Mr. John J. Gay Air Compliance and Enforcement FDEP Northeast District Office 7825 Baymeadows Way, Suite B200 Jacksonville, Florida 32256

RECEIVED

MAY 05 2009

BUREAU OF AIR REGULATION

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RE: East

East Municipal Solid Waste Landfill

Surface Scan

Permit No. 0310318-004-AV

Dear Mr. Gay:

This is the report for the surface scan conducted on the City of Jacksonville, East Municipal Solid Waste Landfill for March 28, 2009. There were no detections of methane above the 500 ppm limit during the surface scan event. Attached is the surface scan route map.

This surface scan is currently being conducted on an annual basis. There were no detections over 500 ppm for more than four consecutive quarters. Therefore, in accordance with 40 CFR60.756(f), the surface scan frequency is annually.

If you have any questions or comments regarding this report, please call me at (904)-472-4720.

Very truly yours.

Romy, Man

Ronald L. Moore Project Manager AECOM/Earth Tech

Attachment

Cc: Florida DEP, (Tallahassee, FL)

Wayne Tutt. (City of JAX. Air Quality Division)

Chris Pearson. (City of JAX. Solid Waste)

Mike Beaudoin, (AECOM)

Monitoring Instrument Performance Evaluation NSPS Surface Scan

40 CFR 60.755(d)(3) requires performance evaluation of response factor, response time and calibration precision according to the section 4.4 of 40 CFR 60 Appendix A, Method 21. The requirements are presented below along with locations to record the evaluations.

Response Factor:

Response factor is the ratio of the known concentration of a VOC compound to the observed meter reading when measured using an instrument calibrated with the reference compound specified in the applicable regulation. Since the monitoring instrument is being used to detect methane and the calibration reference compound is methane, the response factor by definition is one. No further evaluation is required.

Response Time:

Response time is the time interval from a step change in VOC concentration at the input of the sampling system to the time at which 90 percent of the corresponding final value is reached as displayed on the instrument readout meter.

Performance Requirement: Section 3.1.2(b) of Method 21 requires the instrument response time to be equal to or less than 30 seconds.

Evaluation Frequency: Prior to placing instrument into service (for the first time or after it was out of service for maintenance or repair). If modification to the sample pumping system or flow configuration is made that would change the response time, a new test is required prior to further use.

Evaluation Procedure: (Section 4.4.3 of Method 21) Calibrate instrument with the methane calibration gas. Introduce zero gas into the instrument sample probe. When the meter reading has stabilized, switch quickly to the specified calibration gas. Measure the time from switching to when 90 percent of the final stable reading is attained. Perform this test sequence three time and record the results. Calculate the average response time. Use the form below or a similar format to document this procedure.

Date: 3/28/09
Operator Name: Ron Moore

Facility: <u>East Landfill (Jacksonville, FL)</u>

Instrument ID: Photovac microFiD I/S

Calibration Gas Conc.: 500 ppm CH4 90% of Calib. Gas Conc.: 450 ppm CH4

Trial No.Time to reach 90% gas value122.0 seconds221.0 seconds323.0 seconds

Is instrument response time less than or equal to 30 seconds? (If yes, then performance is acceptable)

X Yes ___ No

Average

22.0 seconds

Monitoring Instrument Performance Evaluation NSPS Surface Scan

(cont.)

Calibration Precision:

Calibration precision is the degree of agreement between measurements of the same known value, expressed as the relative percentage of the average difference between the meter readings and the known concentration to the known concentration.

Performance Requirement: The calibration precision must be equal to or less than 10 percent of the calibration gas value.

Evaluation Frequency: Must be completed prior to placing instrument into service, and at subsequent 3-month intervals or at the next use whichever is later.

Evaluation Procedure: (Section 4.4.2 of Method 21) Calibrate instrument with the methane calibration gas. Make a total of three measurements by alternately using zero gas and the specified calibration gas. Record the meter readings. Calculate the average algebraic difference between the meter readings and the known value. Divide this average difference by the known calibration value and multiply by 100 to express the resulting calibration precision as a percentage.

Date: 3/28/09
Operator Name: Ron Moore

Facility: East Landfill (Jacksonville, FL)

Instrument ID: <u>Photovac microFiD I/S</u>

Calibration Gas Conc.: 500 ppm CH4

Trial No.	Meter Reading After Zero Gas	Meter Reading with Cal Gas	Difference Between Cal Gas and Meter Reading
1	0.0 ppm	490 ppm	10.0 ppm
2	<u>0.0 ppm</u>	<u>500 ppm</u>	<u>0.0 ppm</u>
3	<u>0.0 ppm</u>	<u>495 ppm</u>	<u>5.0 ppm</u>

Average Difference: 5.0 ppm

Calibration Precision = Average Difference/Calibration Gas Conc. X 100
=
$$5.0 / 500$$
 X 100
= 1.0%

Is calibration precision equal to or less than 10 percent of the calibration gas value? (If yes, then performance is acceptable):

X Yes No

Table 2 Instrument Calibration and Monitoring Procedures Surface Monitoring Design Plan

The calibration procedures in section 4.2 of 40 CFR 60 Appendix A, Method 21 must be conducted immediately before commencing a surface monitoring survey. [40 CFR 60.755(d)(4)] Calibration, background readings and monitoring details can be recorded using this form.

Calibration Procedure:

The calibration gas should be methane in air at a nominal concentration of 500 ppm. [See section 3.2 of Method 21 for further calibration gas requirements.]

Assemble and start up the analyzer according to the manufacturer's instructions. After the appropriate warm-up period and zero internal calibration procedure, introduce the calibration gas into the instrument sample probe. Adjust the instrument meter readout to correspond to the calibration gas value. Record the calibration information in the table below.

Background Concentration:

Determine the background concentration by moving the probe inlet upwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Record the background concentration and location in the table below.

General Information:

Date: 3/28/09
Operator Name: Ron Moore

Facility: East Landfill (Jacksonville, FL)

Instrument ID: Photovac microFiD I/S

Wind Direction: South
Approximate Wind Speed 10 mph

General Weather: 68 °F

clear, partly cloudy, overcast: <u>clear</u> (circle one or write in) no precip, drizzle, rain, snow: <u>no precip</u> (circle one or write in)

Calibration Information:

Calibration Gas Conc.: 500 ppm CH4

Conduct internal zero calibration? Yes

Instrument reading after calibration: 500 ppm CH4 (should be same as above)

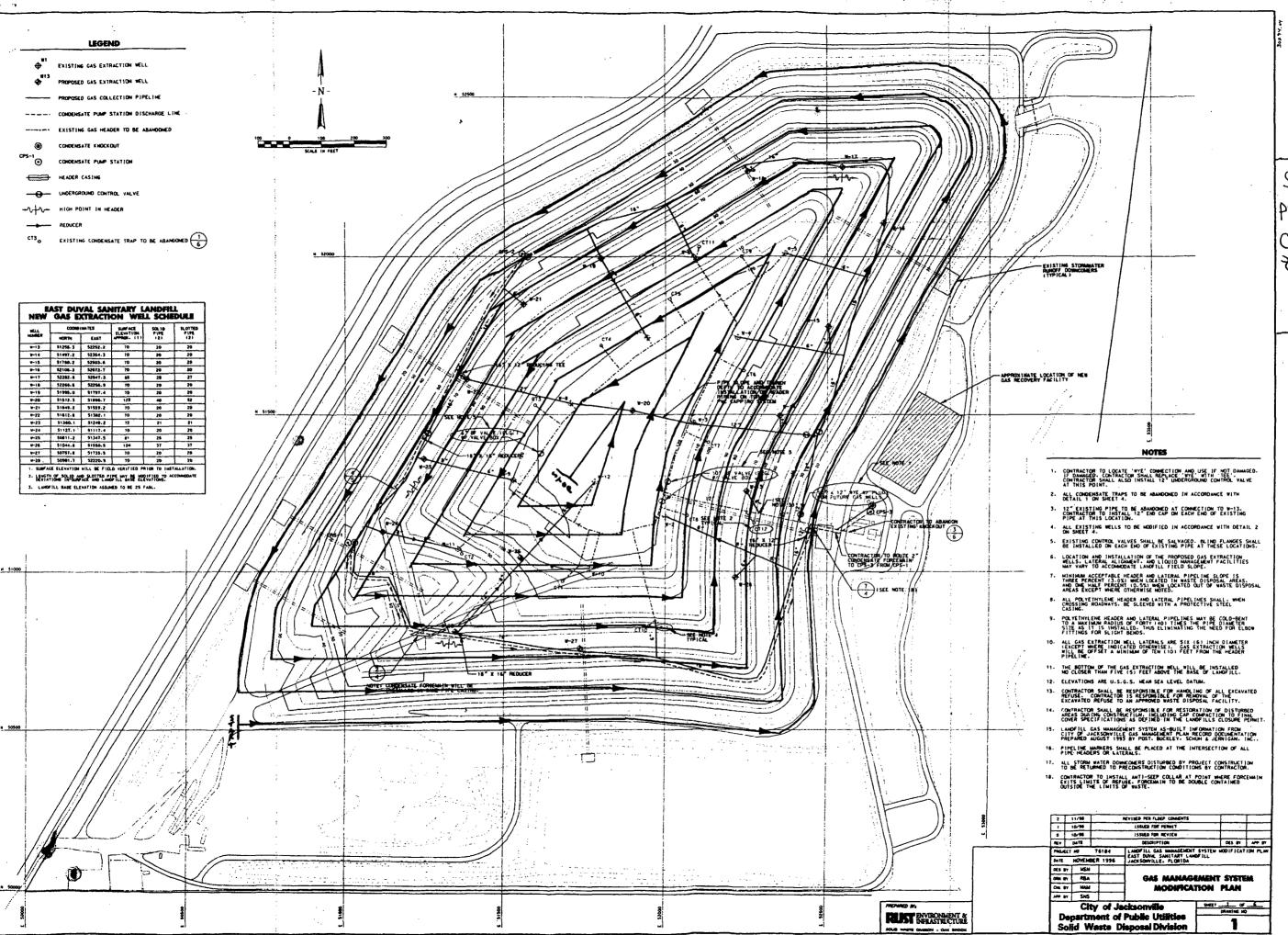
Time of Calibration: 08:00 a.m.

Background Concentration Information:

Background concentration upwind of site: <u>0 ppm</u> Average Background:

Location of background reading: South side of landfill 0 ppm

Background concentration downwind of site: <u>0 ppm</u> New "Leak" definition: Location of background reading: <u>North side of landfill</u> <u>500 ppm</u>



Surface Scan
performed 3-28-09
O detections over
the 500 ppm limit.

Ram r. Man AECOM/Earth Tech May 4, 2009

Mr. Raymond Barata Air Compliance and Enforcement FDEP Northeast District Office 7825 Baymeadows Way, Suite B200 Jacksonville, FL 32256

Re: Visible Emissions Test

Permit No. 0310318-004-AV

City of Jacksonville, East Municipal Landfill

Dear Mr. Walker: Barata

Visible emission testing was performed for the City of Jacksonville's East Municipal Landfill on April 2, 2009. There currently are two operational engines at the East Municipal Landfill Gas Plant. The engines are Engine #2 and Engine #3. The engines had not run this year until March 2nd, when the Plant's flow computer was replaced. The two engines were tested using EPA method 9, in accordance with the landfill permit.

The testing was performed by George H. Hawkins, (Ambient Air Services, Inc.), as detailed on the attached data sheets.

The inlet gas flow to Engine #2 during the test was 7.90 MMbtu/hour at 247 scfm.

The inlet gas flow to Engine #3 during the test was 7.26 MMbtu/hour at 228 scfm.

Should you have any questions or require additional information, please call me at (904) 472-4720.

Sincerely,

Ronald L. Moore

Project Manager

AECOM/Earth Tech

Attachment

CC: US EPA - Atlanta, GA (Air Enforcement Section)

Florida DEP - Tallahassee, FL (Air Resource Management)

Wayne Walker - City of Jacksonville (Air Quality Dept.)

Chris Pearson - City of Jacksonville (Solid Waste Division)

Mike Beaudoin - AECOM

Ambient Air Services, Inc.

106 Ambient Airway • Starke, FL 32091 • (904) 964-8440 • FAX (904) 964-6675

April 6, 2009

Mr. Ronald L. Moore, Project Manager AECOM/Earth Tech 13245 Atlantic Blvd., Suite 4-311 Jacksonville, FL 32225

RE: Visible Emissions Tests

Engine #2 Engine #3

Dear Mr. Moore:

Included with this letter are the visible emissions test on Engine #2 and Engine #3 tested on April 2, 2009. A copy of the Field Data Test Sheet, the Visible Emissions Test Data Sheets, the Process Weight Certifications, and a copy of the Observer's Certification should be sent to the Florida Department of Environmental Protection within 45 days of the test date of April 2, 2009. It should be sent to:

Mr. Raymond Barata, Environmental Specialist Florida Department of Environmental Protection 7825 Baymeadows Way, Suite 200B Jacksonville, FL 32256-7590

If you have any questions, please contact me at (904) 964-8440.

(Sholles

Sincerely,

David C. Sholtes

DCS:sha

VISIBLE EMISSIONS TEST DATA

FACILITY:

City of Jacksonville

East Municipal Landfill

FACILITY ADDRESS:

515 Girvin Road

Jacksonville, FL 32225

MAILING ADDRESS:

13245 Atlantic Blvd., Suite 4-311

Jacksonville, FL 32225

SOURCE IDENTIFICATION:

(4EK01066) Engine #2

(4EK01065) Engine #3

COMPANY CONTACT:

Ronald Moore

TEST CONDUCTED BY:

George H. Hawkins

TEST DATE AND TIME:

April 2, 2009

Engine #2: 09:22-10:22

Engine #3: 10:35-11:35

COMMENTS:

Standard test, no exceptions.

A	Ambient Air Services, Inc.				PAGE OF									
A	106 Ambient Air Way			START TIME 0922					END TIME NO.2.2					
S				OBSERV	ATION E	ATE O	1/02		TIM	E ZONE				
	OFFICE 904 - 964-8440 FAX	904 -964-6675	7011	SEC/MIN	0	15	30	45	SECMIN	0	15	30	45	
FACILITY EAST NILLIZIONAL LANGTILL			1	0	0	0	0	31	0	0	0	0		
SOURCE #2 ENGINE GENORATOR			2	0	0	0	0	32	0	0	0	0		
ADDRESS 515 GAVIN Rd.			3	0	0	0	0	33	0	0	0	0		
спу Ју	cksonville	STATE FL		4	0	0	0	0	34	0	0	0	0	
PHONE		SOURCE ID NO		5	0	0	0	0	35	0	0	0	0	
PROCESS 610	-gas general		NG MODE:	6	0	0	0	0	36	0	0	0	0	
CONTROL EQUI	0 2	OPERATI	ING MODE:	7	0	0	0	0	37	0	0	0	0	
DESCRIBE EMIS	SION POINT OF FRAME	horz. 3	facks	8	0	0	0	0	38	0	0	0	0	
Nonth	7 310C VEIG.	3600001	(100111	9	0	0	0	0	39	0	0	0	0	
HEIGHT OF EMI	SSION POINT	HEIGHT RELATIVE	TO OBSERVER	10	0	0	0	0	40	0	0	0	0	
START 2	'END 30'	START 25	END 75	11	0	0	0	0	41	0	0	0	0	
DISTANCE TO E	MISSIONS POINT	DIRECTION TO EI	M. PT.	12	0	0	0	0	42	0	0	0	0	
START~ 60	1 END 80 1	START 280	END 28°	13	0	0	0	0	43	0	0	0	0	
VERTICAL ANGL	E TO OBS. PT.			14	0	0	0	0	44	0	0	0	0	
START	150 END	150		15	0	0	0	0	45	0	0	0	0	
DESCRIBE EMIS	SIONS			16	0	0	0	0	46	0	0	0	0	
START CX	END S	AWC		17	0	0	0	0	47	0	0	0	0	
EMISSION COLO	OR.	WATER DROPLET	PLUME YES NO	18	0	0	0	0	48	0	0	O	0	
START -	END -	ATTACHED	DETACHED	19	0	0	0	0	49	0	0	0	0	
DESCRIBE PLUI	ME BACKGROUND			20	0	0	0	0	50	0	0	0	6	
START	SKY END	oky		21	0	0	0	0	51	0	0	0	0	
BACKGROUND	POLOR	SKY CONDITION		22	0	0	0	0	52	0	0	0	0	
START Na	e Cend Same	Cloudy	ENDCLOUSY	23	0	0	0	0	53	0	0	0	0	
WIND SPEED	·	WIND DIRECTION	•	24	0	0	0	0	54	0	٥	0	0	
STARTAZ -	8 END 42-4	START &	END E	25	0	0	0	0	55	0	0	0	0	
AMBIENT TEMPE	ERATURE	WET BUILB TEMP	%RH	26	0	0	0	0	56	0	0	0	٥	
START 75	end 75°	720	85	27	0	0	0	0	57	0	0	0	0	
COMMENTS				28	0	0	0	0	58	0	0	0	٥	
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				30	0	0	0	0	60	0	0	0	O	
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FACILITY EAST MUNICIP	OAL LANGET	1	0	0	0	0	31	0	0	0	0			
SOURCE #3 ENGINE GEN	CRATOR	2	0	0	0	0	32	0	0	0	0			
ADDRESS 5/5 GIZYIN	RI	3	0	0	0	0	33	0	0	0	0			
CITY Janksonville	STATE R	4	0	0	0	0	34	0	0	0	0			
PHONE	SOURCE ID NO.	5	0	0	0	0	35	0	0	0	0			
PROCESS DIO POS SENCIENT	OPERATING MODE:	6	0	0	0	0	36	0	0	0	0			
CONTROL EQUIP.	OPERATING MODE:	7	0	0	0	0	37	0	0	0	0			
DESCRIBE EMISSION POINT OF FOUR	horz. stacks av	8	0	0	0	0	38	B	0	0	٥			
west side of bldg. se	CUNG TRUM BUILT	9	0	0	0	0	39	Ð	0	0	0			
HEIGHT OF EMISSION POINT	HEIGHT RELATIVE TO OBSERVER	10	0	0	0	0	40	O	0	0	0			
START - 30' END 30'	START ~ 25 END 25	11	0	0	0	0	41	0	0	0	0			
DISTANCE TO EMISSIONS POINT	DIRECTION TO EM. PT.	12	0	0	0	0	42	0	0	0	0			
START 70' END 70'	START 320 END 320	13	0	0	0	0	43	0	O	0	0			
VERTICAL ANGLE TO OBS. PT.		14	0	0	0	0	44	0	0	0	٥			
START 210 END 210			0	0	0	0	45	0	0	0	0			
DESCRIBE EMISSIONS			0	0	0	0	46	0	0	0	0			
START CYLONG END	same	17	0	0	0	0	47	0	0	0	0			
EMISSION COLOR	WATER DROPLET PLUME YES NO	18	0	0	0	0	48	0	0	0	0			
START - END	ATTACHED DETACHED	19	0	0	0	0	49	0	0	0	0			
DESCRIBE PLUME BACKGROUND		20	0	0	0	0	50	0	0	0	0			
START STAN END ST	·y	21	0	0	0	0	51	0	0	0	0			
BACKGROUND COLOR	SKY CONDITION	22	0	0	0	0	52	0	0	0	σ			
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WIND SPEED	WIND DIRECTION	24	0	0	0	0	54	0	0	0	0			
START 3 - 4 END 43 - 6	START & END &	25	0	0	0	0	55	0	0	0	0			
AMBIENT TEMPERATURE	WET BULB TEMP %RH	26	0	0	0	0	56	0	೦	0	0			
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COMMENTS		28	0	0	0	0	58	8	0	0	0			
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SOURCE WITH SUN	WIND	CERTIFIE	D BY ETA	11/19/08										

PROCESS WEIGHT CERTIFICATION

COMPANY: <u>City of Jacksonville</u>
FACILITY: <u>East Landfill</u> DATE: <u>4-2-09</u>
ADDRESS: 515 Girvin Rd Jacksonville, FL 32225
MAILING ADDRESS: 13245 Atlantic Alud Snite 4-311 Jacksonville, FL 32225
SOURCE IDENTIFICATION(1): Engine # 2 (4EKO1066)
PERMITTED PROCESS RATE(1): 800 KW
METHOD USED TO DETERMINE PROCESS WEIGHT: NA
TEST TEST TIME PROCESS RATE DURING TEST No. FROM TO
1 0930 to 1030 695 KW / 247 scfm
to
to
(1) Identify the source and report the process rate in the same terms as found on the air operations permit.
I certify the above statement is true to the best of my knowledge and belief.
Certifier's Name (Printed): Roy Moore
Signature: Remarkable Management
Title: Project Manager Affiliation: AECOM/Earth Tech
Phone: 904-472-4720

PROCESS WEIGHT CERTIFICATION

COMPANY: City of Jacksonville
FACILITY: East Landfill DATE: 4-2-09
ADDRESS: 515 Girvin Rd Jacksonville, FL 32225
MAILING ADDRESS: 13245 Atlantic Blud Swite 4-311 Jacksonville, FL 3222S
SOURCE IDENTIFICATION(1): Ensine #3 (4Ekologs)
PERMITTED PROCESS RATE ⁽¹⁾ : <u>800 κω</u>
METHOD USED TO DETERMINE PROCESS WEIGHT: NA
TEST TEST TIME PROCESS RATE DURING TEST No. FROM TO
2 1035 to 1135 679 kW / 228 scfm
to
to
(1) Identify the source and report the process rate in the same terms as found on the air operations permit.
I certify the above statement is true to the best of my knowledge and belief.
Certifier's Name (Printed): Ron Moore
Signature:
Title: Project Manger Affiliation: AECOM/Earth Tech
Phone: 904-472-4720

VISIBLE EMISSIONS EVALUATOR

This is to certify that

GEORGE HAWKINS

met the specifications of Federal Reference Method 9 and qualifies as a visible emissions evaluator. Maximum deviation on white and black spece did not exceed 7.5% opacity and no single error exceeding 15% opacity was intering during the certification test conducted by Eastern Technical Associates of Faleigh, No. This certificate is valid for six months from date of sixtle 4.



MANAGER OF TRAINING SERVICES

EASTERN TECHNICAL ASSOCIATES

GEORGE HAWKINS

HAW627343 STUDENT ID NUMBER

met the specifications of Federal Reference Method 9 and qualifies as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single-error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, NC. This certificate is valid for six months from date of Issue and expires on the date below.

JACKSONVILLE, FL

11/19/2008

369962

SCHOOL LOCATION

DATE OF SCHOOL

CERT NUMBER

JAXS08

5/21/2009

LAST LECTURE

CERTIFICATION EXP DATE

BEARER

Customer Support Debbie or Sheila 919-878-3188

www.eta-is-opacity.com