfill inspection, the Department directed a letter to OMSL seeking additional information about why allegedly incompletely incinerated solid waste was delivered to the Lake County Landfill and what quality control measures would be undertaken to prevent this situation from occurring again. A copy of that letter and OMSL's response thereto, and well as a follow-up letter from DEP to OMSL and OMSL's subsequent response, are attached as Appendix A.

OMSL believes that Mr. Robinson's professional opinion is the most credible one in this matter. The waste was determined by Mr. Robinson to not be infectious, and potentially not even biomedical in origin. Further, the possibility has not been ruled out that the waste cited by the Department as unburned biomedical waste was simply wind swept MSW from the MSW deliveries in the landfill cell adjacent to the ash monofill cell. Finally, as discussed previously in response to Question 1.0, OMSL contends that the quality or character of solid residue resulting from the processing of solid waste, including infectious waste, by OMSL is not within the purview of the Air Bureau and is thus not properly subject to Title V Air Permit terms or conditions.

APPENDIX A

VOLUME 1 of Report No. 326

OGDEN MARTIN SYSTEMS, INC.

40 LANE ROAD
CN 2615
FAIRFIELD, NEW JERSEY 07007-2615
(201) 882-9000



AN OGDEN COMPANY

Environmental Engineering Department

VOLUME I

EXECUTIVE SUMMARY

ENVIRONMENTAL TEST REPORT

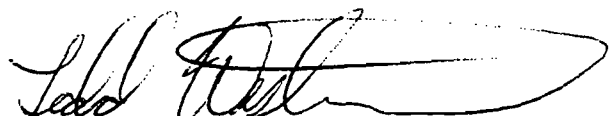
PREPARED FOR: Ogden Martin Systems of Lake, Inc.
3830 Rogers Industrial Park
P. O. Box 189
Opahumpka, Florida 34762

REGARDING: Municipal Solid Waste-to-Energy Facility

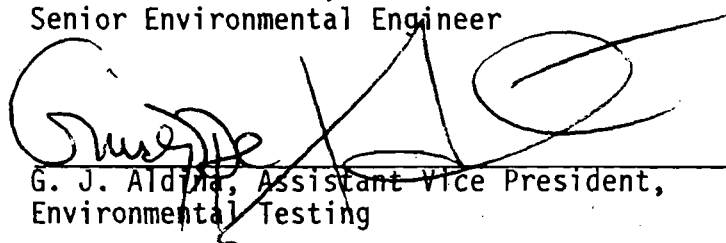
PURPOSE: To Demonstrate Compliance with Florida
Department of Environmental Regulation,
Permit No. AC 35-115379

TEST DATES: January 15 - 16, 1991

PREPARED BY:



Todd B. Westersund,
Senior Environmental Engineer



G. J. Aldred, Assistant Vice President,
Environmental Testing

February 22, 1991
OPI Report No. 326

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1.0 INTRODUCTION

Ogden Martin System of Lake, Inc, (OMSL) performed compliance emission tests at the Lake County Resource Recovery Facility from January 15 through 16, 1991. The purpose of this test program was to demonstrate compliance with the Florida Department of Environmental Regulation (FDER), Permit No. AC 35-115379, Specific Condition 4. The testing was performed by Entropy Environmentalists, Inc. (Entropy) in accordance with all procedures in the FDER approved test protocol. The FDER test observer, Mr. Gary Kuberski, witnessed the testing.

The OMSL municipal solid waste combustion facility is located in Okahumpka, FL. The facility is rated at 528 tons of municipal solid waste per day. Units 1 and 2 were tested for pollutant emissions at the outlet of the spray dryer absorber/fabric filter baghouse. Acid gas emissions were tested at the inlet and outlet of the air pollution control equipment.

A summary of emission test results for the facility is presented in Section 2.0, Table 2.1. The Entropy report (Volume 2) includes all data gathered at the site and all laboratory analytical data.

The test program, as indicated in the Source Test Plan (OPI Report No. 308), is presented in Section 3.0, Table 3.2. There were no modifications to the Source Test Plan. Test observers and participants are presented in Table 3.1. The Schedule of Activities is presented in Table 3.3.

2.0 SUMMARY OF RESULTS

TABLE 2.1
SUMMARY OF SOURCE TEST RESULTS - UNIT 1

Pollutant	----Run Number----			Average	Permitted Compliance Emission Limits
	1	2	3		
<u>SDA INLET</u>					
<u>Conc., ppm_{dv} @ 7% O₂</u>					
Hydrogen Chloride	556	534	513	534	---
<u>Conc., ppm_{dv} @ 12% CO₂</u>					
Sulfur Dioxide	86.8	108	83.1	92.7	---
<u>STACK</u>					
<u>Conc., ppm_{dv} @ 7% O₂</u>					
Carbon Monoxide	13.0	15.8	18.3	15.7	100
Hydrogen Chloride	25.3	47.8	38.4	37.2	50
<u>Conc., ppm_{dv} @ 12% CO₂</u>					
Nitrogen Oxides	319	303	318	313	385
Sulfur Dioxide	32.8	29.6	32.9	31.7	60
Volatile Organic Compounds	1.3	0.9	0.4	0.9	70
<u>Conc., gr/DSCF @ 7% O₂</u>					
Particulate	0.0012	0.0001	0.0005	0.0006	0.02
<u>Conc., gr/DSCF @ 12% CO₂</u>					
Particulate	0.0013	0.0001	0.0005	0.0006	0.015
Fluoride	1.60E-05	1.55E-05	1.32E-05	1.49E-05	1.5E-03
Beryllium	ND ⁽¹⁾	ND	ND	ND	ND
Lead	ND	ND	2.90E-06	9.67E-07	3.1E-04
Mercury	2.40E-04	2.09E-04	2.03E-04	2.17E-04	3.4E-04
<u>Opacity, %</u>					
Visible Emissions	0	0	0	0	15

(1) ND = Not Detected, used as zero (0)

TABLE 2.2
SUMMARY OF SOURCE TEST RESULTS - UNIT 2

Pollutant	-----Run Number-----			Average	Permitted Compliance Emission Limits
	1	2	3		
<u>SDA INLET</u>					
<u>Conc., ppm_{dv} @ 7% O₂</u>					
Hydrogen Chloride	628	526	471	542	---
<u>Conc., ppm_{dv} @ 12% CO₂</u>					
Sulfur Dioxide	58.0	73.6	62.9	64.8	---
<u>STACK</u>					
<u>Conc., ppm_{dv} @ 7% O₂</u>					
Carbon Monoxide	24.8	23.4	18.6	22.3	100
Hydrogen Chloride	28.1	32.3	32.2	30.9	50
<u>Conc., ppm_{dv} @ 12% CO₂</u>					
Nitrogen Oxides	331	320	315	322	385
Sulfur Dioxide	22.9	19.5	16.9	19.8	60
Volatile Organic Compounds	5.3	2.0	2.4	3.2	70
<u>Conc., gr/DSCF @ 7% O₂</u>					
Particulate	0.0013	0.0004	0.0002	0.0006	0.02
<u>Conc., gr/DSCF @ 12% CO₂</u>					
Particulate	0.0012	0.0004	0.0002	0.0006	0.015
Fluoride	1.16E-05	2.94E-05	1.28E-05	1.79E-05	1.5E-03
Beryllium	ND	ND	ND	ND	2.0E-07
Lead	2.91E-06	1.92E-06	ND	1.61E-06	3.1E-04
Mercury	2.23E-04	1.54E-04	1.41E-04	1.73E-04	3.4E-04
<u>Opacity, %</u>					
Visible Emissions	0	0	0	0	15

3.0 TEST PROGRAM

TABLE 3.1
TEST PARTICIPANTS

Ogden Martin Systems, Inc.

Todd B. Westersund

Lake County

Bill Cummins

Florida Department of Environmental Regulation

Chuck Collins
Gary Kuberski

R. W. Beck and Associates

Rick Reiff
Evis Couppis
Linda Long
Michelle Rouch

Brown and Caldwell

Tom Stucker
Russ Bowan

TABLE 3.2
TEST PROGRAM

Parameter	Method
Particulate Matter (PM)	U.S. EPA Method 5
Sulfur Dioxide (SO ₂) ⁽¹⁾	U.S. EPA Method 6C
Nitrogen Oxides (NO _x)	U.S. EPA Method 7E
Carbon Monoxide (CO)	U.S. EPA Method 10
Volatile Organic Compounds (VOC)	U.S. EPA Method 25A
Lead (Pb)	U.S. EPA Method 12
Mercury (Hg)	U.S. EPA Method 101A
Fluorides (F)	U.S. EPA Method 13B
Beryllium (Be)	U.S. EPA Method 104
Visible Emissions (VE)	U.S. EPA Method 9
Hydrogen Chloride (HCl) ⁽¹⁾	U.S. EPA Method 26

⁽¹⁾SO₂ and HCl sampled at the inlet and outlet of the air pollution control equipment.

TABLE 3.3
SCHEDULE OF ACTIVITIES

DATE/ TIME	UNIT	LOCATION	SAMPLING METHOD	RUN	PARAMETER
1/15/91					
0805-1025	1	Outlet	EPA 101A	1	Hg
0805-1025	1	Outlet	EPA 104	1	Be
0817-1037	2	Outlet	EPA 13B	1	F
0817-1037	2	Outlet	EPA 5/12, 9	1	PM/Pb, VE
0829-0929	2	Outlet	EPA 25A	1	VOC
0830-1000	2	Outlet	EPA 26	1	HCl
0830-1008	2	Inlet	EPA 26	1	HCl
0831-1006	2	Inlet	EPA 6C	1	SO ₂
0831-1006	2	Outlet	EPA 6C, 7E, 10	1	SO ₂ , NO _x , CO
1035-1135	2	Inlet	EPA 26	2	HCl
1035-1135	2	Outlet	EPA 26	2	HCl
1036-1157	2	Inlet	EPA 6C	2	SO ₂
1036-1157	2	Outlet	EPA 6C, 7E, 10	2	SO ₂ , NO _x , CO
1147-1415	2	Outlet	EPA 5/12, 9	2	PM/Pb, VE
1147-1415	2	Outlet	EPA 13B	2	F
1150-1420	1	Outlet	EPA 101A	2	Hg
1150-1420	1	Outlet	EPA 104	2	Be
1205-1305	2	Outlet	EPA 25A	2	VOC
1315-1415	2	Inlet	EPA 26	3	HCl
1315-1415	2	Outlet	EPA 26	3	HCl
1316-1431	2	Inlet	EPA 6C	3	SO ₂
1316-1431	2	Outlet	EPA 6C, 7E, 10	3	SO ₂ , NO _x , CO
1511-1725	2	Outlet	EPA 5/12, 9	3	PM/Pb, VE
1511-1725	2	Outlet	EPA 13B	3	F
1526-1626	2	Outlet	EPA 25A	3	VOC
1600-1817	1	Outlet	EPA 101A	3	Hg
1600-1817	1	Outlet	EPA 104	3	Be
1/16/91					
0810-1020	1	Outlet	EPA 5/12,9	1	PM/Pb, VE
0810-1020	1	Outlet	EPA 13B	1	F
0811-1039	2	Outlet	EPA 101A	1	Hg
0811-1039	2	Outlet	EPA 104	1	Be
0905-1005	1	Outlet	EPA 25A	1	VOC
0913-1035	1	Inlet	EPA 6C	1	SO ₂
0913-1035	1	Outlet	EPA 6C, 7E, 10	1	SO ₂ , NO _x , CO
0915-1035	1	Inlet	EPA 26	1	HCl
0915-1035	1	Outlet	EPA 26	1	HCl

TABLE 3.3
 SCHEDULE OF ACTIVITIES - cont'd.

DATE/ TIME	UNIT	LOCATION	SAMPLING METHOD	RUN	PARAMETER
1/16/91 (cont'd)					
1105-1230	1	Inlet	EPA 26	2	HCl
1105-1230	1	Outlet	EPA 26	2	HCl
1106-1230	1	Inlet	EPA 6C	2	SO ₂
1106-1230	1	Outlet	EPA 6C, 7E, 10	2	SO ₂ , NO _x , CO
1110-1340	1	Outlet	EPA 5/12, 9	2	PM/Pb, VE
1110-1340	1	Outlet	EPA 13B	2	F
1127-1227	1	Outlet	EPA 25A	2	VOC
1132-1345	2	Outlet	EPA 101A	2	Hg
1132-1345	2	Outlet	EPA 104	2	Be
1310-1440	1	Inlet	EPA 26	3	HCl
1310-1440	1	Outlet	EPA 26	3	HCl
1311-1442	1	Inlet	EPA 6C	3	SO ₂
1311-1442	1	Outlet	EPA 6C, 7E, 10	3	SO ₂ , NO _x , CO
1428-1640	2	Outlet	EPA 101A	3	Hg
1428-1640	2	Outlet	EPA 104	3	Be
1435-1645	1	Outlet	EPA 5/12, 9	3	F
1435-1645	1	Outlet	EPA 13B	3	PM/Pb, VE
1445-1545	1	Outlet	EPA 25A	3	VOC

4.0 OPERATIONAL DATA DURING EMISSION TESTING

4.0 OPERATIONAL DATA DURING EMISSION TESTING

Operational data were collected manually from process recorders. The data logger printouts are in Volume 3.

5.0 METHODOLOGY

TABLE 5.1
REFERENCES

Parameter	Test Method	Reference
PM	U.S. EPA Method 5	40 CFR 60, App. A
SO ₂	U.S. EPA Method 6C	40 CFR 60, App. A
NO _x	U.S. EPA Method 7E	40 CFR 60, App. A
CO	U.S. EPA Method 10	40 CFR 60, App. A
VOC	U.S. EPA Method 25A	40 CFR 60, App. A
Pb	U.S. EPA Method 12	40 CFR 60, App. A
Hg	U.S. EPA Method 101A	40 CFR 61, App. B
F	U.S. EPA Method 13B	40 CFR 60, App. A
Be	U.S. EPA Method 104	40 CFR 61, App. B
VE	U.S. EPA Method 9	40 CFR 60, App. A
HCl	U.S. EPA Method 26	40 CFR 60, App. A

APPENDIX A: FURNACE TEMPERATURES

LAKE COUNTY - FURNACE TEMPERATURES (deg F) JANUARY 16, 1991

	UNIT 1	UNIT 2	AVERAGE
	-----	-----	-----
COMBUSTION ZONE	2134	2108	2121
FURNACE ROOF TOP	1450	1446	1448
DIFFERENCE	684	662	673

TO MAINTAIN A COMBUSTION ZONE TEMPERATURE OF 1800 deg F, THE FURNACE
ROOF TEMPERATURE MUST BE ABOVE (1800 - 662 =) 1138 deg F.

LAKE COUNTY - FURNACE ROOF TEMPERATURES

JANUARY 16, 1991

UNIT 1 ROOF TEMPERATURE (deg F)

0800	0900	1000	1100	1200	1300	1400
1488	1488	1455	1401	1459	1553	1516
1465	1453	1424	1366	1428	1514	1468
1392	1381	1350	1293	1342	1420	1380
1472	1471	1738	1385	1442	1537	1499
1468	1456	1429	1373	1432	1516	1471
1480	1467	1435	1374	1426	1510	1466
average						1450

UNIT 2 ROOF TEMPERATURE (deg F)

0800	0900	1000	1100	1200	1300	1400
1479	1523	1487	1410	1439	1430	1445
1472	1516	1473	1405	1432	1424	1443
1446	1478	1429	1367	1404	1391	1410
1486	1529	1493	1419	1448	1439	1454
1473	1516	1474	1409	1435	1427	1445
1450	1482	1433	1374	1410	1397	1415
average						1446

FURNACE TEMP (°F)
COMBUSTION ZONE

1/16/91

UNIT 1

UNIT 2

①

②

①

②

0815 - 0825

2207

2022

2070

1840

0915 - 1025

2375

2059

2419

2021

1115 - 1225

2191

2007

2097

2040

1305 - 1415

2386

1824

2280

2098

Average

2134

Average

2108



OGDEN MARTIN SYSTEMS, INC.

BY TBW DATE 1/23/91

AN OGDEN COMPANY

SHEET _____ OF _____

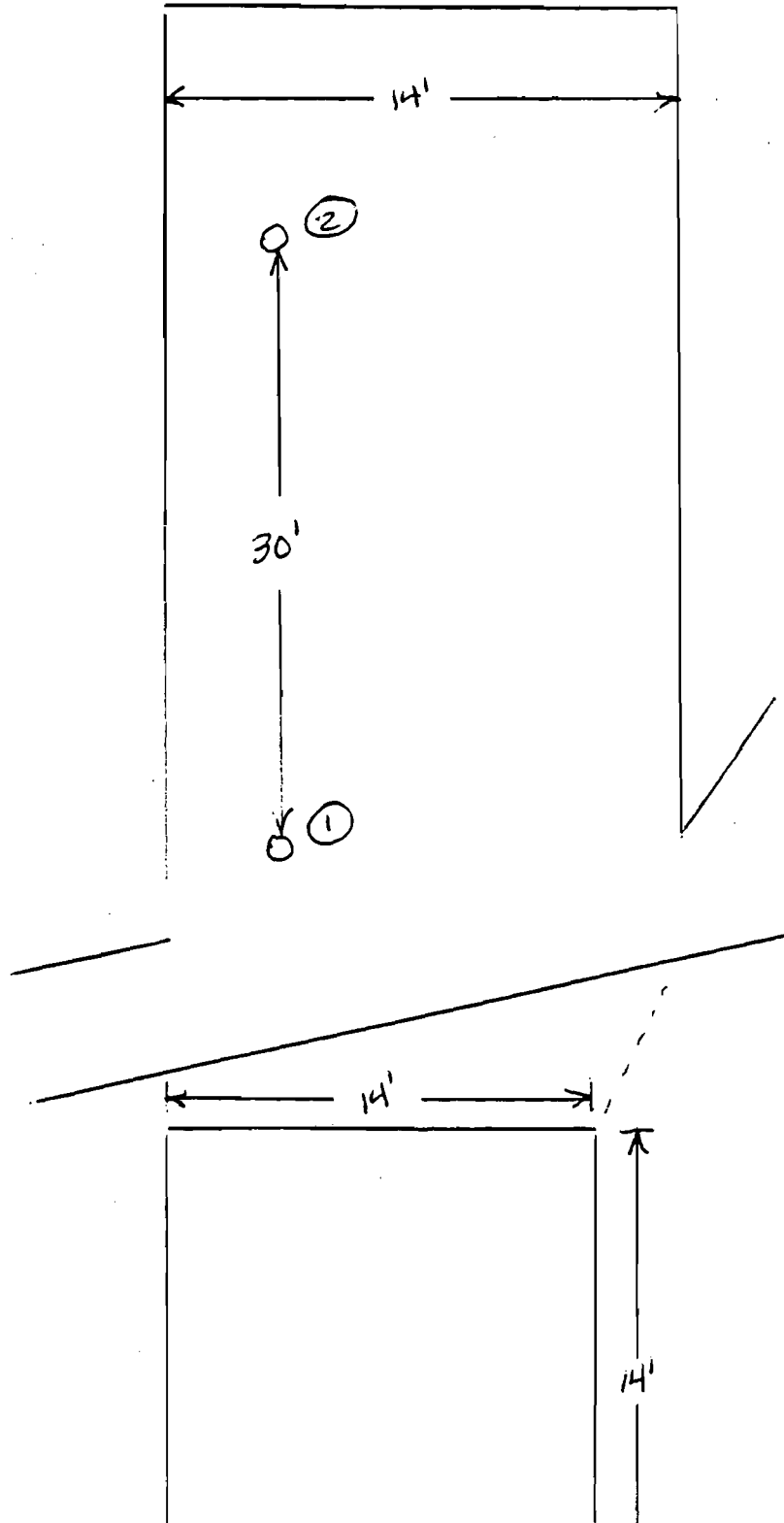
CHKD BY _____ DATE _____

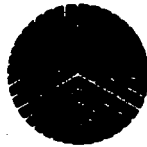
BOOK NO. _____

APPROVED BY _____ DATE _____

PROJECT LAKE COUNTY PROJECT NO. _____

SUBJECT FURNACE DIMENSIONS (not to scale)





OGDEN MARTIN SYSTEMS, INC.

BY TBW DATE 1/23/91

AN OGDEN COMPANY

SHEET _____ OF _____

CHKD BY _____ DATE _____

BOOK NO. _____

APPROVED BY _____ DATE _____

PROJECT LAKE COUNTY

PROJECT NO. _____

SUBJECT FURNACE TEMPERATURE RESIDENCE TIME

UNIT 1

$$T_F = 2134^\circ F$$

$$T_S = 395^\circ F$$

$$Q_{aw} = 72,419 \text{ acfm}$$

$$A_x = 196 \text{ ft}^2$$

$$V_F = \frac{\left(\frac{72,419 \text{ ft}^3}{\text{min}}\right) \left(\frac{2134 + 460}{395 + 460}\right) \left(\frac{\text{min}}{60 \text{ sec}}\right)}{196 \text{ ft}^2} = 18.68 \text{ ft/sec}$$

$$t_R = \frac{30 \text{ ft}}{18.68 \text{ ft/sec}} = 1.6 \text{ sec}$$

UNIT 2

$$T_F = 2108^\circ F$$

$$T_S = 402^\circ F$$

$$Q_{aw} = 79,166 \text{ acfm}$$

$$A_x = 196 \text{ ft}^2$$

$$V_F = \frac{\left(\frac{79,166 \text{ ft}^3}{\text{min}}\right) \left(\frac{2108 + 460}{402 + 460}\right) \left(\frac{\text{min}}{60 \text{ sec}}\right)}{196 \text{ ft}^2} = 70.05 \text{ ft/sec}$$



OGDEN MARTIN SYSTEMS, INC.

BY TBW DATE 1/23/91

AN OGDEN COMPANY

SHEET _____ OF _____

CHKD BY _____ DATE _____

BOOK NO. _____

APPROVED BY _____ DATE _____

PROJECT LAKE COUNTY PROJECT NO. _____

SUBJECT FURNACE TEMP. RESIDENCE TIME

$$t_R = \frac{30 \text{ ft}}{20.05 \text{ ft/sec}} = 1.5 \text{ sec}$$

-
- T_F = average furnace temperature
 - T_S = economizer outlet temperature
 - Q_{aw} = economizer outlet volumetric flow
 - A_x = furnace cross-sectional area
 - V_F = furnace gas velocity
 - t_R = furnace residence time at T_F
 - 30 feet between sampling points

APPENDIX B

**Prior Correspondence Between OMSL and
The Department on Complete Combustion**

18 November 1999

Mr. James Bradner, P.E.
Solid Waste Program Manager
Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Ogden Martin Systems of Lake, Inc.
3830 Rogers Industrial Park Road
Okahumpka, FL 34762
352 365 1611
Fax 352 365 6359

RECEIVED

NOV 24 1999

NANCY TAMMI

SUBJ: Response to Letter dated November 10, 1999

Dear Mr. Bradner:

In response to your letter dated November 10, 1999 (attached), Ogden Martin Systems of Lake, Inc. is pleased to provide the following response(s):

Why was incompletely incinerated solid waste delivered to the Lake County Landfill?

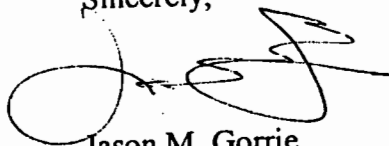
Attached, please find a copy of a letter dated May 2, 1986 from Mr. Charles P. Nichols, P.E. to Mr. Charles M. Collins, P.E. The letter states in pertinent part on page 11 that "(t)he expected unburned combustibile content of the ash is less than 5%, by weight, and the expected putrescible content of the ash is less than 0.2%." As evidenced by this letter previously submitted to the Department, "incompletely incinerated solid waste" has always been an anticipated aspect of the ash delivered to the Lake County Landfill. Further, please find attached the applicable portion of our contract with Lake County as relates to ash quality delivered to the landfill. As presented previously, the delivery of "incompletely incinerated solid waste" to the Lake County Landfill presents neither an environmental threat nor a regulatory violation.

What quality control measures will be undertaken to prevent this situation from occurring in the future?

As outlined in our previous letter to you dated 11/04/99, this situation does not present an environmental threat nor a violation of Department rules. It is our view that our existing QC procedures are sufficient to minimize unburned material. As such, we will continue to follow our existing procedures and to abide by our contractual obligations to Lake County as relates to any unburned fraction of the ash.

Mr. Jim Bradner, P.E.
Florida Department of Environmental Protection
November 18, 1999
Page 2

Sincerely,



Jason M. Gorrie
Senior Environmental Engineer
Ogden Martin Systems of Lake, Inc.

Attachments: 5/2/86 letter from C. Nichols (LGM Engineers) to C. Collins (FDER)
Schedules 4 and 10 of NRG/Lake County Agreement

c: Leonard Kozlov
Don Post
Gary Debo
Mark Slaby
Nancy Tammi, Esq.

File: Lake County SW Application #1 (16)



LGM ENGINEERS CONSTRUCTORS

May 2, 1986

Mr. Charles M. Collins, P. E.
Hazardous/Solid Waste Engineering
State of Florida
Department of Environmental Regulation
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803-3767

RE: Lake County Waste to Energy Facility
April 14, 1986 Letter to C. P. Nichols
from C. M. Collins; OSJ-SW-86-0078

Dear Mr. Collins,

Please find enclosed, responses to the comments and request for information contained in the above referenced letter.

We trust that this additional information will result in a complete construction permit application.

Please respond as soon as possible if there are any additional comments and questions. Thank you for your prompt review.

Sincerely,

LGM ENGINEERS CONSTRUCTORS

Charles P. Nichols

Charles P. Nichols, P. E.
Manager, Environmental Engineering

CPN:ce

Enclosures

LGM INC. / 1330 West Peachtree Street, NW / Atlanta, Georgia 30367-6501 / (404) 873-1867

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. OSJ-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NOS. 1 AND 2 RESPONSE:

Mr. Walt Walters, President, NRG/Recovery Group reports that he delivered a check in the amount of \$500 for permit application processing and six (6) copies of the Application for Permit to Construct a Solid Waste Resource Recovery and Management Facility to DER on March 17, 1986, and received a signed receipt for these items from Alyce Bobkin, Administrative Secretary, DER. Walters discussed these items with Bobkin by telephone on April 28. She indicated she would look into the whereabouts of these items and resolve the matter. Please consult with Bobkin for her comments.

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. 05J-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 3 RESPONSE:

Please refer to Contract for Sale and Purchase in Section 3 of the original Permit Application and to the attached letter from attorneys Cummins, Keedy and Richey.

Proof of land ownership will be submitted for your record prior to commencement of any construction.

Cummins, Keedy and Richey, P.A.

ATTORNEYS AND COUNSELLORS AT LAW

JOHN F. CHERRY (1914-1973)
NORMAN C. CUMMINS
JAMES F. KEEDY
STEVEN J. RICHEY
BENJAMIN J. COX

RECEIVED

APR 29 1986

April 25, 1986

LGM ENGINEERS
CONSTRUCTORS

Mr. Charles M. Collins, P.E.
Hazardous/Solid Waste Engineering
Department of Environmental Regulation
State of Florida
St. Johns River District
3319 Maguire Boulevard
Suite 232
Orlando, FL 32803-3767

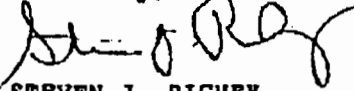
Re: Lake County - SW
Lake County Waste to Energy Facility
Construction Permit Application

Dear Mr. Collins:

This letter is in response to your April 14, 1986, letter to Lockwood Greene Engineering, Inc. As attorney for the owner of the land involved, this letter is to advise you that, pursuant to Paragraph 3 of said letter, NRG/Recovery, Inc., or its assigns, will have ownership of the land by the conclusion of your DER permitting.

If I can be of any further assistance, please don't hesitate to contact me.

Sincerely,



STEVEN J. RICHEY

SJR/cfh

P.O. Box 1856 • 1009 N. 14th Street • Leesburg, Florida 32749-1856 • 804/787-5411

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. OSJ-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 4 RESPONSE:

Refer to the attached Site Plan/Ground Penetrating Radar Interpretations Map overlay which shows that no major structures will be constructed over any areas of suspected or possible cavities or areas with a cavity signature.

The strength of the subgrade and soil bearing capabilities have not been determined at this time. Geotechnical services will be initiated upon approval of subject construction permit application. The strength of subgrade and soil bearing capabilities will be determined in accordance with ASTM Standards D1586, D1587, D2113, and D2488. Foundation systems will be designed according to the Geotechnical Engineer's recommendations to ensure imposed loads and stresses will not exceed allowables.

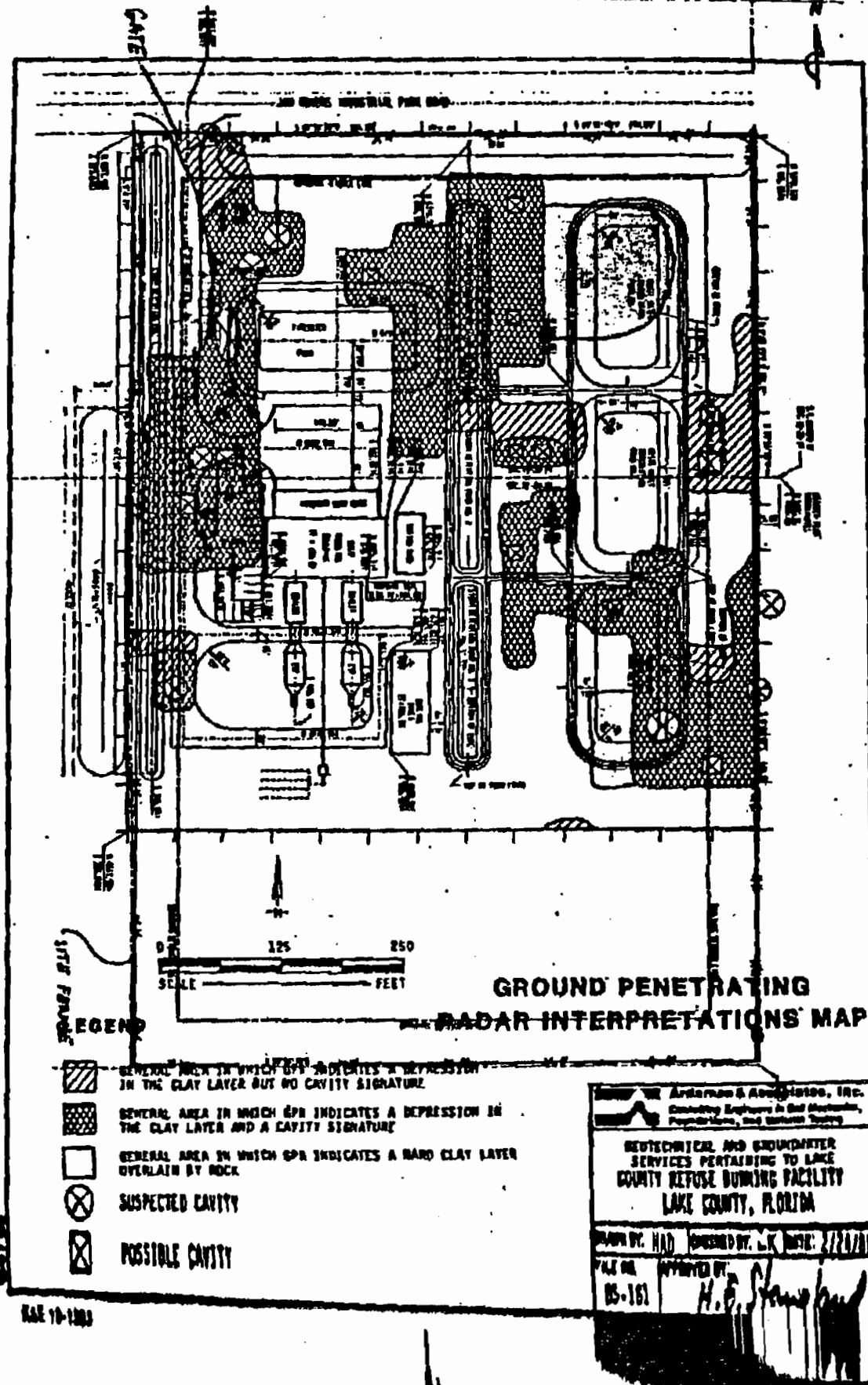


FIGURE 8

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. OSJ-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 5 RESPONSE:

Attached is a certified copy of the aerial photograph flown over the subject area in February, 1984. The requirement that the aerial be taken within one year of permit application is noted in Section 17-7.050(3)(a), F.A.C. However, the area is of rural character, not subject to rapid change. Stephen Vaughn, Realtor, Vaughn Realty Corporation of Mount Dora, Florida, reports that "the attached aerial photograph is still highly accurate," that "virtually no change within a 1500 feet radius, and no significant change within a 5000 feet radius has occurred since February, 1984." We request that the aerial photograph be accepted as representative of current, actual conditions. (One copy only to C. M. Collins.)

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. 05J-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 6 RESPONSE:

A.

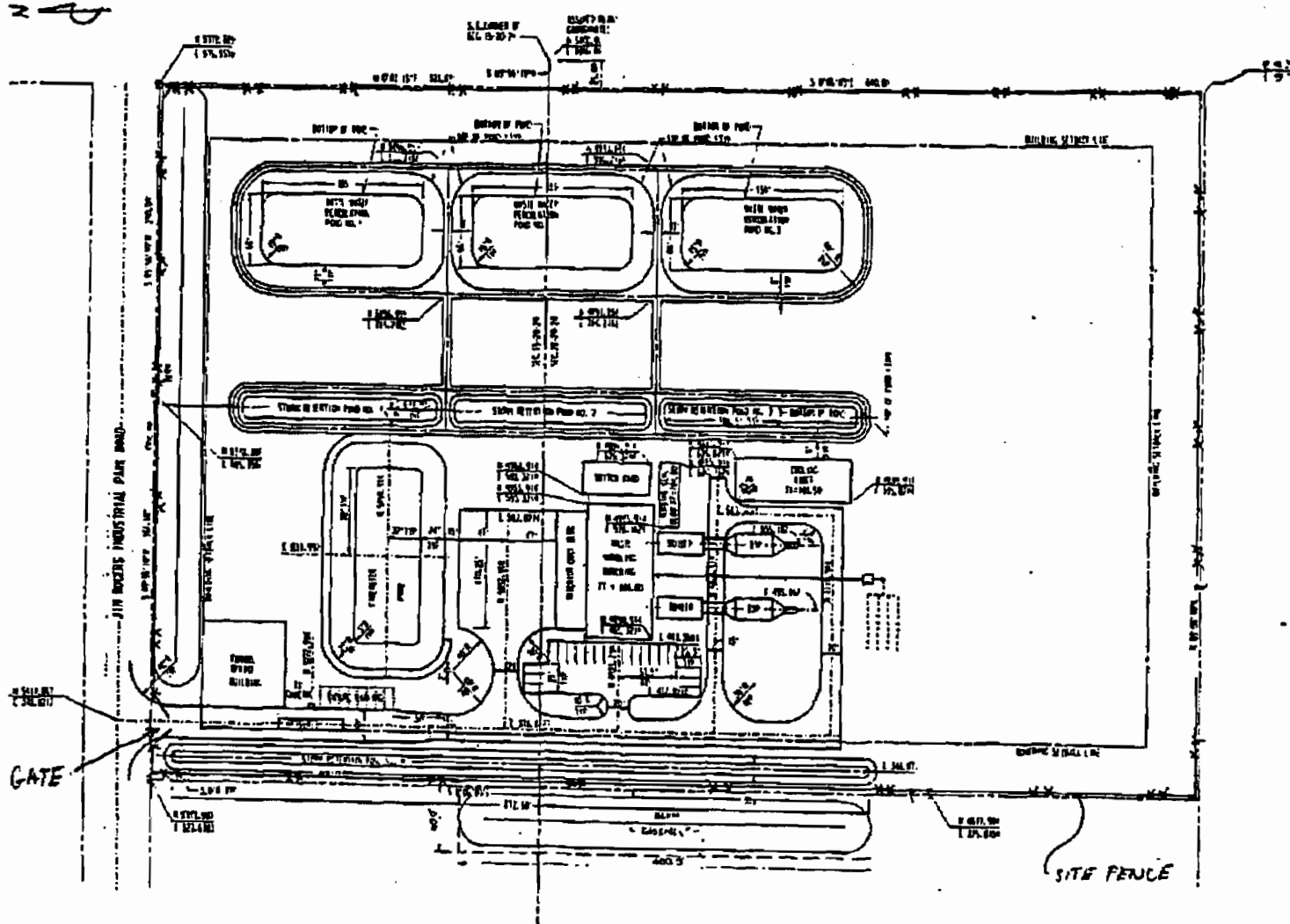
1. Refer to the attached sketch of site drawing showing location of fencing and gate. Note that the entire perimeter of the property is to be fenced.
2. Refer to attached sketch of the site fire protection system showing location of fire hydrants, fire pump house, post indicator valves, isolation valves, and feeds to sprinkler systems inside buildings.

B. The firewater pond will serve as a storage reservoir for water to fight fire(s). The firewater distribution piping and hydrants will be fed by fire pumps taking suction from the fire water pond. The pond will have a volumetric capacity to supply 2000 GPM flow for four hours. A community well will serve as a source of makeup to the firewater pond. A city fire hydrant system exists along the frontage road.

C. The switch yard will contain electrical switchgear for the subject facility.

D. The tipping floor and waste storage area are enclosed. There are no drains from this area discharging contaminated water or liquids. Any liquids in the waste or clean up water from the tipping floor will be mixed with and absorbed by the waste and incinerated.

BEST AVAILABLE COPY



LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. OSJ-SW-86-0078 DTD: 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 7 RESPONSE:

- A. We hereby give assurance that signs indicating the name of the operating authority, traffic, flow, hour of operation, charges for disposal; and signs prohibiting the disposal of hazardous, infectious and sludge wastes will be posted at the site entrance, in accordance with Section 17-7.050(5)(c), F.A.C.
- B. We hereby give assurance that communication facilities will be available on site, per Section 17-7.050(5)(d), F.A.C.
- C. We hereby confirm that adequate safety devices will exist on the equipment to protect operators from potential hazards during operation, per Section 17-7.050(5)(e), F.A.C.

Included among the safety devices and/or safety features designed into the facility are the following:

- The boilers are manufactured according to the ASME code and will have steam side safety valves for pressure protection.
- The combustion furnace walls are tight membrane wall construction, thereby limiting escape of gases.
- The gases leaving the furnace will be monitored and used for control to prevent over temperature damage to superheater.
- The turbine generators will have overspeed trip protection.
- All pipes will be insulated for efficiency and/or personnel protection.
- The turbine will have safety valves to protect against over pressure.
- The MSW pit is under suction by the combustion air fans for odor control.
- There is fire protection in the building and control room.
- Two methods of egress from around the equipment.

A list of primary and reserve equipment necessary for the proper operation of the facility and/or systems, which will provide redundancy or backup is given below:

- Two (2) 100% capacity MSW cranes
- Two (2) 100% capacity boiler feedwater pumps
- Multiple doors for receiving MSW trucks
- Each combustion process stream is independent of the other

◦Adequate and recommended spare parts will be maintained on site

LOCKWOOD GREENE RESPONSES TO
DER LETTER NO. OSJ-SW-86-0078 DTD. 4-14-86
C. M. COLLINS TO C. P. NICHOLS

LAKE COUNTY - SW
NRG RECOVERY GROUP
LAKE COUNTY WASTE TO ENERGY FACILITY
CONSTRUCTION PERMIT APPLICATION

LETTER ITEM NO. 9 RESPONSE:

- A. The ash from the subject property will be disposed of at a lined landfill. Please refer to the attached letter of April 25, 1986, from Paulette Alexander, Director, Lake County Department of Pollution Control.
- B. The furnace and stoker grate system are to be designed with special consideration to maximize the combustion process and minimize products of incomplete combustion in the flue gases and ash product. The design grate heat release rate is approximately 255,000 BTU/cu. ft. hr., and material should remain on the grates in the range of 20 to 30 minutes, from waste feed to ash discharge. The expected unburned combustible content of the ash is less than 5%, by weight, and the expected putrescible content of the ash is less than 0.2%. The furnace volumetric heat release rate is low to provide for long flue gas residence time. At design capacity and fuel conditions, the furnace residence time to 1800°F is greater than 1 second and furnace residence time to 1500°F after over fire air ports is greater than 3 seconds. This design equals or exceeds EPA recommended design criteria.
- C. All stormwater will be retained on site in stormwater retention ponds, as indicated on the site plan. Stormwater will be discharged to the atmosphere through evaporation and/or to the ground through percolation.
- D. We submit herewith the completed Application for Monitoring Plan Approval DER Form 17-1.216(1) for review by the groundwater section.
- E. We hereby confirm that the facility will be constructed and operated in compliance with Section 17-7.040, F.A.C.

NOTE: There was no Item No. 8 in Mr. Collins' letter.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3318 MAQUIRE BOULEVARD
SUITE 223
ORLANDO, FLORIDA 32802



GOR GRANT
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

APPLICATION FOR MONITORING PLAN APPROVAL
(Existing Sources)

INSTRUCTIONS: Submit four copies of this application and four copies of supporting information such as laboratory reports, maps and other documents to the appropriate District Office.

PART I - General Information

In compliance with Florida Administrative Code Rule 17-4.245(6)(c)2., the undersigned installation owner applies for approval from the Department for the monitoring criteria on the following property owned by:

<u>NRG/Recovery Group</u>			<u>Applied for</u>		
Corporation or Owner's Name			Permit No.		
<u>Lake County Waste to Energy Facility</u>			<u>N/A</u>		
Installation Name			SIC Code		
<u>Jim Rogers Road</u>	<u>Okahumpka</u>	<u>Lake</u>	<u>28°44'25"N</u>	<u>81°53'20"W</u>	
Street Address	City	Zip County	Latitude	Longitude	
		<u>1/4 1/4 1/8 of</u>	<u>22</u>	<u>20</u>	<u>24</u>
			Section, Township, Range		

OWNER OR AUTHORIZED REPRESENTATIVE (If representative, attach letter of authorization.)

Robert Mayfield, Manager, Energy Division, LGM Inc. Engineers/Constructors
Name and Official Title (Print or Type)

1330 W. Peachtree St., NW Atlanta Georgia 30367 (404) 873-4867
Street City State Zip Telephone Number

Signature: Robert C. Mayfield Date: 5/2/86

PART II - Content of Monitoring Plan *See Construction Permit Application package for hydrogeological information.*

Pursuant to Rule 17-4.245(6)(d), the plan shall contain findings, recommendations and plans for ground water monitoring derived from site specific information. For the type of information to be considered in the development and assessment of the plan, see page two of this form. In any case, the following items must be included:

1. Location(s) of proposed well(s) to sample natural unaffected background water quality and the intermediate and compliance well(s) in the down gradient direction.
2. Construction details of the monitor well(s), including type of casing material, diameter of casing, depth of casing and location of screens.
3. A water sampling and chemical analysis procedure which can determine the natural unaffected background quality of the ground water, and the quality of the receiving ground water in the downgradient intermediate and compliance wells.

The following information is the type generally required for detailed assessment of the most complex plans, with less complex cases not needing this degree of evaluation:

1. Hydrogeological, physical and chemical data for the site, including:
 - a. Direction and rate of ground water flow, and background ground water quality;
 - b. Porosity, horizontal and vertical permeability for the aquifer(s) and the depth to, and lithology of, the first confining bed(s);
 - c. Vertical permeability, thickness, and extent of any confining beds;
 - d. Topography, soil information and surface water drainage systems surrounding the site;
2. Waste disposal rate and frequency, chemical composition, method of discharge, pond volume, spray-field dimension, or other applicable site specific information;
3. Toxicity of waste;
4. Present and anticipated wastewater volume, seepage rate to the receiving ground water, physical, chemical, microbiological (whichever is applicable) characteristics of the leachate;
5. Disposal system water balance;
6. Present and reasonably expected future pollution sources located within one mile radius of the site;
7. Inventory depth, construction details, and cones of depression of water supply wells and monitor wells located within one mile radius of the site or potentially affected by the discharge;
8. Site specific economic and feasibility considerations;
9. Chronological information on water levels in the monitor wells and water quality data on water supplies collected from the water supply and monitor wells;
10. Type and number of waste disposal facilities within the installation;
11. Chronological information on surface water flows and water quality upstream and downstream from the site;
12. Construction and operation details of disposal facilities;
13. History of construction and land development in the vicinity of the site.

A monitoring program instituted under some other state, federal, or local government regulation or permit may be substituted (or referenced if contained in an existing department permit) if such program is in substantial compliance with Part II.

SCHEDULE 4

PERFORMANCE STANDARDS

Section 4.1. General. This Schedule describes the Performance Standards for the Facility to be used for determining whether the Facility has met the Acceptance Criteria, as demonstrated through the Performance Tests. "Acceptance Criteria" means (1) eighty-five percent (85%) of the Capacity Performance Standard and the Energy Recovery Performance Standard, and (2) full and complete satisfaction of the Environmental Tests, and Putrescible and Unburned Carbon Test.

The Performance Test are made up of four (4) tests:

- a. Capacity Test
- b. Energy Recovery Test
- c. Environmental Tests
- d. Putrescible and Unburned Carbon Test

The methodology and procedures for the Performance Tests are specified in Schedule 5.

It is understood that the Environmental Tests may not be run concurrently with the other Performance Tests, and the Facility will be accepted conditionally and the Commencement Date of Operations will occur when the Facility has met the Acceptance Criteria except for Environmental Tests, said condition being the passing of environmental tests within the time period stipulated by the regulatory agencies having jurisdiction.

Section 4.2. Performance Standards. The Capacity Performance Standard is 528 ton/day based upon processing of waste having the composition and heating value of the Standard Reference Waste. The Capacity Performance Standard shall be demonstrated in accordance with the provisions outlined in Section 5.2 of Schedule 5.

The Energy Recovery Performance Standard is 525 kWh/ton of Standard Reference Waste processed, which is net of in-plant electricity usage. The Energy Recovery Performance Standard shall be demonstrated during the Energy Recovery Test, as described in Schedule 5.

The Environmental Tests shall be conducted to demonstrate for acceptance, compliance with the following air emission limitations:

- a. Particulate: 0.0150 grains, dscf corrected to 12% CO₂.
- b. Sulfur Dioxide: 60 ppm_{dv} corrected to 12% CO₂, 6-hour rolling average;
or
70% reduction of uncontrolled SO₂ emissions, 6-hour rolling average. Not to exceed 120 ppm_{dv} corrected to 12% CO₂, 6-hour rolling average.
- c. Nitrogen Oxides: 385 ppm_{dv} corrected to 12% CO₂.
- d. Carbon Monoxide: 200 ppm_{dv} corrected to 12% CO₂, 4-hour rolling average.
- e. Volatile Organic Compounds: 70 ppm_{dv} as carbon corrected to 12% CO₂.
- f. Lead: 3.1×10^{-4} gr/dscf corrected to 12% CO₂.
- g. Fluoride: 1.5×10^{-3} gr/dscf corrected to 12% CO₂.
- h. Beryllium: 2.0×10^{-7} gr/dscf corrected to 12% CO₂.
- i. Mercury: 3.4×10^{-4} gr/dscf corrected to 12% CO₂.
- j. Visible Emissions: Opacity of MWC emissions shall not exceed 15% opacity (6-min. average), except for one 6-min. period per hour of not more than 20% opacity. Excess emissions resulting from startup, shut down, or malfunction shall be permitted provided that best operational practices to minimize emissions

are adhered to, and the duration of excess emissions are minimized.

Process Residue shall be tested to determine compliance utilizing the Putrescible and Unburned Carbon Test. The Unburned Carbon Performance Standard is five percent (5%) by dry weight of the ash and the Putrescible Matter Performance Standard is five-tenths percent (0.5%) by dry weight of the ash.

SCHEDULE 10

DAMAGES FOR UNBURNED CARBON

The County may, at any time and from time to time after the Commencement Date of Operations, require that a test similar to the one described in Section 5.5 of Schedule 5 hereto, be conducted to determine whether the Facility is in compliance with the Unburned Carbon Performance Standards specified in Schedule 4. Such test shall be conducted no more frequently than monthly, unless otherwise requested by NRG and shall be conducted over a three-day period using the same methodology specified in Section 5.5 of Schedule 5. If the test demonstrates that the Facility is in compliance with the Unburned Carbon Performance Standard, the County shall pay for the cost of such testing; otherwise, NRG shall pay for such testing. If the Facility does not meet the Unburned Carbon Performance Standard, NRG shall pay the County an amount equal to \$20 per ton, adjusted by the Escalation Factor, for each "Excess Residue Ton" as hereinafter defined delivered to the Landfill during such month. Such liquidated damage factor is the reasonable estimate of the value of the capacity of the Landfill used to dispose of the Excess Residue Tons. Following a test showing that the Facility is not in compliance with the Unburned Carbon Performance Standard, the Facility shall be considered to remain out of compliance with such Performance Standard until another test demonstrates that the Facility is in compliance with such Performance Standard.

The Excess Residue Tons, as used herein, shall equal the tons of Residue on a wet basis for any month, or portion thereof, for which the Facility was not in compliance with the Unburned Carbon Performance Standard in excess of the number of tons calculated by multiplying

- (i) the tons of waste processed on a wet basis at the Facility during such month,
times
- (ii) either
 - (A) a fraction computed by dividing the tons of Residue generated on a wet basis at the

Facility during the most recent six (6) months of operation in compliance with the Unburned Carbon Performance Standard by the tons of waste delivered to and accepted at the Facility during such period

or

(B) if the Facility has not operated in compliance with the Unburned Carbon Performance Standard for six (6) months following the Commencement Date of Operations, the lesser of

(1) the average tons of Residue on a wet basis per ton of waste processed for such lesser period of time, if any, that the Facility has operated in compliance with the Unburned Carbon Performance Standard

or

(2) thirty-two hundredths (0.32) of the weight of waste processed.



Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

November 10, 1999

Jason M. Gorrie
Senior Environmental Engineer
Ogden Martin Systems of Lake, Inc.
3830 Rogers Industrial Park Road
Okahumpka, Florida 34762

OCD-SW-99-0500

Lake County SW
Astatula Landfill, Phase II

RECEIVED
NOV 12 1999
O.M.S. OF LAKE

Dear Mr. Gorrie:

Thank you for your letter, dated November 4, 1999 (received November 8), about the waste delivered to the Lake County Landfill in Astatula on October 29, 1999. In addition to the information presented in your letter, I would appreciate your response to the following questions:

Why was incompletely incinerated solid waste delivered to the Lake County Landfill?

What quality control measures will be undertaken to prevent this situation from occurring in the future?

I appreciate your assistance. Please contact me at 407/893-3329 if you have questions or need further information.

Sincerely,

James N. Bradner, P.E.
Solid Waste Program Manager

/jnb

cc: Leonard Kozlov, Program Administrator, FDEP Air Resources Management
Don Post, Director, Lake County Solid Waste Management Services
Gary Debo, Division Director, Lake County Solid Waste Management Services

"More Protection, Less Process"

Printed on recycled paper.

OGDEN

04 November 1999

Ogden Martin Systems of Lake, Inc.
3830 Rogers Industrial Park Road
Okahumpka, FL 34762
352 365 1611
Fax 352 365 6359

Mr. Jim Bradner
Florida Department of Environmental Protection
Central District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

*SUBJ: October 29, 1999 Inspection
Lake County Landfill*

Dear Mr. Bradner:

Thank you for taking the time yesterday to update me on the status of your findings following an October 29 inspection at the Lake County Landfill. As you are aware, the solid waste in question was apparently generated by our facility in Okahumpka. As I understand the current situation following our discussion, the solid waste does not present an environmental threat because it is properly contained in a permitted Class I disposal unit.

Apprehension has been expressed by some that the material may present an infectious threat. We have discussed that aspect with Mr. Jim Robinson of the Florida Department of Health following his inspection at the landfill. His agency has advised us that the material does not present an infectious threat and should be disposed of in accordance with Florida DEP rules. Further, review of operating records with Department air inspectors indicates that all medical waste processing parameters have been met.

Thank you for your assistance in bringing this matter to a satisfactory conclusion. Please feel free to contact me at (352) 365-1611 if additional information and/or action is required on our part.

Sincerely,



Jason M. Gorrie
Senior Environmental Engineer
Ogden Martin Systems of Lake, Inc.

c: D. Crowe/Lake County
M. Slaby/OMS Lake

bc:

C. Boatwright

D. Porter

S. Bass

V. Ragucci