# RECEIVED

NOV 23 2009

BUREAU OF AIR REGULATION

Mr. Syed Arif, P.E. FDEP New Source Review Section 2600 Blair Stone Road Tallahassee, FL 32399-2400

Re: Industrial Power Generating Company, LLC

Dade South Landfill

Response to FDEP October 21, 2009, Request for Additional Information

Dear Mr. Arif:

November 20, 2009 Project No. G080670A

This letter is in response to your October 21, 2009, request for additional information and the November 5, 2009, conference call concerning the Industrial Power Generating Company, LLC (INGENCO) Air Permit Application for a nominal 8 megawatt landfill gas (LFG) and Oil-fired Electrical Generating Station. INGENCO is proposing to construct the Generating Station at the Dade South Landfill located at 24000 Southwest 97<sup>th</sup> Avenue, Miami, Florida.

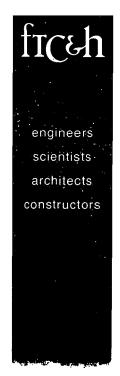
In addition to responding to your request for information, INGENCO would like to notify you that the proposed facility will be moved from the site originally proposed in the permit application. Attachment 1 provides the details regarding this change in location.

Below is INGENCO's response to your request for information:

1. The applicant provided Table 1 which was the stack test results of nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) emissions from the engines at its King and Queen Plant located in Virginia. Please explain if these and similar results from other facilities were used in developing the linear equation presented in Section 2.1.1 of the application. How does the linear equation in Section 2.1.1 apply for CO emissions? Is the same equation true for both NO<sub>x</sub> and CO emissions? Additionally, explain why the Dade South requested emissions in Table 1 for NO<sub>x</sub> and CO in Ib/mmBtu (million British Thermal Unit) given in the last column are less than the actual results for mixed fuel (GF + biodiesel) given under the stack test results column.

Applicant Response – Table 1 contained test results using biodiesel as the liquid fuel. These are the only test results INGENCO has for biodiesel. INGENCO would like the opportunity to use biodiesel if it is economically feasible for the facility. Biodiesel can be derived from a number of sources. Emissions from fuels using biodiesel will depend on the source and composition of the biodiesel and the characteristics of the LFG. LFG composition, especially methane (CH<sub>4</sub>) content and carbon dioxide (CO<sub>2</sub>) content, will have a minor affect on emissions. In general, the lower the LFG CH<sub>4</sub> content, the lower the NO<sub>x</sub> and the higher the CO. INGENCO is willing to accept and has provided permit language requiring emissions testing if biodiesel is used. Testing will allow development of an emissions relationship that will be based on site-specific factors derived from source testing. INGENCO will comply with annual ton per year limits for both NO<sub>x</sub> and CO, regardless of the fuel being used in the engines.

As discussed during our conference call, the relationship between  $NO_x$  and LFG is approximately linear during certain ranges of LFG. Those ranges are 0 to 30% LFG, 31% to 81% LFG, and greater than 81% LFG. Due to engine knock, INGENCO will not operate the engines for any significant length of time between 31% and 81% LFG except during transitions from lower to higher gas fractions.

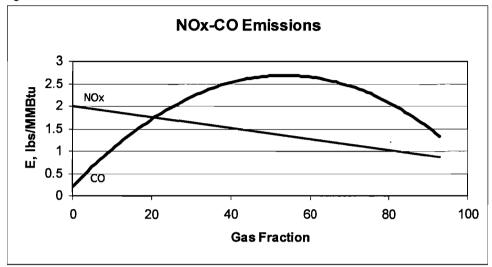


1515 Arboretum Dr., SE Grand Rapids, MI 49546 ph: 616.575.3824 fax: 616.575.8155 www.ftch.com Mr. Syed Arif, P.E. Page 2 November 20, 2009



The relationship between CO and LFG is parabolic in shape. CO emissions tend to be highest in the mid LFG range. As indicated above, INGENCO will not operate the engines for any significant length of time between 31% and 81% LFG. Figure 1 shows a generalized relationship curve for  $NO_x$  and CO emissions.

Figure 1 - Generalized Emissions Rates



2. The Department indicated that a 1-micron filter (primary and polishing) will be required for treatment of the LFG. The applicant indicated that a 10-micron filter is sufficient based on U.S. Environmental Protection Agency (USEPA) determinations. The Department's regulatory authority of requiring a 1-micron filter comes from the Prevention of Significant Deterioration rules...

**Applicant Response** – As discussed during the telephone conference, INGENCO will install a 1-micron filter.

- 3. The applicant indicated that siloxane removal system is technically infeasible for LFG to energy projects; therefore, a cost analysis is not required for a technically infeasible control technology. The Department in its research found at least four facilities that were permitted to install a siloxane removal system and of the four, two facilities were permitted to install selective catalytic reduction (SCR) for NO<sub>x</sub> control. The facilities are as follows:
  - a. Santee Cooper (Lee County LFG Electric Generation Facility; 412008)
  - b. University of New Hampshire LFG Project, NH (6/2007)
  - c. Ridgewood Power Facility, Johnston, RI (3/2009) SCR included
  - d. Tullytown Resource Recovery Facility. Tullytown, PA SCR included

Additionally, the Department reviewed the BioEnergy Washington (BEW), LLC application at the Cedar Hills Regional Landfill facility in Maple Valley, Washington. The applicant submitted cost effectiveness estimates for the installation of SCR for  $NO_x$  control and oxidation catalyst for CO control. The data reflected that the installation of SCR with ammonia control will amount to \$5,480 per ton of  $NO_x$  removed while oxidation catalyst will amount to \$4,979 per ton of CO removed.

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Based on the above discussion, it clearly reflects that a siloxane removal system is technically feasible for LFG to energy projects and that a cost analysis for the installation of SCR for  $NO_x$  control and an oxidation catalyst for CO control is warranted for the INGENCO project. Therefore, please submit the cost effectiveness estimate (in dollars per ton of pollutant removed) for the installation of siloxane removal system, SCR, and oxidation catalyst for  $NO_x$  and CO control. This requested information must be certified by a professional engineer registered in the State of Florida.

**Applicant Response** – As discussed during our telephone conference, INGENCO does not believe that siloxane removal systems are technically feasible for this type of application. The siloxane removal systems that are in place generally remove 95% to 99% of siloxanes in LFG, which is protective of the engines. In order to protect catalysts from siloxanes, a greater than 99% removal must be achieved. The following points indicate the difficulty of siloxane removal.

Siloxane removal is used in some landfill applications, particularly with turbine and Jennbacher engine generators. The purpose of siloxane removal in these cases is to protect the engines or turbines. Generally, this removal is done at about 95% of the siloxane removed. Techniques for meeting these standards have been either pressure swing or temperature swing removal systems, which work reasonably well for the intended purpose of protecting the engine.

Siloxanes in LFG are a misnomer, since the gas may contain other organosilicon compounds such as silanes.

95% to 99% silicon removal is not adequate for preventing catalysts from being poisoned. Catalyst vendors have indicated that the life expectancy of SCR and oxidative catalysts are about the same in regard to silicon poisoning. Catalysts begin degrading immediately in systems with siloxane removal adequate to protect the engine.

Catalyst life expectancy depends on the reduction required by the permit. However, in all cases, the facility will be using control devices that are failing by the hour.

Several projects were noted in the FDEP letter indicating siloxane removal systems were permitted: Those projects are discussed below:

BEW There is some difference between medium-Btu and high-Btu projects. The BEW project is a high-Btu LFG project which is designed to convert about 11,000 standard cubic feet per minute (scfm) of LFG (480 Btu/cubic feet [cf]) to about 4,000 scfm of pipeline quality (>980 Btu/cf) gas, as shown in the enclosed process flow schematic. LFG used by the engines is a waste gas from the last step of the process which includes sulfur removal, pressure swing absorption, carbon absorption, membrane separation, oxygen removal on a palladium oxide catalyst, and temperature swing absorption. These steps are integral to the process, and will remove or react with silicon compounds that may be in the gas. The cost per ton for NO<sub>x</sub> and CO removal in the BEW application considers only the cost of operation of the SCR and oxidative catalyst systems, and does not consider the approximately \$30,000,000 in processing equipment. The BEW Cedar Hills project cannot be directly compared with the proposed South Dade project. The BEW equipment that could be used for landfill gas purification would cost about \$23,000,000 if installed at the South Dade Landfill, and would not include the DeOxo catalyst and the molecular sieve units. However, it would include the membrane system, which, in addition to removing some traces of siloxanes, would also concentrate the methane and make it unsuitable for the engines INGENCO intends to use.

<u>Lee County Landfill (Santee Cooper)</u> Santee Cooper installed three GE Jenbacher gas engines. Jenbachers are extremely sensitive to siloxanes. The siloxane removal system put in place is to protect the engines.

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<u>University of New Hampshire</u> The project is listed as a \$49,000,000 project including 12 miles of pipeline. LFG is treated by PSA, activated carbon, and molecular sieves to produce a high-Btu gas. No SCR is required. \$15,000,000 of the project was to pipe the gas 12.5 miles. It was expected to start in fall 2009.

<u>Ridgewood Power Facility</u> Two permits were issued in 2009. One was for spark ignition engines, and does not include siloxane and SCR removal. The second was for turbines with siloxane and SCR removal. Neither project appears to have been started.

<u>Tullytown Resource Recovery Facility</u> It is not believed to have SCR and appears to be an old boiler firing a steam turbine. LFG is from Waste Management (WM), and operated by Exelon.

Okeechobee Landfill In addition, FDEP forwarded INGENCO a copy of the Best Available Control Technology (BACT) analysis for WM Okeechobee Landfill, Inc. The first several pages of the BACT analysis indicate that WM does not believe SCRs or catalytic oxidation is technically feasible due to siloxanes in the LFG. The letter further states (page 3), "Although the current status of siloxane removal systems is that these systems are unproven, and therefore, the SCR systems are not technically feasible for the OLI gas turbines, a cost analysis is presented for informational purposes. Page 5 of the Okeechobee Letter indicates, "the small amount of siloxane left in the gas stream will still eventually foul the SCR catalyst, requiring more frequent catalyst replacement."

With regard to SCR, the Okeechobee letter concludes (page 5), "Based on the extremely high capital and annual costs and cost effectiveness, controlling  $NO_x$  emissions using the SCR system, which also requires a siloxane removal system, is not an economically viable option. Indeed, if this cost were imposed, in addition to the high cost of the Low-CAT system already to be incurred, the proposed project would no longer be economically feasible. USEPA has recently concluded that siloxane removal systems for landfill gas are not proven and are unreliable. There are no other  $NO_x$  control technologies that are technically feasible. Good combustion practice is therefore selected as BACT for  $NO_x$  emissions."

For the oxidation catalysts cost analysis, the Okeechobee letter indicates an oxidation system has never been applied on an LFG combustion turbine (page 6). In addition the oxidation catalysts cost analysis concludes (page 7) "... that there are no examples of these technologies applied to LFG-fired CTs. These technologies are technically feasible only if siloxanes are completely removed from the gas stream, as even a trace amount of siloxanes in the gas stream would foul the catalyst beds in a short time. EPA has acknowledged that siloxane removal systems are currently unreliable."

INGENCO believes there are no demonstrated low or medium BTU siloxane removal projects that will reduce the siloxanes in the LFG enough to be protective of a catalyst. Requiring catalytic control even with siloxane pretreatment is equivalent to requiring control that will exponentially deteriorate over time. Tests conducted by INGENCO, with a siloxane removal system, have shown limited catalyst life depending on siloxane removal efficiency. At 99%-99.5% siloxane removal, the catalyst life at 85% pollutant removal efficiency is about 400 hours. If the treatment system experiences a breakthrough, the catalyst life is 3 to 6 hours. INGENCO is not aware of a proven in-line siloxane monitoring system. A typical catalyst should last upwards of 16,000 hours. For the purposes of this cost analysis, we will assume that a siloxane removal system is in place, and the catalysts will need replacing every 700 hours.

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#### **COST ANALYSIS**

Copies of the cost tables, which include all assumptions, are included in Attachment 2.

### Siloxane Removal

Siloxane removal costs were estimated using the Applied Filter Technologies, Engineering Report for the City of Manitowoc (Attachment 3). The Manitowoc cost estimate showed similar siloxane loading as the South Dade Landfill LFG (~14,500 part per billion by volume [ppbv] for Manitowoc Waste Water Treatment Plant, ~11,300 ppbv to ~21,000 ppbv South Dade LFG analytical report). The Manitowoc siloxane removal system was based on a flow rate 117 scfm. The design flow rate of LFG to INGENCO is 2,700 scfm. Based on a ratio of the Manitowoc flow rate to the LFG flow rate the Total Installed Cost of the siloxane removal system is on the order of \$10,960,000. This estimate is consistent with Resource Dynamics Corporation, Characterization of the Installed Costs of Prime Movers using Gaseous Opportunity Fuels (Prepared for the U.S. Department of Energy, September 2007), cost estimate for a siloxane removal systems of \$1,000 to \$1,100 per (KW) kilowatt (350/KW x 24 Engines x \$1,000/KW = \$8,400,000). The siloxane removal cost estimates presented are for systems requiring protection of the combustion equipment, not for systems requiring catalyst protection.

The annual siloxane removal media replacement was also estimated using the Engineering Report for the City of Manitowoc, and the ratio of LFG flow rate to Manitowoc's flow rate. The Total Annual Cost (TAC) of the siloxane removal system, assuming a capital recovery of 10 years at 7% interest, is approximately \$3.13 million dollars.

## SCR - NOx

The January 2002 USEPA Air Pollution Control Cost Manual (EAPCCM) was used to develop cost estimates for an SCR. The SCR technology is based on injecting nitrogen-based reducing agent in the exhaust-gas-stream of the engine upstream of the catalyst bed. The reducing agent reduces  $NO_x$  to nitrogen and water vapor. Urea and ammonia are used as reagents in an SCR system. For INGENCO's SCR cost analysis, urea was used as the reagent. The advantage of urea is that it is nontoxic; however, it is more expensive than ammonia.

The main factors influencing the cost of SCR are the engine size and removal efficiency required. INGENCO assumed a removal efficiency of 80%. The USEPA Direct Capital Cost Equation includes purchased equipment cost (PEC), instrumentation, sales tax, freight, and other direct installation costs, including auxiliary equipment. The PEC equations for an SCR in the EAPCCM are based on retrofitting boilers for an SCR; therefore, INGENCO used a base equipment cost of \$121/horsepower (HP) for the engines, which was obtained from the Alpha Gamma Technologies Inc., 2005 Memorandum to the USEPA.

The Total Capital Investment (TCI) for the SCR is the sum of the direct capital costs, indirect installation costs, project contingency, preproduction costs, and reagent inventory capital. The TCI of the SCR was calculated to be approximately \$1,917,000.

The TAC is the sum of the direct annual cost (maintenance, labor, utilities, waste disposal, reagent, additional cost required to evaporate the water, etc.), and indirect annual costs (overhead, administrative, taxes, insurance, and capital recovery). With the exception of the capital recovery, the indirect annual costs for the SCR were considered negligible. The catalyst replacement cost is based on 700 hours of catalyst life. This is a very conservative estimate, as INGENCO has seen catalyst fouling in as little as a week, even with a siloxane removal system in place. The TAC of the SCR was calculated to be approximately \$2,050,000.

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#### Oxidation Catalyst - CO

In catalytic oxidation, combustion exhaust gas passes through a catalyst bed (typically platinum is the primary catalytic material) where the oxidation of CO to CO<sub>2</sub> takes place. The main factors influencing the cost of oxidation catalyst are the engine size and removal efficiency required. INGENCO assumed a removal efficiency of 80%. INGENCO used a base equipment cost of \$15/HP for the engines, which was obtained from a September 3, 1998, Memorandum regarding Catalyst Control Cost Information from the Reciprocating Internal Combustion Engine Work Group. The TCI for the oxidation catalyst is the sum of the direct capital costs, indirect installation costs, project contingency, preproduction costs, etc. The TCI of the oxidation catalyst was calculated to be approximately \$237,650.

The TAC is the sum of the direct annual cost (maintenance, labor, utilities, waste disposal, catalyst replacement, etc.), and indirect annual costs (overhead, administrative, taxes, insurance, and capital recovery). With the exception of the capital recovery, the indirect annual costs for the oxidation catalyst were considered negligible. The catalyst replacement cost is based on 700 hours of catalyst life. This is a very conservative estimate, as INGENCO has seen catalyst fouling in as little as a week, even with a siloxane removal system in place. The TAC of the oxidation catalyst was calculated to be approximately \$958,550.

## **Cost per Ton of Pollutant Removed**

In order to estimate the cost per ton of pollutant removed, INGENCO assumed a removal efficiency of 80% for the SCR and oxidation catalyst. Since the siloxane removal system is required for both an SCR and oxidation catalyst, the annualize cost for the siloxane removal system was split equally between the two control technologies.

Based on the SCR TAC, one-half of the siloxane removal TAC, and an annual  $NO_x$  removal rate of 203 tpy, the cost of  $NO_x$  removal was calculated to be \$17,512 per ton of  $NO_x$  removed, which is above industry norms. Therefore, an SCR is not BACT for the engines

Based on the oxidation catalyst TAC, one-half of the siloxane removal TAC, and an annual CO removal rate of 265 tpy, the cost of CO removal was calculated to be \$9,315 per ton of CO removed, which is above industry norms. Because the oxidation catalyst will convert NO to NO<sub>2</sub> in sufficient quantity to create stack opacity problems, SCR could also be included in the cost analysis for oxidation catalyst. Therefore, an oxidation catalyst is not BACT for the engines.

It should be noted, that if either the SCR or oxidation catalyst is eliminated, then the cost per ton for the other control technology will increase.

4. Laboratory results of the LFG sampling for total sulfur compounds indicate that sample EFF-1700 was not included in the results. Please explain.

**Applicant Response** – HSA Engineers and Scientists were contracted to obtain three samples of the LFG from Dade South Landfill. The technician mistakenly took four samples of the LFG. When this was discovered, the laboratory was contacted and the fourth sample was cancelled before being tested.

The samples were taken immediately upstream from the flare and all manifolds were open. The samples represent a composite sample of the LFG from all cells at the landfill.

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5. The applicant indicated that the LFG treatment system for LFG routed to INGENCO will be the responsibility of INGENCO. Does this imply that the LFG routed to the flares will not go through the treatment system? If so, what are the reasons for not routing all the LFG through the treatment system?

Applicant Response – INGENCO will not treat LFG that does not go to the electrical generating plant. 40 CFR Part 60.752(b)(2)(iii) requires that the LFG be routed to (A) an open flare designed and operated in accordance with §60.18 except as noted in §60.754(e); (B) a control system designed and operated to reduce non-methane organic compound (NMOC) by 98 weight percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million (ppm) by volume, dry basis as hexane at three percent oxygen. The reduction efficiency or ppm by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d); or (C) route the collected gas to a treatment system that processes the collected gas for subsequent sale or use.

The treatment system is provided for use of the LFG in the engines. Untreated LFG can be routed to the flare without any additional treatment according to applicable regulations.

6. Please check the first page of the model input parameters for fine particulate matter less than 10-microns (PM<sub>10</sub>) increment National Ambient Air Quality Standards (NAAQS) emissions submitted with your response to the request for additional information. For example, the values for Florida Power & Light Cutler Power Plant Units 3 and 4, and Turkey Point Power Plant Units 1 and 2 emissions seem too low. According to the PM<sub>10</sub> modeling report sent in April 2009, giving emission rates for sources in the vicinity of the project, the Cutler Unit 3 and 4 rates are 11.84 and 20.41 grams per second, respectively. The Turkey Point Unit 1 and 2 rates are 48.51 grams per second each. Please correct and remodel PM<sub>10</sub> emissions, if necessary.

**Applicant Response** – The emission rates were changed in the modeling and the model was rerun. The combined impact from all sources remained below both the increment and NAAQS thresholds for  $PM_{10}$ . The model results are included as Attachment 4. The model input files are included on the enclosed CD.

7. Enclosed are comments submitted by the National Park Service. Please address their concerns.

Applicant Response – In order to mitigate visibility impacts in Biscayne National Park, INGENCO will be filtering the LFG before being combusted in the engines using a 1-micron filter instead of a 10-micron filter. INGENCO will also commit to using ultra low sulfur fuel with a maximum sulfur content of 15 ppm.

The signed/sealed Professional Engineer certification statement is included as Attachment 5.

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We trust that we have provided FDEP with sufficient detail to continue to review our Air Construction Permit Application. If you have any questions or require additional information, please contact me at 269-544-6955 or Imspurr@ftch.com.

Please contact us if you have additional questions or need further clarification.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Lynn M. Spurr

jjr

**Enclosures** 

cc/enc: Mr. Robert Greene - INGENCO

Lynn Spurr

Mr. Cleve Holladay - FDEP

Mr. Lee Casey - Miami-Dade Solid Waste Management

Mr. German Hernandez - Miami-Dade Solid Waste Management

Ms. Kathleen Forney - USEPA Region 4

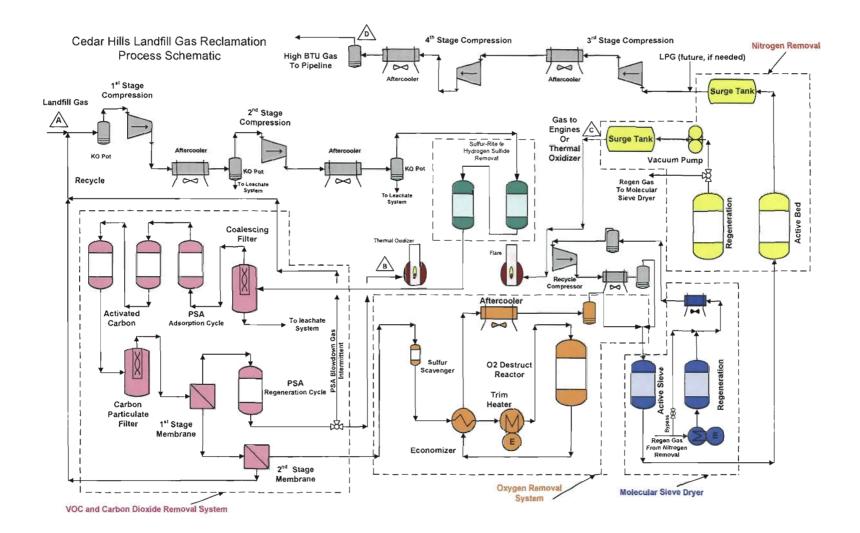
Mr. Lee Hoefert – FDEP-SED

Ms. Mallika Muthiah – DERM

Ms. Dee Morse - NPS

Ms. Vicki Gipson - FDEP-BAR

Mr. James A. Susan, P.E. - FTC&H



# **Attachment 1**

# ATTACHMENT 1 Industrial Power Generation Company, LLC (INGENCO) Dade South Landfill Revised Location for Generating Station

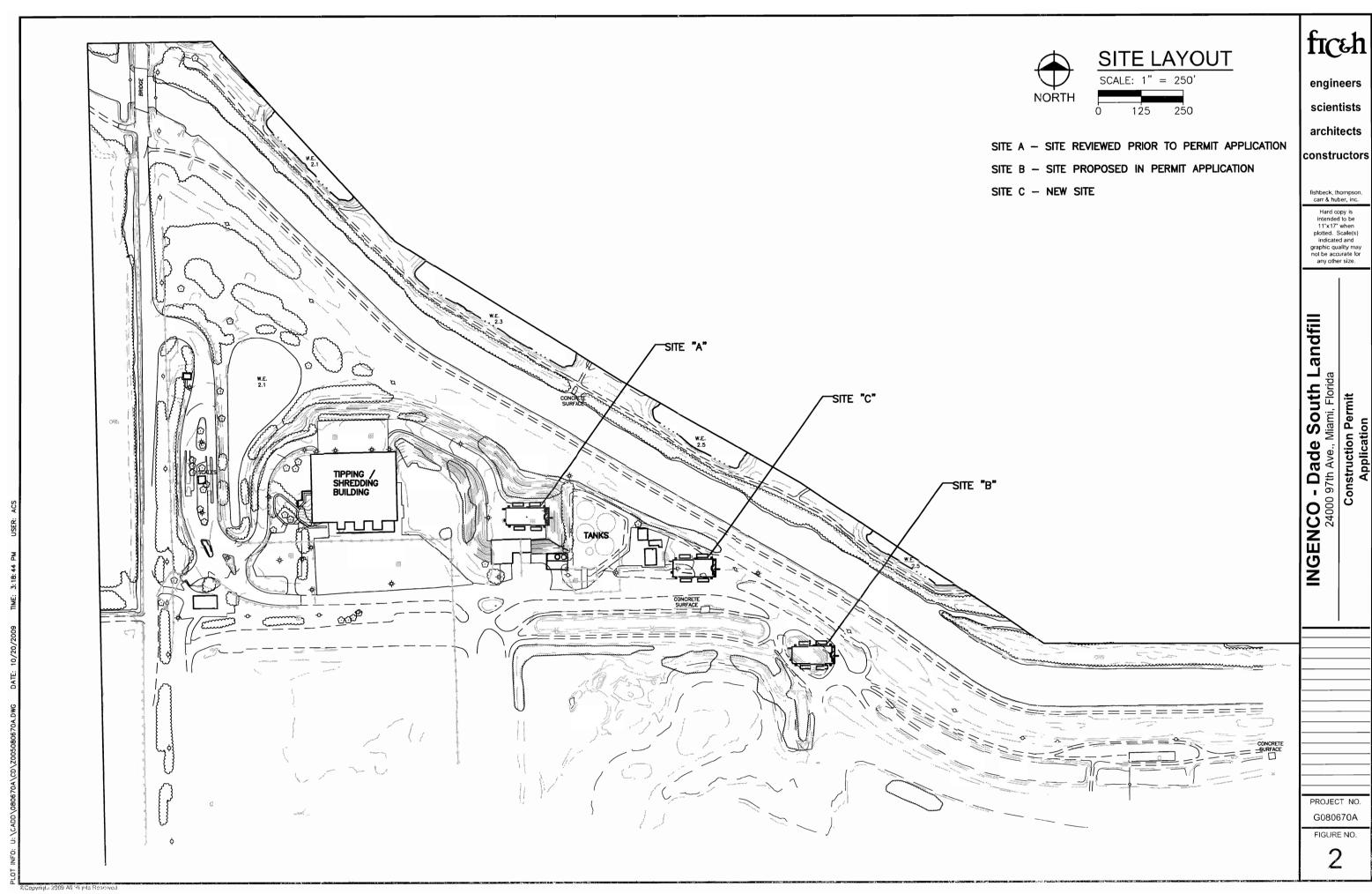
INGENCO has been investigating the Dade South Landfill to determine a location that is conducive for building their proposed nominal 8-megawatt Landfill Gas- and Oil-Fired Electrical Generating Station. While investigating the site (Site B), INGENCO discovered that the location shown on Figure 2 of the permit application does not fit the necessary criteria for the project.

Prior to permit submittal, INGENCO performed a New Source Review Analysis for another location at the landfill (Site A), and found that it too would not meet their needs. INGENCO is proposing a new location (Site C) that is between the original two locations. Attachment 1A is a Figure which shows all three locations.

Attachment 1B provides the Class II modeling results for Site A. As shown in Attachment 1B, the potential ambient impacts (PAIs) from this location are below all Class II thresholds. Attachment 1C provides the Class I modeling report for Site A. As shown in Attachment 1C, the PAIs from this location are below all Class I thresholds at the Everglades National Park and below Class II thresholds for Biscayne National Park.

Although Site C, specifically, has not been modeled, it could be concluded that since Site C is only 524 feet from Site A, and 435 feet from Site B, the PAIs would be below all required thresholds.

# **Attachment 1A**



# **Attachment 1B**

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 14:06:19 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2001 10PM 01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2001 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA01.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	(METERS)	BLDG EXISTS	URBAN SOURCE		EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.20790E+00	565866.2	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	ИО	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO.	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995 <b>E-</b> 01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	ИО	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO ,	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04	565921.2	2843168.9	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.9	3.0	8.53	394.26	0.00	0.30	NO	NO	ИО	
2503144	0	0.60633E-02	565921.2	2843168.9	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E~01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	ИО	
2503146	0	0.90179E-01	565921.2	2843168.9	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2	2843168.9	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	

2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0,21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0,74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	ИО	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)		Y METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2505202	0	0.12696E-01	565901.2 283	25259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505203	0	0.18958E-01	565901.2 282	25259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505206	0	0.28746E-02	565901.2 282	25259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505207 .	0	0.14440E-02	565901.2 282	25259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505208	0	0.20535E-02	565901.2 282	25259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505209	0	0.21056E-02	565901.2 282	25259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1 280	6740.3	0.8	12.50	410.93	22.86	1.37	NO	NO	ИО	
2506141	0	0.62244E+01			1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00			1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2 282		1.5	15.24	3.35	1172.04	4000.00	ИО	ИО	ИО	
25000310		0.22176E+01			1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01			1.5	39.93	367.59	17.98	5.79	ИО	ИÒ	NO	
25000312	0	0.22176E+01		<del>-</del>	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2 285		2.0	0.00	0.00	294.26	0.00	ИО	ИО	NO	
25002214	0	0.67658E+00			2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2 285		2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01			2.0	15.85	1.22	294.26	0.00	ИО	ИО	NO	
25052010	0	0.23410E-02	565901.2 282		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02			1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
25052013	0	0.20833E-02	565901.2 282	25259.5	1.5	6.40	0.70	663.71	0.00	NO	NO	NO	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 ,

2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

. \*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10 PM IN MICROGRAMS/M\*\*3

GROUP ID	)		AVERAGE CONC	REC	EPTOR (XR,	YR, ZELEV,	ZHILL, ZFLAG)	OF TYP	NETWORK E GRID-ID
	<b></b>								
ALL	1STHIGHEST			565324.68,				0.00) D	
	2NDHIGHEST	_		565274.69,				0.00) D	
	3RDHIGHEST			565273.47,		, 1.53,	•	0.00) D	
	4THHIGHEST	VALUE IS	•	565325.90,		, 1.50,	•	0.00) D	-
	5THHIGHEST	VALUE IS	2.88457 AT (	565275.92,		, 1.50,		0.00) D	
	6THHIGHEST	VALUE IS	2.73049 AT (	565323.46,	2825050.16	, 1.60,	1.60,	0.00) D	
	7THHIGHEST	VALUE IS	2.66813 AT (	565374.66,	2825002.82	, 1.50,	1.50,	0.00) D	С
A	8THHIGHEST	VALUE IS	2.62613 AT (	565157.00,	2825002.00	, 1.60,	1.60,	0.00) D	C -
	9THHIGHEST	VALUE IS	2.51262 AT (	565157.00,	2825102.00	, 1.60,	1.60,	0.00) D	С
	10THHIGHEST	VALUE IS	2.46491 AT (	565375.88,	2824954.22	, 1.50,	1.50,	0.00) D	С
INGENCO	1STHIGHEST	VALUE IS	0.97155 AT (	565464.87,	2825394.12	, 1.50,	1.50,	0.00) D	С
	2NDHIGHEST	VALUE IS	0.95285 AT (	565463.64,	2825442.72	, 1.50,	1.50,	0.00) D	С
	3RDHIGHEST	VALUE IS	0.93640 AT (	565466.09,	2825345.52	, 1.50,	1.50,	0.00) D	C
	4THHIGHEST	VALUE IS	0.89905 AT (	565467.31,	2825296.92	, 1.50,	1.50,	0.00) D	С
	5THHIGHEST	VALUE IS	0.88100 AT (	565468.53,	2825248.32	, 1.50,	1.50,	0.00) D	C
	6THHIGHEST	VALUE IS	0.86327 AT (	565462.42,	2825491.32	1.58,	1.58,	0.00) D	C
	7THHIGHEST	VALUE IS	0.83872 AT (	565414.88,	2825392.86	5, 1.50,	1.50,	0.00) D	C
	8THHIGHEST	VALUE IS	0.83754 AT (	565732.52,	2825550.17	1.73,	1.73,	0.00) D	C
	9THHIGHEST	VALUE IS	0.83307 AT (	565469.75,	2825199.72	1.50,	1.50,	0.00) D	C
	10THHIGHEST	VALUE IS	0.82828 AT (	565416.10,	2825344.26	1.50,	1.50,	0.00)	C

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

# \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	)			AVE	RAGE CONC	 DATE (YYMMDDHH)		RECE	PTOR (XR, YR,	ZELEV, ZHII	L, ZFLAG)	OF T		NETWORK GRID-ID
ALL	HIGH HIGH	1ST HIGH				01030224: 01071324:		564107.00, 564657.00,	2823052.00, 2823402.00,	1.40, 1.40,	1.40, 1.40,	0.00)		
INGENCO	HIGH HIGH	1ST HIGH 2ND HIGH			10.41606 9.38208	01091424: 01072224:	•	565942.79, 565942.79,	2825419.27, 2825419.27,	1.59, 1.59,	1.59, 1.59,	0.00)	DC DC	
*** REC	CEPTOR	G	GC = GR GP = GR GC = DI GP = DI	IDPOLR SCCART										

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 15:13:17 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2002 10PM 01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2002 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA02.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	Х	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE		EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0,20790E+00	565866.2	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	565854.1	2825292.0	. 11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	.NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	ИО	ИО	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	ИО	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00		0.00	NO	ΝО	ИО	
2503141	0	0.89984E-04	565921.2	2843168.8	3.0	8.53	394.26		0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	ИО	NO	ИО	
2503144	0	0.60633E-02	565921.2		3.0	8.53	298.15	0.00	0.30	NO	ИО	ИО	
2503145	0	0.47700E-01	565921.2		3.0	0.00	0.00		0.00	NO	ИО	ИО	
2503146	0	0.90179E-01	565921.2		3.0	8.53	394.26		0.37	NO	NO	ИО	
2503148	0	0.50848E-02	565921.2		3.0	21.03	0.91	294.26	0.00	NO	ИО	NO	
2503481	0	0.83160E+00		2857458.2		76.20	422.04		2.57	NO	NO	NO	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	ИО	
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	ИО	ИО	ИО	

2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	ИО
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT	E X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2505202	0	0.12696E-01	565901.2		1.5	12.19	0.46	688.71	2758.00	NO	NO	ИО	
2505203	0	0.18958E-01	565901.2		1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505206	0	0.28746E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	ИО	ИО	NO	
2505207	0	0.14440E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	ИО	NO	NO	
2505208	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	ИО	NO	NO	
2505209	, 0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1	2806740.3	0.8	12.50	410.93	22.86	1.37	ИО	NO	NO	
2506141	0	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2	2825259.5	1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	ИО	NO	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 ,

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2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,
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\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

NETWORK GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID 3.31803 AT ( 565324.68, 2825001.56, ALL 1STHIGHEST VALUE IS 1.50, 1.50, 0.00) DC 2NDHIGHEST VALUE IS 3.24135 AT ( 565274.69, 2825000.31, 1.50, 1.50, 0.00) DC 3RDHIGHEST VALUE IS 2.99234 AT ( 565273.47, 2825048.90, 1.53, 1.53, 0.00) DC 4THHIGHEST VALUE IS 2.84378 AT ( 565325.90, 2824952.96, 1.50, 1.50, 0.00) DC 2.78016 AT ( 565323.46, 2825050.16, 5THHIGHEST VALUE IS 1.60, 1.60. 0.00) DC 2.75498 AT ( 565275.92, 2824951.71, 6THHIGHEST VALUE IS 1.50, 1.50, 0.00) DC 7THHIGHEST VALUE IS 2.74979 AT ( 565374.66, 2825002.82, 1.50. 1.50. 0.00) DC Α 8THHIGHEST VALUE IS 2.57998 AT ( 565157.00, 2825002.00, 1.60, 1.60, 0.00) DC 9THHIGHEST VALUE IS 2.50832 AT ( 565157.00, 2825102.00, 1.60, 1.60, 0.00) DC 10THHIGHEST VALUE IS 2.46995 AT ( 565272.25, 2825097.50, 1.50, 1.50, 0.00) DC INGENCO 1STHIGHEST VALUE IS 1.10799 AT ( 565464.87, 2825394.12, 1.50, 1.50, 0.00) DC 1.09767 AT ( 565463.64, 2825442.72, 2NDHIGHEST VALUE IS 1.50, 1.50, 0.00) DC 3RDHIGHEST VALUE IS 1.04165 AT ( 565732.52, 2825550.17, 1.73, 1.73, 0.00) DC 4THHIGHEST VALUE IS 1.00978 AT ( 565466.09, 2825345.52, 1.50, 1.50, 0.00) DC 5THHIGHEST VALUE IS 1.00740 AT ( 565462.42, 2825491.32, 1.58, 1.58, 0.00) DC 6THHIGHEST VALUE IS 0.96766 AT ( 565773.79, 2825524.77, 0.00) DC 1.50, 1.50, 7THHIGHEST VALUE IS 0.94854 AT ( 565414.88, 2825392.86, 1.50, 1.50, 0.00) DC 8THHIGHEST VALUE IS 0.94812 AT ( 565413.66, 2825441.46, 1.51, 1.51, 0.00) DC 9THHIGHEST VALUE IS 0.90361 AT ( 565699.50, 2825586.36, 1.50, 1.50, 0.00) DC 10THHIGHEST VALUE IS 0.89090 AT ( 565412.44, 2825490.06, 1.60. 1.60, 0.00) DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

# \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

## \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID	- <b>-</b>		-,	AVE	RAGE CONC		DATE (YYMMDDHH)		RECE!	PTOR (XR, YR,	, ZELEV, <b>ZH</b> II	LL, ZFLAG)	OF 7	YPE	NETWORK GRID-ID
ALL	HIGH	1ST HIGH	VALUE I	s	20.34365c	ON	02080224:	АТ (	566607.00,	2823052.00,	0.70,	0.70,	0.00)	DC	
	HIGH	2ND HIGH	VALUE I	S	15.43829c	ON	02071824:	TA (	564557.00,	2823402.00,	1.40,	1.40,	0.00)	DC	
	HIGH HIGH	1ST HIGH 2ND HIGH		_	,			,	565942.79, 565773.79,	2825419.27, 2825524.77,	1.59, 1.50,	1.59, 1.50,	0.00)		
*** RECE	PTOR	G D	C = GRID P = GRID C = DISC P = DISC	POLR	٠.										

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 16:19:57 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111\_2003\_10PM\_01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2003 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA03.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

SOURCE		EMISSION RATE (GRAMS/SEC)		V	BASE ELEV.	STACK HEIGHT	STACK	STACK	STACK DIAMETER	BLDG	URBAN	-	EMIS RATE SCALAR
ID										FVISIS	SOURCE		VARY BY
40FEET1				2825309.2		12.19	741.48		0.41	YES	NO	ИО	
40FEET2	-	0.20790E+00		2825309.2		12.19	741.48		0.41	YES	NO	NO	
40FEET3		0.20790E+00		2825292.0		12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	565866.2	2825292.0		12.19	741.48	45.84	0.41	YES	NO	ИО	
2500013	0	0.11844E+02	569741.2	2834789.1		45.72	413.71	15.45	4.27	ИО	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02		2813050.1		121.92	408.15	23.47	5.52	ИО	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1 2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	ИО	ИО	ИО	
2503141	0	0.89984E-04	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	ио .	NO	NO	
2503144	0	0.60633E-02	565921.2	2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2	2843168.8	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	ИО	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	

2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	Ó	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	-2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

		NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
	ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
-														
	2505202	0	0.12696E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
	2505203	0	0.18958E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
	2505206	0	0.28746E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
	2505207	. 0	0.14440E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	. NO	NO	
	2505208	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
	2505209	0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
	2505871	0	0.41580E+00	563501.1	2806740:3	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
	2506141	0	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
	2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
	2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	ИО	NO	NO	
	25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
	25000311	٥	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
	25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
	25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
	25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
	25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
	25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	ИО	NO	NO	
	25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
	25052011	0	0.25890E-02	565901.2	2825259.5	1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
	25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	NO	NO	

#### \*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 ,

2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

									NETWORK
GROUP ID	)		AVERAGE CONC	REC	EPTOR (XR,	YR, ZELEV,	ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1STHIGHEST V	ALUE IS	2.88699 AT (	565324.68,	2825001.56	, 1.50,	1.50,	0.00) DC	;
	2NDHIGHEST V	ALUE IS		565274.69,	2825000.31			0.00) DC	;
	3RDHIGHEST V	ALUE IS	2.61322 AT (	565273.47,	2825048.90	, 1.53,	1.53,	0.00) DO	;
	4THHIGHEST V	ALUE IS	2.55690 AT (	565374.66,	2825002.82	, 1.50,	1.50,	0.00) DO	;
	5THHIGHEST V	ALUE IS	2.49205 AT (	565323.46,	2825050.16	, 1.60,	1.60,	0.00) DO	:
	6THHIGHEST V	ALUE IS	2.39754 AT (	565325.90,	2824952.96	, 1.50,	1.50,	0.00) DO	;
	7THHIGHEST V	ALUE IS	2.33122 AT (	565275.92,	2824951.71	, 1.50,	1.50,	0.00) DO	:
A	8THHIGHEST V	ALUE IS	2.17416 AT (	565157.00,	2825002.00	, 1.60,	1.60,	0.00) DO	:
	9THHIGHEST V	ALUE IS	2.16396 AT (	565272.25,	2825097.50	, 1.50,	1.50,	0.00) DO	;
•~-	10THHIGHEST V	ALUE IS	2.10937 AT (	565157.00,	2825102.00	, 1.60,	1.60,	0.00) DO	:
INGENCO	1STHIGHEST V	ALUE IS	0.99833 AT (	565732.52,	2825550.17	, 1.73,	1.73,	0.00) DO	:
	2NDHIGHEST V	ALUE IS	0.94383 AT (	565773.79,	2825524.77	, 1.50,	1.50,	0.00) DO	:
	3RDHIGHEST V	ALUE IS	0.89373 AT (	565463.64,	2825442.72	, 1.50,	1.50,	0.00) DO	;
	4THHIGHEST V	ALUE IS	0.86434 AT (	565699.50,	2825586.36	, 1.50,	1.50,	0.00) DO	;
	5THHIGHEST V	ALUE IS	0.85805 AT (	565462.42,	2825491.32	, 1.58,	1.58,	0.00) DO	;
	6THHIGHEST V	ALUE IS	0.84128 AT (	565464.87,	2825394.12	, 1.50,	1.50,	0.00) DO	
	7THHIGHEST V	ALUE IS	0.78346 AT (	565816.04,	2825498.39	, 1.50,	1.50,	0.00) DO	
	8THHIGHEST V	ALUE IS	0.77431 AT (	565461.20,	2825539.91	, 1.50,	1.50,	0.00) DO	
	9THHIGHEST V	ALUE IS	0.75433 AT (	565413.66,	2825441.46	, 1.51,	1.51,	0.00) DO	
	10THHIGHEST V	ALUE IS	0.74751 AT (	565412.44,	2825490.06	, 1.60,	1.60,	0.00) DO	

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

18:20

## \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	· 	AVERAGE CONC	DATE (YYMMDDHH)	RECEF	TOR (XR, YR,	ZELEV, ZHIL	L, ZFLÄG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE HIGH 2ND HIGH VALUE		N 03061924: AT ( N 03012224: AT (	564607.00, 563857.00,	2823052.00, 2823052.00,	1.40, 1.50,	1.40, 1.50,	0.00) DC 0.00) DC	
INGENCO.	HIGH 1ST HIGH VALUE HIGH 2ND HIGH VALUE		N 03052924: AT ( N 03032124: AT (	565985.04, 565942.79,	2825392.89, 2825419.27,	1.50, 1.59,	1.50, 1.59,	0.00) DC 0.00) DC	
*** REC	CEPTOR TYPES: GC = GRI GP = GRI DC = DIS DP = DIS	DPOLR CCART							

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 17:27:05 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111\_2004\_10PM\_01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2004 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA04.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)		STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO.	
40FEET2	0	0.20790E+00	565866.2	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	ИО	
2500223	0	0.62592E-01	567301.2		2.0	15.24	0.76		20400.00	ИО	NO	ИО	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2500225	٠0	0.35442E-01	567301.2		2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2500227	0	0.17667E+01	567301-2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2		2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	ИО	NO	NO	
2503144	0	0.60633E-02	565921.2	2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2	2843168.8	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	ИО	•
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	ИО	МО	ИО	

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2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	046620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0.	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
2505202	0	0.12696E-01	565901 2	2825259:5'	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505202	0	0.18958E-01		2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
	-												
2505206	0	0.28746E-02		2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	ИО	
2505207	. 0.	0.14440E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	ИО	
2505208	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	ИО	
2505209	. 0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1	2806740.3	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2506141	0	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	- 0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	Ö	0.25890E-02		2825259.5	1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
25052011	0	0.20833E-02	565901.2		1.5	6.40	0.70	663.71	0.00	NO	NO	NO	
23032013	U	0.200556 02	303301.2	2023233.3	1.5	0.40	3.70	003.71	0.00	140	140	110	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 ,

2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, ...

INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	)		AVERAGE CO	1C		REC	EPTOR	(XR,	YR,	ZELEV,	ZHILL,	ZFLAG	) OF	TYPE	NETWORK GRID-ID
ALL	1STHIGHEST	VALUE IS	3.04	748 AT	(	565325.90,	28249	52.96	,	1.50,	1.5	50,	0.00	) DC	
	2NDHIGHEST	VALUE IS	2.98	TA 886	{	565275.92,	28249	51.71	,	1.50,	1.5	50,	0.00	) DC	
	3RDHIGHEST	VALUE IS	2.94	381 AT	(	565274.69,	28250	00.31	,	1.50,	1.5	50,	0.00	) DC	
	4THHIGHEST	VALUE IS	2.92	146 AT	(	565324.68,	28250	01.56	,	1.50,	1.5	50, ^	0.00	) DC	
	5THHIGHEST	VALUE IS		928 AT						1.50,		50,	0.00	) DC	
	6THHIGHEST			105 AT			28250			1.53,		53,	0.00		
A	7THHIGHEST			987 AT	-	· · · · · · ·			•	1.60,		50,	0.00		
	8THHIGHEST			376 AT	•	·			•	1.50,		50,	0.00		
	9THHIGHEST			386 AT		,						50,	0.00		
	10THHIGHEST	VALUE IS	2.32	007 AT	(	565323.46,	28250	50.16	,	1.60,	1.0	50,	0.00	) DC	
INGENCO	1STHIGHEST	VALUE IS	1.16	503 AT	(	565466.09,	28253	45.52	,	1.50,	1.5	50,	0.00	) DC	
	2NDHIGHEST	VALUE IS	1.13	593 AT	(	565467.31,	28252	96.92	,	1.50,	1.5	50,	0.00	) DC	
	3RDHIGHEST	VALUE IS	1.11	002 AT	(	565464.87,	28253	94.12	,	1.50,	1.5	50,	.0.00	) DC	
	4THHIGHEST	VALUE IS	1.05	657 AT	(	565468.53,	28252	48.32	,	1.50,		50,	0.00	) DC	
	5THHIGHEST	VALUE IS	1.03	395 AT	(	565416.10,	28253	44.26	,	1.50,	1.5	50,	0.00	) DC	
	6THHIGHEST			560 AT	-	565417.32,			•			50,	0.00		
	7THHIGHEST			526 AT	-	565414.88,			•			50,	0.00		
	8THHIGHEST			436 AT	•	565463.64,						50,	0.00		
	9THHIGHEST			896 AT		565418.54,			•			50,	0.00	-	
	10THHIGHEST	VALUE IS	0.93	212 AT	(	565366.12,	28253	43.01	,	1.50,	1.	50,	0.00	) DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

## \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	)		AVERAGE CONC	DATE (YYMMDDHH)	RECEF	PTOR (XR, YR,	ZELEV, ZHIL	L, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH HIGH	1ST HIGH VALUE I		ON 04052824: AT (	565607.00, 565378.33,	2823052.00, 2824857.02,	1.37,	1.37, 1.50,	0.00) DC	
INGENCO	HIGH HIGH	1ST HIGH VALUE I 2ND HIGH VALUE I		ON 04092624: AT (	565900.54, 565900.54,	2825445.64, 2825445.64,	1.50,	1.50, 1.50,	0.00) DC 0.00) DC	
*** REC	EPTOR	TYPES: GC = GRID GP = GRID DC = DISC DP = DISC	POLR CART							

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 18:27:06 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2005 10PM 01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags 2009 1111 2005 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Mode1\Met Data\MIAMIAO5.SFC

Number of sources - 60 Number of source groups - 2 Number of receptors - 2042

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	×	Y (METERS)		STACK HEIGHT (METERS)		(M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.20790E+00	565866.2	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	ИО	NO	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	. 2.0	0.00	0.00	294.26	0.00	ИО	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	ИО	NO	
2503144	0	0.60633E-02	565921.2	2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2	2843168.8	3.0	21.03	0.91	294.26	0.00	NO	ŃО	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO	

2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO
		,									

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE	NUMBER PART.	EMISSION RAT (GRAMS/SEC)	E X	. У	BASE ELEV.	STACK HEIGHT	STACK TEMP.	STACK EXIT VEL.	STACK DIAMETER	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
				~									
2505202	0	0.12696E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505203	0	0.18958E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505206	0	0.28746E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	· NO	NO	NO	
2505207	0	0.14440E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505208	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505209	0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1	2806740.3	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2506141	0 .	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	ИО	ИО	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2	2825259.5	1.5	6.40	0.82	294.26	0.00	NO	ИО	NO	
25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	NO	ИО	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1, 40FEET2, 40FEET3, 40FEET4, 2500013, 2500014, 2500031, 2500032, 2500035, 2500036, 2500037, 2500039, 2500051, 2500221, 2500223, 2500224, 2500225, 2500227, 2500228, 2500229, 2503141, 2503143, 2503144, 2503145,

2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310 , 25000311 , 25000312 , 25002210 , 25002214 , 25002215 , 25002219 , 25052010 , 25052011 , 25052013 , 25062011 , 25052013 , 25062011 , 25062012 , 25062012 , 25062012 , 25062013 , 25062013 , 25062013 , 25062013 , 25062014 , 25062014 , 25062015 , 25062015 , 25062015 , 25062014 , 25062015 , 2506

#### \*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID		. <b></b>	AVERAGE CONC		REC	EPTOR	(XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	ÖF	TYPE 	NETWORK GRID-II
ALL	1STHIGHEST	VALUE IS	2.54911	AT (	565325.90,	282495	2.96,	,	1.50,	1.5	0,	0.00)	DC	
	2NDHIGHEST	VALUE IS	2.54584	AT (	565275.92,	282495	1.71	,	1.50,	1.5	0,	0.00)	DC	
	3RDHIGHEST	VALUE IS	2.52045	AT (	565274.69,	282500	0.31	,	1.50,	1.5	0,	0.00)	DC	
	4THHIGHEST	VALUE IS	2.48259	) TA	565324.68,	282500	1.56	,	1.50,	1.5	0,	0.00)	DC	
A	5THHIGHEST	VALUE IS	2.19278	) TA	565157.00,	282500	2.00	,	1.60,	1.6	0,	0.00)	DC	
	6THHIGHEST	VALUE IS	2.15442	AT (	565273.47,	282504	18.90	,	1.53,	1.5	3,	0.00)	DC	
	7THHIGHEST	VALUE IS	2.09880	AT (	565375.88,	282495	4.22	,	1.50,	1.5	0,	0.00)	DC	
	8THHIGHEST	VALUE IS	2.06752	AT (	565374.66,	282500	2.82	,	1.50,	1.5	0,	0.00)	DC	
	9THHIGHEST	VALUE IS	2.04367	AT (	565323.46,	282505	0.16	,	1.60,	1.6	0,	0.00)	DC	
	10THHIGHEST	VALUE IS	2.01218	AT (	565277.14,	282490	3.11	,	1.50,	1.5	0,	0.00)	DC	
NGENCO	1STHIGHEST	VALUE IS	0.87733	AT (	565464.87,	282539	4.12	,	1.50,	1.5	0,	0.00)	DC	
	2NDHIGHEST	VALUE IS	0.84545	) TA	565466.09,	282534	5.52	,	1.50,	1.5	0,	0.00)	DC	
	3RDHIGHEST	VALUE IS	0.84231	AT (	565463.64,	282544	2.72	,	1.50,	1.5	0,	0.00)	DC	
	4THHIGHEST	VALUE IS	0.78781	AT (	565467.31,	282529	6.92	,	1.50,	1.5	0,	0.00)	DC	
	5THHIGHEST	VALUE IS	0.77353	AT (	565462.42,	282549	1.32	,	1.58,	1.5	8,	0.00)	DC	
	6THHIGHEST	VALUE IS	0.75771	AT (	565414.88,	282539	2.86	,	1.50,	1.5	0,	0.00)	DC	
	7THHIGHEST	VALUE IS	0.74255	AT (	565416.10,	282534	14.26	,	1.50,	1.5	0,	0:00)	DC	
	8THHIGHEST	VALUE IS	0.73289	AT (	565413.66,	282544	11.46	,	1.51,	1.5	1,	0.00)	DC	
	9THHIGHEST	VALUE IS	0.73190	AT (	565468.53,	282524	18.32	,	1.50,	1.5	0,	0.00)	DC	
	10THHIGHEST	VALUE IS	0.70476	AT (	565732.52,	282555	0.17	,			3,	0.00)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

# . \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

# . \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID	,				AVEF	RAGE (	CONC		DATE (YYMMDDHH)		RECEI	PTOR (XR, YR	, ZELEV, ZHIL	L, ZFLAG)	OF T	TYPE	NETWORK GRID-ID
														<del></del> -			<del></del>
ALL	HIGH	1ST HIC	H VALU	E IS		27.	55011c	ON	05031424:	AT (	564107.00,	2823052.00,	1.40,	1.40,	0.00)	DC	
	HIGH	2ND HIC	H VALU	E IS		22.	59620c	ON	05121624:	AT (	564057.00,	2823302.00,	1.50,	1.50,	0.00)	DC	
INGENCO	HIGH	1ST HIG	H VALU	E. IS		12.	15305c	ON	05031124:	AT (	565985.04,	2825392.89,	1.50,	1.50,	0.00)	DC	
	HIGH	2ND HIG	H VALU	E IS		9.5	50615c	ON	05022824:	AT (	565942.79,	2825419.27,	1.59,	1.59,	0.00)	DC	
*** REC	EPTOR	TYPES:	GC = G	RIDC	ART												
			GP = G	RIDP	OLR												
			DC = D	TSCC	ART												

DC = DISCCART
DP = DISCPOLR

\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 04/28/09 at 16:24:46 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Mode1\Class II Final Submittal\CO increment and naags 2009 03
31 2001 CO 01.DTA

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2001 CO 01.LST

Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA01.SFC

Number of sources - 197
Number of source groups - 198
Number of receptors - 3417

	NUMBER	EMISSION RATE	Ε		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY -
40FEET1	0	0.47375E+01	565854.1	2825309.2	1.5	12.19	741.48	45.84	0.41	YES	МО	NO	
40FEET2	0	0.47375E+01	565866.2	2825309.2	1.6	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.47375E+01	565854.1	2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.47375E+01	565866.2	2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO	
1100023	0	0.37000E-02	581161.0	2877767.0	3.0	16.76	333.15	14.94	0.46	NO	NO	NO	
1100024	0	0.23000E-01	581161.0	2877767.0	3.0	9.14	294.26	0.34	0.61	NO	ИО	NO	
1120952	0	0.36000E+00	567801.0	2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO	
1121411	0	0.72600E-01	584202.0	2881037.0	1.5	4.88	366.48	15.24	0.61	NO	NO	NO	
1121492	0	0.50400E-02	578561.0	2878547.0	2.3	6.10	366.48	9.14	0.52	NO	ИО	NO	
1123701	0	0.10500E+01	557561.0	2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO	
1123702	0	0.28800E-01	557561.0	2879977.0	1.7	9.14	1088.71	1.55	2.13	NO	NO	NO	
1123703	0	0.21200E+01	557561.0	2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO.	
1123704	0	0.21200E+01	557561.0	2879977.0	1.7	6.71	1033.15	20.91	0.15	NO	NO	NO	
1123991	0	0.13500E-01	564751.0	2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO	
1123992	0	0.11500E-01	564751.0	2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO	
1124101	0	0.10700E+01	555101.0	2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.72000E+00	555101.0	2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	NO	
1127045	0	0.11900E-01	571911.0	2873927.0	1.5	7.32	294.26	0.00	6.10	NO	NO	NO	
2500013	0	0.47400E+01	569741.0	2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.80700E+01	569741.0	2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NO	ИО	
2500031	0	0.58200E+01	566591.0	2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.52400E+01	566591.0	2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	ИО	
2500035	0	0.56300E-01	566591.0	2813050.0	1.5	6.10	663.71	44.41	0.56	ИО	NO	NO	
2500036	0	0.69400E-02	566591.0	2813050.0	1.5	3.96	814.26	53.10	0.20	ИО	NO	ИО	
2500037	0	0.65400E+01	566591.0	2813050.0	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.86000E+01	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	

2500051	0	0.13700E+01	568801.0 2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO
2500133	0	0.20200E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	ИО	ИО
2500138	0	0.18400E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.17900E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
2500148	0	0.11800E+02	557491.0 2851888.0	1.2	41.76	399.82	7.62	4.57	NO	NO	NO
2500204	0	0.43600E+02	562271.0 2861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO
2500221	0	0.24500E+00	567301.0 2859638.0	2.0	9.14	338.71	21.03	0.70	NO	ИО	NO
2500223	0	0.46400E+01	567301.0 2859638.0	2.0	15.24	522.04	43.77	0.76	NO	NO	NO
2500224	0	0.62000E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2500227	0	0.63400E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2501572	0	0.14600E-02	578601.0 2852438.0	2.2	50.90	344.26	1.52	1.49	NO	ΝΟ	NO
2501573	0	0.25700E+00	578601.0 2852438.0	2.2	13.72	294.26	0.00	0.61	NO	NO	NO
2501574	0	0.53200E-01	578601.0 2852438.0	2.2	10.67	294.26	0.00	1.22	NO	NO	NO.
2501575	0	0.73800E-02	578601.0 2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO.

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)			ELEV.	HEIGHT	TEMP.	EXIT VEL.		EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
			•										
2501576	0	0.85900E-02				7.62	294.26	0.00	0.30	NO	NO.	NO	
2501578	0	0.21000E-02		2852438.0		4.57	294.26	0.00	0.30	NO	ИО	NO	
2502052	0	0.19900E-01				6.10	294.26	0.00	0.76	NO	NO	NO	
2502328	0	0.69400E-01				17.07	502.04	7.83	0.61	NO	NO	NO	
2502329	0	0.66500E-01		2852578.0		17.07	502.04	, 7.83	0.61	NO	ИО	NO	
2502451	0	0.16700E-01	586002.0	2854738.0		0.00	298.15	0.00	0.00	NO	NO	NO	
2502452	0	0.27600E-02		2854738.0		0.00	460.93	0.00	0.00	NO	NO	NO	
2502501	.0	0.63300E+00		2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.92700E+00	557001.0	2869138.0		7.62	294.26	0.00	0.76	NO	NO	NO	
2502578	0	0.50300E+00	550171.0	2842239.0		0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.12200E+01	570701.0	2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
2502816	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO.	NO	
2502819	0	0.16600E-01	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2503141	0	0.57900E+00	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	ИО	
2503144	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.70500E+00	565921.0	2843169.0.	3.0	0.00	298.15	0.00	. 0.00	NO	NO	NO	
2503146	0	0.17800E+01	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.37	NO.	NO	NO	
2503371	0	0.15500E+00	578071.0	2846709.0	1.1	12.19	349.82	10.36	0.61	NO	NO	NO	
2503372	0	0.25100E-01	578071.0	2846709.0	1.1	15.24	294.26	0.00	0.30	NO	NO	NO	
2503481	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	ИО	NO	NO	
2503482 ·	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.77100E+01	563831.0	2857458.0		76.20	422.04	41.21	2.57	NO.	NO	NO	
2503484	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503612	0	0.11500E-02	567611.0	2857908.0	1.6	4.57	699.82	4.27	0.61	NO	NO	NO	

2503783	0	0.14400E-06	562001.0 2863738.0	1.5	7.92	422.04	18.90	0.61	NO	NO	NO
2503902	0	0.13200E-05	570501.0 2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO
2503903	0	0.39600E-03	570501.0 2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO 🔍
2503931	0	0.34400E+00	570611.0 2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.15800E+01	570611.0 2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.22700E+00	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.25900E-01	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504074	0	0.85900E-02	577501.0 2867318.0	2.0	9.14	294.26	0.00	1.22	NO	NO	NO
2504223	0	0.14400E-02	572201.0 2854038.0	2.4	7.62	294.26	0.00	0.61	NO	NO	NO
2504604	0	0.88100E-05	570401.0 2854138.0	2.2	6.10	294.26	0.00	0.91	NO	NO	NO
2504701	0	0.38000E+01	579561.0 2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2504763	0	0.23000E-02	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	.NO
2504764	0	0.84900E-01	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2504766	0	0.54700E-02	584292.0		0.1	10.67	741.48	25.91	0.37	NO	NO	NO	
2504767	0	0.65600E+00	584292.0		0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
2504769	0	0.58600E+00	584292.0		0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
2504793	0	0.10900E-02	573321.0		1.5	10.67	549.82	14.02	0.76	ИО	NO	ИО	
2504795	0	0.14700E-01	573321.0		1.5	10.67	549.82	14.02	0.76	NO	NO	ИО	
2504796	0	0.27300E-01	573321.0		1.5	10.67	549.82	12.19	0.76	NO	NO	NO	
2504798	0	0.19000E-01	573321.0		1.5	13.72	294.26	0.00	0.91	ИО	NO	ИО	
2504882	0	0.40300E-02	567401.0		1.5	1.52	294.26		0.30	ИО	NO	NO	
2504883	0	0.69900E-02	567401.0		1.5	3.66	294.26		0.30	NO	ИО	NO	
2504884	0	0.66500E-02	567401.0		1.5	0.00	294.26		0.00	NO	NO	ИО	
2504885	0	0.10500E-02	567401.0	-	1.5	10.67	294.26		0.91	NO	NO	NO	
2505051	0	0.94600E-01	582301.0		2.2	6.10	1033.15	7.01	0.46	NO	NO	NO	
2505105	0	0.27800E-01	573621.0	2863078.0	1.6	7.62	294.26	0.00	0.30	NO	ИО	ИО	
2505201	0	0.59800E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
2505202	0	0.50100E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
2505203	0	0.74900E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
2505206	0	0.42500E-Q1	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	ИО	ИО	NO	
2505207	0	0.21400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	ИО	NO	
2505208	0	0.30400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505209	0	0.31100E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505292	0	0.20400E+00	558601.0	2868738.0	1.5	6.71	435.93	24.69	1.10	NO	NO	NO	
2505534	0	0.46900E-01	559901.0	2819940.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2505871	0	0.14400E+01	563501.0	2806740.0	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2505937	0	0.97900E-02	570321.0	2864728.0	1.5	7.62	294.26	0.00	0.30	NO	NO	NO	
2505938	0	0.48700E-01	570321.0	28,64728.0	1.5	6.10	294.26	0.00	0.30	NO	NO	NO	
2506002	0	0.64500E-02	584452.0	2866808.0	3.2	6.40	663.71	23.81	0.76	. NO	NO	NO	
2506003	0	0.11700E+01	584452.0	2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506004	0	0.74400E-02	584452.0	2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO	

1. A St. 1887

2506005	0	0.72100E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506007	0	0.36700E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506008	0	0.85000E-02	584452.0 2866808.0	3.2	7.01	703.71	29.93	0.71	NO	NO	NO
2506031	0	0.17700E+01	570671.0 2871978.0	10.3	0.00	294.26	0.00	0.00	NO	NO	NO
2506032	0	0.14100E+01	570671.0 2871978.0	10.3	9.14	810.37	10.85	2.10	NO	NO	NO
2506111	0	0.46600E+00	570411.0 2852428.0	2.7	11.28	294.26	0.00	1,22	NO	NO	NO
2506113	0	0.14400E-02	570411.0 2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	NO
2506151	0	0.70200E+01	565041.0 2859858.0	1.5	15.24	294.26	0.00	0.15	NO	NO	NO
2506155	0	0.34500E+01	565041.0 2859858.0	1.5	16.76	294.26	0.00	3.96	NO	NO	NO
2506161	0	0.20000E-01	561501.0 2834979.0	3.3	9.75	294.26	0.00	0.61	NO	NO	NO
2506231	0	0.79900E+01	565511.0 2824950.0	1.5	13.72	1172.04	0.08	3.05	NO	NO	NO
2506232	0	0.96200E+01	565511.0 2824950.0	1.5	15.24	1172.04	0.07	3.35	NO	NO	NO

# 

	NUMBER	EMISSION RAT	E.		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.							(M/SEC)	(METERS)				VARY BY
					',								
2506241	0	0.40100E+00		2868158.0		9.14	409.26		1.40	NO	NO	ИО	
2506302	0	0.83200E-02		2849489.0		5.49	727.59	4.02	0.52	NO	NO	NO	
2506361	0 -	0.26300E-02	<del>-</del>	2810400.0		7.62	449.82		0.36	NO	NO	NO	
2506405	0	0.36300E-01		2860448.0		10.67	294.26		0.61	NO	NO	NO	
2506409	0	0.35400E-02	564561.0	2860448.0		0.00	294.26	0.00	0.00	NO	NO	NO	
2506481	0	0.25200E-02		2852648.0		13.41	810.93	4.27	0.46	NO	NO	NO	
2506641	0	0.20200E-01	579171.0	2868708.0		9.75	293.15	0.88	0.82	NO	NO	NO	
2506642	0	0.17600E-01	579171.0	2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO	
2506643	0	0.16700E-01	579171.0	2868708.0		9.75	294.26	0.00	0.61	NO	NO	NO	
2506644	0	0.32300E-02	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	. NO	NO	
2506647	0	0.16700E-01	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO	
2506651	0	0.73100E+00	575101.0	2854838.0	1.5	7.62	294.26	0.00	0.61	NO	NO	NO	
2506652	0	0.26600E-02	575101.0	2854838.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2506821	0	0.72500E-01	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506822	0	0.13800E-02	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506825	0	0.14500E-02	569481.0	2864498.0	1.5	15.24	294.26	0.00	0.91	NO	NO	NO	
2506826	0	0.80900E-01	569481.0	2864498.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO	
2509451	0	0.24500E-02	558651.0	2852178.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2509465	0	0.29800E-01	567081.0	2858888.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2509622	0	0.54400E-02	569471.0	2865548.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511043	0	0.72700E-02	573641.0	2863228.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511461	0	0.57600E-07	5724710	2852418.0	2.5	9.14	294.26	0.00	0.91	NO	NO	NO	
25.11861	0	0.14400E-02	5.69201.0	2852958.0	1.6	12.19	294.26	0.00	5.33	NO	NO	NO	
2511912	0	0.48900E-03	566901.0	2853838.0	1.5	7.62	294.26	0.00	0.91	NO	NO	NO	
2511941	0	0.28800E-04	564451.0	2861488.0	1.5	13.72	294.26	0.00	0.61	NO	NO	NO	
2511962	0	0.51800E-02	566641.0	2859468.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2512851	0	0.21000E-02	574361.0	2858278.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO	
2512861	0	0.36500E-01	562471.0	2852938.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO	
11101413	0	0.86400E-02	585302.0	2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO	

11101414	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101415	0	0.30500E-02	585302.0 2878437.0	3.0	12.50	519.26	10.67	0.55	NO	NO	ИО
11101416	0	0.11200E-01	585302.0 2878437.0	3.0	5.79	723.15	4.66	0.61	NO	NO	NO
11101417	0	0.98100E-02	585302.0 2878437.0	3.0	5.79	294.26	0.00	0.61	NO	NO	NO
11101419	0	0.33500E-01	585302.0 2878437.0	3.0	5.79	723.15	8.84	0.61	NO	NO	NO
25000310	0	0.85800E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000311	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000312	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	ИО	ИО	ИО
25001310	0	0.32000E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001311	0	0.36000E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO
25001312	0	0.24500E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NÓ	NO	NO

_	SOURCE ID	NUMBER PART. CATS.	EMISSION RAT	X	Y (METERS)			(DEG.K)	STACK EXIT VEL. (M/SEC)	(METERS)	BLDG EXISTS	URBAN SOURCE		EMIS RATE SCALAR VARY BY
	25001313	0	0.16100E+00	552751 0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
	25001313	0	0.14400E+00				15.24	755.37		0.52	NO	NO	NO	
	25001314	0	0.14700E+00				15.24	755.37		0.52	NO	NO	NO	
	25001316	0	0.25300E+00				15.24	755.37		0.52	NO	NO	NO	
	25001317	0	0.20400E+00				15.24	755.37		0.52	NO	NO	NO	
	25001318	0	0.14100E+01		2817360.0		16.46	752.59		1.27	NO	NO	NO	
	25001319	0	0.13400E+01		2817360.0		16.46	752.59		1.27	NO	NO	NO	
	25001320	0	0.12400E+01		2817360.0		14.63	755.37		0.70	NO	NO	NO	
	25001321	0	0.13700E+01	552751.0	2817360.0	2.1	14.63	7.55.37	75.93	0.70	NO	NO	NO	
	25001414	0	0.80800E-02	557491.0	2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO	
	25001418	0	0.57400E+02	557491.0	2851888.0	1.2	109.42	513.15	49.04	2.44	NO	NO	NO	
	25002028	0	0.72600E+02	562271.0	2861538.0	1.5	45.72	294.26	0.00	0.91	NO	NO	NO	
	25002219	0	0.53100E-01	567301.0	2859638.0		15.85	294.26	0.00	1.22	NO	NO	NO	
	25023211	0	0.93600E-04	578031.0	2852578.0		9.14	394.26	9.08	0.46	NO	NO	NO	
	25023212	0	0.84900E-01	578031.0	2852578.0	2.2	18.29	810.37	52.24	0.30	NO	NO	NO	
	25028110	0	0.20700E-01	570701.0	2856598.0		8.84	608.15	45.08	0.53	NO	NO	NO	
	25028111	0	0.29400E-01	570701.0	2856598.0		8.84	608.15		0.53	NO	NO	NO	
	25028112	0	0.20800E+01				8.84	608.15		0.53	NO	NO	NO	
	25031418	0	0.54200E+00				9.75	650.93		0.30	NO	NO	NO	
	25031419	0	0.54200E+00				9.75	650.93		0.30	NO	NO	NO	
	25031420	0	0.87000E+00				9.75	652.59		0.46	NO	NO	NO	
	25031421	0	0.56100E-04		2843169.0		12.19	294.26		0.08	NO	NO	NO	
	25031424	0	0.55100E+00		2843169.0		6.40	608.15		0.53	NO	NO	NO	
	25031425	0	0.55100E+00		2843169.0		6.40	608.15		0.53	NO	NO	NO	
	25047610	0	0.38800E+00		2847609.0		11.58	741.48		0.46	NO	ИО	NO	
	25047611	0	0.36100E+00		2847609.0		11.58	741.48		0.46	NO	NO	NO	
	25047613	0	0.94000E-01		2847609.0		4.57	663.71		0.76	NO	NO	NO	
	25047614	0	0.66600E-01				4.57	663.71		0.76	NO	NO	NO	
	25047615	0	0.25600E-01				4.57	663.71		0.76	NO	NO	NO	
	25047619	0	0.98200E-02	584292.0	2847609.0	0.1	7.01	608.15	26.09	0.70	ИО	NO	NO	

in the state of the state of

25047620	0	0.48300E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO .	NO	NO
25052010	0	0.34600E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
25052013	0	0.30800E-01	565901.0 2825260.0	1.5	6.40	663.71	28.13	0.70	NO	NO	NO
77700104	0	0.37800E+00	560461.0 2854738.0	1.5	9.14	294.26	0.00	1.07	NO	NO	NO
77702503	0	0.20300E+00	562801.0 2865838.0	1.2	0.00	294.26	0.00	0.00	NO.	NO	NO
77752121	0	0.46800E+00	557311.0 2880437.0	1.5	8.23	408.15	.28.59	0.99	NO	NO	NO
77752211	0	0.48400E+00	558081.0 2868748.0	1.5	9.14	294.26	0.00	0.91	NO.	NO	NO

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL	40FEET1 , 40FEET2 ,	40FEET3 , 40FEET4 ,	1100023 , 11	100024 , 112095	2 , 1121411 ,	1121492 ,	1123701 ,	1123702 ,	1123703 ,
	1123704 , 1123991 ,	1123992 , 1124101 ,	1124102 , 11	127045 , 250001	3 , 2500014 ,	2500031 ,	2500032 ,	2500035 ,	2500036 ,
	2500037 , 2500039 ,	2500051, 2500133	2500138 , 25	500139 , 250014	8 , 2500204 ,	2500221 ,	2500223 ,	2500224 ,	2500227 ,
	2501572 , 2501573 ,	2501574 , 2501575 ,	2501576 , 25	501578 , 250205	2 , 2502328 ,	2502329 ,	2502451 ,	2502452 ,	2502501 ,
. •	2502521 , 2502578.,	2502811 , 2502816 ,	2502817 , 25	502818 , 250281	9 , 2503141 ,	2503143 ,	2503144 ,	2503145 ,	2503146 ,
	2503371 , 2503372 ,	2503481 , 2503482 ,	2503483 , 25	503484 , 250361	2 , 2503783 ,	2503902 ,	2503903 ,	2503931 ,	2503933 ,
	2503937 , 2503938 ,	2504074 , 2504223 ,	2504604 , 25	504701 , 250476	3 , 2504764 ,	2504766 ,	2504767 ,	2504769 ,	2504793 ,
	2504795 , 2504796 ,	2504798 ., 2504882 ,	2504883 , 25	504884 , 250488	5 , 2505051 ,	2505105 ,	2505201 ,	2505202 ,	2505203 ,
	2505206 , 2505207 ,	2505208 , 2505209 ,	2505292 , 25	505534 , 250587	1 , 2505937 ,	2505938 ,	2506002 ,	2506003 ,	2506004 ,
	2506005 , 2506007 ,	2506008 , 2506031 ,	2506032 , 25	506111 , 250611	3 , 2506151 ,	2506155 ,	2506161 ,	2506231 ,	2506232 ,
	2506241 , 2506302 ,	2506361 , 2506405 ,	2506409 , 25	506481 , 250664	1 , 2506642 ,	2506643 ,	2506644 ,	2506647 ,	2506651 ,
	2506652 , 2506821 ,	2506822 , 2506825 ,	2506826 , 25	509451 , 250946	5 , 2509622 ,	2511043 ,	2511461 ,	2511861 ,	2511912 ,
	2511941 , 2511962 ,	2512851 , 2512861 ,	11101413, 11	1101414, 111014	15, 11101416,	11101417,	11101419,	25000310,	25000311,
	25000312, 25001310,	25001311, 25001312,	25001313, 25	5001314, 250013	15, 25001316,	25001317,	25001318,	25001319,	25001320,
	25001321, 25001414,	25001418, 25002028,	25002219, 25	5023211, 250232	12, 25028110,	25028111,	25028112,	25031418,	25031419,
	25031420, 25031421,	25031424, 25031425,	25047610, 25	5047611, 250476	13, 25047614,	25047615,	25047619,	25047620,	25052010,
	25052013, 77700104,	77702503, 77752121,	77752211,						

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN MICROGRAMS/M\*\*3

	AVERAGE CONC			ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-II
ALL HIGH 1ST HIGH VALUE HIGH 2ND HIGH VALUE	IS 6853.59912 ON IS 6497.36523 ON	01110502: AT ( 565- 01042619: AT ( 565-	77.06, 2824908.25, 177.06, 2824908.25,	1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC
		THE SUMMARY OF HIGH	ST 8-HR RESULTS ***		
	** CONC OF	CO IN MICROGRAM	IS/M**3	**	
GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR,	ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-II
ALL HIGH 1ST HIGH VALUE HIGH 2ND HIGH VALUE	IS 4360.04932 ON 4247.89307 ON	01021924: AT ( 565	125.88, 2824955.50, 125.88, 2824955.50,	1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC
*** AERMOD - VERSION 07026 **  *** INGENCO - South Dade Land  *** Model Executed on 04/29/0  Input File - U:\Projects\080  31_2002 CO 0	fill Location 9 at 01:59:23 *** 670A\Dade South Permi	t Files\Model\Class	*** I Final Submittal\CO	increment and naaqs 200	9 03
Output File - U:\Projects\080 31_2002_CO_0 Met File - d:\Documents an	1.LST			increment and naaqs 200	9 03
Number of sources - Number of source groups -	197 198 3417				
		*** POINT SOURCE DATA	•••		
NUMBER EMISSION SOURCE PART. (GRAMS/S		BASE STACK ELEV. HEIGHT		CK BLDG URBAN CAP ETER EXISTS SOURCE HOR	

Royal Garage

40FEET1	0	0.47375E+01	565854.1 2825309.2	1.5	12.19	741.48	45.84	0.41	YES	NO	NO
40FEET2	0.	0.47375E+01	565866.2 2825309.2	. 1.6	12,19	741.48	45.84	0.41	YES	NO	NO
40FEET3	0	0.47375E+01	565854.1 2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO
40FEET4	0	0.47375E+01	565866.2 2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO
1100023	0	0.37000E-02	581161.0 2877767.0	3.0	16.76	333.15	14.94	0.46	NO	NO	NO
1100024	0	0.23000E-01	581161.0 2877767.0	3.0	9.14	294.26	0.34	0.61	NO	NO	NO
1120952	0	0.36000E+00	567801.0 2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO
1121411	0	0.72600E-01	584202.0 2881037.0	1.5	4.88	366.48	15.24	0.61	NO	NO	NO
1121492	0	0.50400E-02	578561.0 2878547.0	2.3	6.10	366.48	9.14	0.52	NO	NO	NO
1123701	0	0.10500E+01	557561.0 2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO
1123702	0	0.28800E-01	557561.0 2879977.0	1.7	9.14	1088.71	1.55	2.13	NO	NO	NO
1123703	0	0.21200E+01	557561.0 2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	ИО	NO
1123704	0	0.21200E+01	557561.0 2879977.0	1.7	6.71	1033.15	20.91	0.15	NO	NO	NO
1123991	0	0.13500E-01	564751.0 2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO
1123992	0	0.11500E-01	564751.0 2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO
1124101	0	0.10700E+01	555101.0 2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO
1124102	0	0.72000E+00	555101.0 2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	NO
1127045	0	0.11900E-01	571911.0 2873927.0	1.5	7.32	294.26	0.00	6.10	NO	NO	NO
25,00013	0	0.47400E+01	569741.0 2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO
2500014	0	0.80700E+01	569741.0 2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NO	NO
2500031	0	0.58200E+01	566591.0 2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO
2500032	0	0.52400E+01	566591.0 2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO
2500035	0	0.56300E-01	566591.0 2813050.0	1.5	6.10	663.71	44.41	0.56	NO	NO	NO
2500036	0	0.69400E-02	566591.0 2813050.0	1.5	3.96	814.26	53.10	0.20	NO	NO	NO
2500037	0	0.65400E+01	566591.0 2813050.0	1.5	2.44	683.15	66.51	0.10	NO	NO	NO
2500039	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
2500051	0	0.13700E+01	568801.0 2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO
2500133	0	0.20200E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.18400E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.17900E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
250.0148	0	0.11800E+02	557491.0 2851888.0	1.2	41.76	399.82	7.62	4.57	NO	NO	NO
2500204	0	0.43600E+02	562271.0 2861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO
2500221	0	0.24500E+00	567301.0 2859638.0	2.0	9.14	338.71	21.03	0.70	NO	NO	NO
2500223	0	0.46400E+01	567301.0 2859638.0	2.0	15.24	522.04	43.77	0.76	NO	NO	NO
2500224	0	0.62000E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2500227	0	0.63400E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2501572	0	0.14600E-02	578601.0 2852438.0	2.2	50.90	344.26	1.52	1.49	NO	NO	NO
2501573	0	0.25700E+00	578601.0 2852438.0	2.2	13.72	294.26	0.00	0.61	NO	NO	NO
2501574	0	0.53200E-01	578601.0 2852438.0	2.2	10.67	294.26	0.00	1.22	NO	NO	NO
2501575	0	0.73800E-02	578601.0 2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO

	NUMBER	EMISSION RATE	3		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE	
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR	
ID								(M/SEC)						
											<b>-</b>			-
2501576	0	0.85900E-02	578601.0 2	2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO		

2501578	0	0.21000E-02	578601.0 2852438.0	2.2	4.57	294.26	0.00	0.30	NO	NO	·NO
2502052	0	0.19900E~01	578101.0 2859938.0	1.6	6.10	294.26	0.00	0.76	NO	NO	NO
2502328	0	0.69400E-01	578031.0 2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO
2502329	0 .	0.66500E-01	578031.0 2852578.0	2.2	17.07	502.04	7.83	0.61	ИО	NO	NO
2502451	0	0.16700E-01	586002.0 2854738.0	2.3	0.00	298.15	0.00	0.00	NO	NO	NO
2502452	0	0.27600E-02	586002.0 2854738.0	2.3	0.00	460.93	0.00	0.00	NO	NO	NO
2502501	0	0.63300E+00	562901.0 2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO
2502521	0	0.92700E+00	557001.0 2869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO
2502578	0	0.50300E+00	550171.0 2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO
2502811	0	0.12200E+01	570701.0 2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO
2502816	0	0.70600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	· NO	NO	NO
2502817	0	0.70600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO
2502818	0	0.70600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO
2502819	0	0.16600E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO
2503141	0	0.57900E+00	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503143	0	0.68900E+00	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.68900E+00	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	ИО	NO	NO
2503145	0	0.70500E+00	565921.0 2843169.0	3.0	0.00	298.15	0.00	0.00	NO	NO	NO
2503146	0	0.17800E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503371	0	0.15500E+00	578071.0 2846709.0	1.1	12.19	349.82	10.36	0.61	NO	NO	NO
2503372	0	0.25100E-01	578071.0 2846709.0	1.1	.15.24	294.26	0.00	0.30	NO	NO	NO
2503481	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503484	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503612	0	0.11500E-02	567611.0 2857908.0	1.6	4.57	699.82	4.27	0.61	NO	NO	NO
2503783	0	0.14400E-06	562001.0 2863738.0	1.5	7.92	422.04	18.90	0.61	NO	NO	NO
2503902	0	0.13200E-05	570501.0 2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO
2503903	0	0.39600E-03	570501.0 2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO
2503931	0	0.34400E+00	570611.0 2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.15800E+01	570611.0 2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.22700E+00	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.25900E-01	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504074	0	0.85900E-02	577501.0 2867318.0	2.0	9.14	294.26	0.00	1.22	NO	NO	NO
2504223	0	0.14400E-02	572201.0 2854038.0	2.4	7.62	294.26	0.00	0.61	NO	NO	NO
2504604	0	0.88100E-05	570401.0 2854138.0	2.2	6.10	294.26	0.00	0.91	NO	NO	ИО
2504701	0	0.38000E+01	579561.0 2850618.0	2.0	39.62	388.71	16.46	2.74	ИО	NO	NO
2504763	0	0.23000E-02	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO
2504764	0	0.84900E-01	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	ИО	NO
	-									-	-

# . . . \*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RATE	Ξ		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	Х	Υ.	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
											•		
2504766	0	0.54700E-02	584292.0	2847609.0	0.1	10.67	741.48	25.91	0.37	ИО	NO	NO	
2504767	0	0.65600E+00	584292.0	2847609.0	0.1	11.58	741.48	29.26	0.46	ИО	NO	ИО	

2504769	0	0.58600E+00	584292.0 2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO
2504793	0	0.10900E-02	573321.0 2862978.0	1.5	10.67	549.82	14.02	0.76	NO	NO	NO
2504795	0	0.14700E-01	573321.0 2862978.0	1.5	10.67	549.82	14.02	0.76	NO	ИО	NO
2504796	0	0.27300E-01	573321.0 2862978.0	1.5	10.67	549.82	12.19	0.76	NO	ИО	ИО
2504798	0	0.19000E-01	573321.0 2862978.0	1.5	13.72	294.26	0.00	0.91	NO	NO	NO
2504882	0	0.40300E-02	567401.0 2859238.0	1.5	1.52	294.26	0.00	0.30	NO	NO	NO
2504883	0	0.69900E-02	567401.0 2859238.0	1.5	3.66	294.26	0.00	0.30	NO	NO	NO
2504884	0	0.66500E-02	567401.0 2859238.0	1.5	0.00	294.26	0.00	0.00	NO	ИО	NO
2504885	0	0.10500E-02	567401.0 2859238.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO
2505051	0	0.94600E-01	582301.0 2868438.0	2.2	6.10	1033.15	7.01	0.46	NO	NO	NO
2505105	0	0.27800E-01	573621.0 2863078.0	1.6	7.62	294.26	0.00	0.30	NO	NO	NO
2505201	0	0.59800E+00	565901.0 2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO
2505202	0	0.50100E+00	565901.0 2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO
2505203	0	0.74900E+00	565901.0 2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO
2505206	0	0.42500E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	ИО	NO
2505207	0	0.21400E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
2505208	0	0.30400E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
2505209	0	0.31100E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NÖ
2505292	0	0.20400E+00	558601.0 2868738.0	1.5	6.71	435.93	24.69	1.10	NO	NO	NO
2505534	0	0.46900E-01	559901.0 2819940.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO
2505871	0	0.14400E+01	563501.0 2806740.0	0.8	12.50	410.93	22.86	1.37	NO	NO	NO
2505937	0	0.97900E-02	570321.0 2864728.0	1.5	7.62	294.26	0.00	0.30	NO	NO	NO
2505938	0	0.48700E-01	570321.0 2864728.0	1.5	6.10	294.26	0.00	0.30	NO	NO	NO
2506002	0	0.64500E-02	584452.0 2866808.0	3.2	6.40	663.71	23.81	0.76	NO	NO	NO
2506003	0	0.11700E+01	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	ИО
2506004	0	0.744.00E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506005	0	0.72100E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	ИО
2506007	0	0.36700E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	ИО	ИО
2506008	0	0.85000E-02	584452.0 2866808.0	3.2	7.01	703.71	29.93	0.71	NO	NO	NO
2506031	0	0.17700E+01	570671.0 2871978.0	10.3	0.00	294.26	0.00	0.00	ИО	NO	NO
2506032	0	0.14100E+01	570671.0 2871978.0	10.3	9.14	810.37	10.85	2.10	ИО	NO	NO
2506111	0	0.46600E+00	570411.0 2852428.0	2.7	11.28	294.26	0.00	1.22	ИО	NO	NO
2506113	0	0.14400E-02	570411.0 2852428.0		0.00	294.26	0.00	0.00	NO	NO	NO
2506151	0	0.70200E+01	565041.0 2859858.0	1.5	15.24	294.26	0.00	0.15	ИО	NO	ИО
2506155	0	0.34500E+01	565041.0 2859858.0	1.5	16.76	294.26	0.00	3.96	ИО	NO	ИО
2506161	0	0.20000E-01	561501.0 2834979.0	3.3	9.75	294.26	0.00	0.61	NO	NO	NO
2506231	0	0.79900E+01	565511.0 2824950.0	1.5	13.72	1172.04	0.08	3.05	ИО	NO	ИО
2506232	0	0.96200E+01	565511.0 2824950.0	1.5	15.24	1172.04	0.07	3.35	NO	NO	NO

SOURCE	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV, (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2506241 2506302		0.40100E+00 0.83200E-02				9.14 5.49	409.26 727.59		1.40 0.52	NO NO	NO NO	NO NO	
2506361	0	0.26300E-02	550501.Ó	2810400.0	1.5	7.62	449.82	9.11	0.36	NO	NO	NO	

2506405	0	0.36300E-01	564561.0 2860448.0	0.8	10.67	294.26	0.00	0.61	ИО	NO	NO
2506409	0	0.35400E-02	564561.0 2860448.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO
2506481	0	0.25200E-02	578441.0 2852648.0	2.2	13.41	810.93	4.27	0.46	NO	NO	NO
2506641	0	0.20200E-01	579171.0 2868708.0	3.2	9.75	293.15	0.88	0.82	NO	NO	NO
2506642	0	0.17600E-01	579171.0 2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO
2506643	0	0.16700E-01	579171.0 2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO
2506644	0	0.32300E-02	579171.0 2868708.0	3.2	10.67	294.26	0.00	0.61	NO	ИО	NO
2506647	0	0.16700E-01	579171.0 2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO
2506651	0	0.73100E+00	575101.0 2854838.0	1.5	7.62	294.26	0.00	0.61	NO	NO	NO
2506652	0	0.26600E-02	575101.0 2854838.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2506821	0	0.72500E-01	569481.0 2864498.0	1.5	0.00	294.26	0.00	0.00	NO	ИО	NO
2506822	0	0.13800E-02	569481.0 2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO
2506825	0	0.14500E-02	569481.0 2864498.0	1.5	15.24	294.26	0.00	0.91	NO	NO	NO
2506826	0	0.80900E-01	569481.0 2864498.0	1.5	10.67	294.26	0.00	0.91 '	NO	NO	NO
2509451	0	0.24500E-02	558651.0 2852178.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2509465	0	0.29800E-01	567081.0 2858888.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO
2509622	0	0.54400E-02	569471.0 2865548.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511043	0	0.72700E-02	573641.0 2863228.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511461	0	0.57600E-07	572471.0 2852418.0	2.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511861	0	0.14400E-02	569201.0 2852958.0	1.6	12.19	294.26	0.00	5.33	NO	NO	NO
2511912	0	0.48900E-03	566901.0 2853838.0	1.5	7.62	294.26	0.00	0.91	NO	NO	NO
2511941	0	0.28800E-04	564451.0 2861488.0	1.5	13.72	294.26	0.00	0.61	NO	NO	NO
2511962	0	0.51800E-02	566641.0 2859468.0	0.8	- 0.00	294.26	0.00	0.00	NO	NO	NO
2512851	0	0.21000E-02	574361.0 2858278.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO
2512861	0	0.36500E-01	562471.0 2852938.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO
11101413	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101414	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101415	0	0.30500E-02	585302.0 2878437.0	3.0	12.50	519.26	10.67	0.55	NO	NO	NO
11101416	0	0.11200E-01	585302.0 2878437.0	3.0	5.79	723.15	4.66	0.61	NO	NO	NO
11101417	0	0.98100E-02	585302.0 2878437.0	3.0	5.79	294.26	0.00	0.61	NO	NO	NO
11101419	0	0.33500E-01	585302.0 2878437.0	3.0	5.79	723.15	8.84	0.61	NO	NO	NO
25000310	0	0.85800E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000311	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000312	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25001310	0	0.32000E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001311	0	0.36000E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO
25001312	0	0.24500E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO

NUMBER SOURCE PART. ID CATS.		X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
25001313 0 25001314 0 25001315 0 25001316 0	0.14400E+00 0.14700E+00	552751.0 2 552751.0 2 552751.0 2 552751.0 2	2817360.0 2817360.0	2.1 2.1 2.1 2.1	15.24 15.24 15.24 15.24	755.37 755.37 755.37 755.37	63.28 63.28 63.28	0.52 0.52 0.52 0.52	NO NO NO	NO NO NO	NO NO NO	

25001317	0	0.20400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001318	0	0.14100E+01	552751.0.2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001319	0	0.13400E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001320	0	.0.12400E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.13700E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	ИО
25001414	0	0.80800E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	. NO	NO
25001418	0	0.57400E+02	557491.0 2851888.0	1.2	109.42	513.15	49.04	2.44	NO	NO	NO
25002028	0	0.72600E+02	562271.0 2861538.0	1.5	45.72	294.26	0.00	0.91	NO	ИО	NO
25002219	0	0.53100E-01	567301.0 2859638.0	2.0	15.85	294.26	0.00	1.22	NO	NO	ИО
25023211	0	0.93600E-04	578031.0 2852578.0	2.2	9.14	394.26	9.08	0.46	NO	NO	NO
25023212	0	0.84900E-01	578031.0 2852578.0	2.2	18.29	810.37	52.24	0.30	NO	NO	ИО
25028110	0	0.20700E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	ИО
25028111	0	0.29400E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	ИО	NO	ИО
25028112	. 0	0.20800E+01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	ИО
25031418	0	0.54200E+00	565921.0 2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	ИО
25031419	0	0.54200E+00	565921.0 2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	ИО
25031420	0	0.87000E+00	565921.0 2843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	ИО
25031421	0	0.56100E-04	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	ИО
25031424 .	- 0	0.55100E+00	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	ИО
25031425	0	0.55100E+00	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO .	NO	ИО
25047610	0	0.38800E+00	584292.0 2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO
25047611	0	0.36100E+00	584292.0 2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	ИО
25047613	0	0.94000E-01	584292.0 2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	ИО
25047614	0	0.66600E-01	584292.0 2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	ИО
25047615	0	0.25600E-01	584292.0 2847609.0	. 0.1	4.57	663.71	23.81	0.76	NO	NO	ИО
25047619	0	0.98200E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO	NO	ИО
25047620	0	0.48300E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO	NO	ИО
25052010	0	0.34600E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
25052013	0	0.30800E-01	565901.0 2825260.0	1.5	6.40	663.71	28.13	0.70	NO	NO	ИО
77700104	0	0.37800E+00	560461.0 2854738.0	1.5	9.14	294.26	0.00	1.07	NO	NO	NO
77702503	0	0.20300E+00	562801.0 2865838.0	1.2	0.00	294.26	0.00	0.00	ИО	ИО	NO
77752121	0	0.46800E+00	557311.0 2880437.0	1.5	8.23	408.15	28.59	0.99	NO	ИО	ИО
77752211	0	0.48400E+00	558081.0 2868748.0	1.5	9.14	294.26	0.00	0.91	ИО	NO	NO

\*\*.\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

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ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 1100023 , 1100024 , 1120952 , 1121411 , 1121492 , 1123701 , 1123702 , 1123703 , 1123704 , 1123704 , 1123991 , 1123992 , 1124101 , 1124102 , 1127045 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500037 , 2500039 , 2500051 , 2500138 , 2500138 , 2500139 , 2500148 , 2500204 , 2500221 , 2500223 , 2500224 , 2500227 , 2501572 , 2501573 , 2501574 , 2501575 , 2501576 , 2501578 , 250252 , 2502328 , 2502329 , 2502451 , 2502452 , 2502501 , 2502521 , 2502578 , 2502578 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 ,
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2503371 , 2503372 , 2503481 , 2503482 , 2503483 , 2503484 , 2503612 , 2503783 , 2503902 , 2503903 , 2503903 , 2503933 , 2503933 , 2503937 , 2503938 , 2504074 , 2504223 , 2504604 , 2504701 , 2504763 , 2504764 , 2504766 , 2504767 , 2504769 , 2504793 , 2504795 , 2504796 , 2504798 , 2504882 , 2504883 , 2504884 , 2504885 , 2505051 , 2505105 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505209 , 2505292 , 2505534 , 2505871 , 2505937 , 2505938 , 2506002 , 2506003 , 2506004 , 2506005 , 2506007 , 2506008 , 2506031 , 2506032 , 2506111 , 2506113 , 2506151 , 2506155 , 2506161 , 2506231 , 2506232 , 2506241 , 2506302 , 2506301 , 2506405 , 2506409 , 2506481 , 2506641 , 2506642 , 2506643 , 2506644 , 2506647 , 2506651 , 2506652 , 2506821 , 2506825 , 2506826 , 2509451 , 2509465 , 2509622 , 2511043 , 2511461 , 2511861 , 2511912 , 2511941 , 2511962 , 2512861 , 11101413 , 11101414 , 11101415 , 11101416 , 11101417 , 11101419 , 25000310 , 25000311 , 25001321 , 25001321 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001316 , 25028111 , 25028112 , 25031418 , 25031419 , 25031420 , 25031421 , 25031424 , 25031425 , 25047610 , 25047611 , 25047613 , 25047614 , 25047615 , 25047619 , 25047620 , 25052010 , 25052013 , 77700104 , 77702503 , 77752121 , 77752211 ,

#### \*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN MICROGRAMS/M\*\*3

GROUP II	)		 AVERAGE CONC	DATE (YYMMDDHH)	RECEP	TOR (XR, YR,	ZELEV, ZHILL,	ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	HIGH HIGH	1ST HIGH 2ND HIGH		ON 02030301: AT		2825005.25, 2825005.25,	1.50, 1.50,	1.50, 1.50,	0.00) DC 0.00) DC

\*\*\* THE SUMMARY OF HIGHEST 8-HR RESULTS \*\*\*

\*\* CONC OF CO IN MICROGRAMS/M\*\*3

DATE NETWORK

GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

HIGH 1ST HIGH VALUE IS 4066.01318 ON 02030608: AT ( 565427.06, 2824906.75, 1.50, 1.50, 0.00) DC ALL 3876.58472 ON 02051024: AT ( 565425.88, 2824955.50, 1.50, 1.50. 0.00) DC HIGH 2ND HIGH VALUE IS \*\*\* AERMOD - VERSION 07026 \*\*\* \*\*\* INGENCO - South Dade Landfill Location \*\*\* Model Executed on 04/28/09 at 16:31:50 \*\*\* Input File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2003 CO 01.DTA Output File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2003 CO 01.LST Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA03.SFC Number of sources -197 198

Number of source groups -Number of receptors -3417

#### \*\*\* POINT SOURCE DATA \*\*\*

STACK BASE STACK STACK STACK BLDG URBAN CAP/ EMIS RATE NUMBER EMISSION RATE HEIGHT TEMP. EXIT VEL. DIAMETER EXISTS SOURCE HOR SCALAR SOURCE PART. (GRAMS/SEC) Х Y ELEV. (METERS) (METERS) (METERS) (DEG.K) (M/SEC) (METERS) VARY BY ΙD 40FEET1 0 0.47375E+01 565854.1 2825309.2 1.5 12.19 741.48 45.84 0.41 YES NO 40FEET2 0 0.47375E+01 565866.2 2825309.2 1.6 12.19 741.48 45.84 0.41 YES NO NO 0 0.47375E+01 565854.1 2825292.0 1.5 12.19 741.48 45.84 0.41 YES NO NO 40FEET3 1.5 12.19 40FEET4 0 0.47375E+01 565866.2 2825292.0 741.48 45.84 0.41 YES NO NO 3.0 16.76 333.15 14.94 0.46 NO NO NO 1100023 · 0 0.37000E-02 581161.0 2877767.0 0 0.23000E-01 581161.0 2877767.0 3.0 9.14 294.26 0.34 0.61 NO NO NO 1100024 1.5 1120952 0 0.36000E+00 567801.0 2872738.0 6.40 427.59 23,17 1.16 NO NO NO 4.88 366.48 1.5 15.24 0.61 NO NO NO 1121411 0 0.72600E-01 584202.0 2881037.0 2.3 6.10 366.48 9.14 0.52 NO NO NO 1121492 0 0.50400E-02 578561.0 2878547.0 1123701 0 0.10500E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO NO 1.7 9.14 1088.71 1.55 2.13 NO NO NO 1123702 0 0.28800E-01 557561.0 2879977.0 1123703 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO NO NO 1.7 1123704 0 0.21200E+01 557561.0 2879977.0 6.71 1033.15 20.91 0.15 NO NO NO 1123991 0 0.13500E-01 564751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO NO NO 1123992 0 0.11500E-01 564751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO NO NO 3.5 8.53 663.71 41.21 1124101 0 0.10700E+01 555101.0 2882277.0 0.36 NO NO NO 1124102 0 0.72000E+00 555101.0 2882277.0 3.5 6.10 294.26 0.00 0.30 NO NO NO 1127045 0 0.11900E-01 571911.0 2873927.0 1.5 7.32 294.26 0.00 6.10 NO NO NO 2500013 0 0.47400E+01 569741.0 2834789.0 4.4 45.72 413.71 15.45 4.27 NO NO 2500014 0 0.80700E+01 569741.0 2834789.0 4.4 45.72 413.71 18.50 4.27 NO NO NO 2500031 0 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 5.52 NO NO NO 2500032 0 0.52400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO NO 2500035 0 0.56300E-01 566591.0 2813050.0 1.5 6.10 663.71 44.41 0.56 NO NO NO 2500036 0 0.69400E-02 566591.0 2813050.0 1.5 3.96 814.26 53.10 0.20 NO NO NO 2500037 0 0.65400E+01 566591.0 2813050.0 1.5 2.44 683.15 66.51 0.10 NO NO NO

2500039	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
2500051	0	0.13700E+01	568801.0 2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO
2500133	0	0.20200E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.18400E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.17900E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
2500148	0	0.11800E+02	557491.0 2851888.0	1.2	41.76	399.82	7.62	4.57	ИО	NO	МО
2500204	0	0.43600E+02	562271.0 2861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO
2500221	0	0.24500E+00	567301.0 2859638.0	2.0	9.14	338.71	21.03	0.70	NO	NO	NO
2500223	0	0.46400E+01	567301.0 2859638.0	2.0	15.24	522.04	43.77	0.76	NO	NO	NO
2500224	0	0.62000E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	ИО
2500227	0	0.63400E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2501572	0	0.14600E-02	578601.0 2852438.0	2.2	50.90	344.26	1.52	1.49	NO	NO	NO
2501573	0	0.25700E+00	578601.0 2852438.0	2.2	13.72	294.26	0.00	0.61	NO	NO	NO
2501574	0	0.53200E-01	578601.0 2852438.0	2.2	10.67	294.26	0.00	1.22	NO	NO	NO
2501575	0	0.73800E-02	578601.0 2852438.0	2.2	.7.62	294.26	0.00	0.30	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.		X (METERS)	(METERS)	BASE ELEV. (METERS)		STACK TEMP. (DEG.K)		STACK DIAMETER (METERS)		URBAN SOURCE	HOR	EMIS RATE SCALAR VARY BY
2501576	0	0.85900E-02	578601.0	2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO	
2501578	0	0.21000E-02	578601.0	2852438.0	2.2	4.57	294.26	0.00	0.30	NO	NO	NO	
2502052	0	0.19900E-01	578101.0	2859938.0	1.6	6.10	294.26	0.00	0.76	NO	ИО	NO	
2502328	0	0.69400E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	ИО	NO	NO	
2502329	0	0.66500E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502451	0	0.16700E-01	586002.0	2854738.0	2.3	0.00	298.15	0.00	0.00	NO	NO	NO	
2502452	0	0.27600E-02	586002.0	2854738.0	2.3	0.00	460.93	0.00	0.00	NO	NO	NO	
2502501	0.	0.63300E+00	562901.0	2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.92700E+00	557001.0	2869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO	
2502578	0	0.50300E+00	550171.0	2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811.	0	0.12200E+01	570701.0	2856598.0	1.5	22.86	313.71		0.91	NO	NO	NO	
2502816	0	0.70600E+00		2856598.0		8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502819	0	0.16600E-01		2856598.0		8.84	608.15		0.53	NO	NO	ИО	
2503141	0	0.57900E+00	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	394.26		0.30	NO	NO	NO	
2503144	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	298.15		0.30	NO	NO	NO	
2503145	0	0.70500E+00	565921.0	2843169.0	3.0	0.00	298.15	0.00	0.00	NO	NO	NO	
2503146	0	0.17800E+01	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO.	
2503371	0	0.15500E+00	578071.0	2846709.0	1,1	12.19	349.82	10.36	0.61	NO	NO	NO	
2503372	0	0.25100E-01	578071.0	2846709.0	1.1	15.24	294.26	0.00	0.30	NO	NO	NO	
2503481	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	ИО	
2503482	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	ИО	МО	NO	
						\$ . 2.		¥13.					

2503612	0	0.11500E-02	567611.0 2857908.0	1.6	4.57	699.82	4.27	0.61	NO	NO	NO
2503783	0	0.14400E-06	562001.0 2863738.0	1.5	7.92	422.04	18.90	0.61	NO	NO	NO
2503902	0	0.13200E-05	570501.0 2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO
2503903	0	0.39600E-03	570501.0 2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO
2503931	- 0	0.34400E+00	570611.0 2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.15800E+01	570611.0 2853218.0	2.5	11.58	538.71	6.40	1.22	ŊO	NO	NO
2503937	0	0.22700E+00	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.25900E-01	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504074	0	0.85900E-02	577501.0 2867318.0	2.0	9.14	294.26	0.00	1.22	NO	NO	NO
2504223	0	0.14400E-02	572201.0 2854038.0	2.4	7.62	294.26	0.00	0.61	NO	NO	NO
2504604	0	0.88100E-05	570401.0 2854138.0	2.2	6.10	294.26	0.00	0.91	NO	NO	NO
2504701	0	0.38000E+01	579561.0 2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2504763	0	0.23000E-02	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO
2504764	0	0.84900E-01	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO

		NUMBER	EMISSION RAT	Ε		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
	SOURCE		(GRAMS/SEC)			ELEV.	HEIGHT	TEMP.		DIAMETER	EXISTS	SOURCE	HOR	SCALAR
	ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
-														
	2504766		0.54700E-02		2847609.0		10.67	741.48	25.91	0.37	ИО	NO	NO	
	2504767		0.65600E+00		2847609.0		11.58	741.48	29.26	0.46	NO	NO	NO	
	2504769		0.58600E+00		2847609.0		11.58	741.48	29.26	0.46	NO	NO	ИО	
	2504793		0.10900E-02		2862978.0		10.67	549.82	14.02	0.76	NO	МО	NO	
	2504795		0.14700E-01		2862978.0		10.67	549.82	14.02	0.76	ИО	NO	NO	
	2504796		0.27300E-01		2862978.0		10.67	549.82	12.19	0.76	NO	NO	NO	
	2504798	-	0.19000E-01		2862978.0		13.72	294.26	0.00	0.91	ИО	NO	NO	
	2504882		0.40300E-02		2859238.0		1.52	294.26	0.00	0.30	NO	NO	NO	
	2504883		0.69900E-02		2859238.0		3.66	294.26	0.00	0.30	ИО	NO	NO	
	2504884		0.66500E-02		2859238.0		0.00	294.26	0.00	0.00	NO	NO	NO	
	2504885		0.10500E-02		2859238.0		10.67	294.26	0.00	0.91	NO	NO	NO	
	2505051	0	0.94600E-01	582301.0	2868438.0	2.2	6.10	1033.15	7.01	0.46	NO	NO	NO	
	2505105	0	0.27800E-01		2863078.0		7.62	294.26	0.00	0.30	NO	NO	NO	
	2505201	0	0.59800E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
	2505202	0	0.50100E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
	2505203	0	0.74900E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	ИО	
	2505206	0	0.42500E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
	2505207	0	0.21400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
	2505208	0	0.30400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
	2505209	0	0.31100E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
	2505292	0	0.20400E+00	558601.0	2868738.0	1.5	6.71	435.93	24.69	1.10	NO	NO	NO	
	2505534	0	0.46900E-01	559901.0	2819940.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
	2505871	0	0.14400E+01	563501.0	2806740.0	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
	2505937	0	0.97900E-02	570321.0	2864728.0	1.5	7.62	294.26	0.00	0.30	NO	NO	NO	
	2505938	0	0.48700E-01	570321.0	2864728.0	1.5	6.10	294.26	0.00	0.30	NO	NO	NO	
	2506002	0	0.64500E-02		2866808.0	3.2	6.40	663.71	23.81	0.76	NO	NO	NO	
	2506003	0	0.11700E+01		2866808.0		2.74	663.71	16.52	0.91	NO	NO	NO	
										2.3-				

2506004	0	0.74400E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506005	0	0.72100E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506007	0	0.36700E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506008	0	0.85000E-02	584452.0 2866808.0	3.2	7.01	703.71	29.93	0.71	NO	NO	NO
2506031	0	0.17700E+01	570671.0 2871978.0	10.3	0.00	294.26	0.00	0.00	NO	NO	NO
2506032	0	0.14100E+01	570671.0 2871978.0	10.3	9.14	810.37	10.85	2.10	NO	NO	NO
2506111	0	0.46600E+00	570411.0 2852428.0	2.7	11.28	294.26	0.00	1.22	NO	NO	NO
2506113	0	0.14400E-02	570411.0 2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	NO
2506151	0	0.70200E+01	565041.0 2859858.0	1.5	15.24	294.26	0.00	0.15	NO	NO	NO
2506155	0	0.34500E+01	565041.0 2859858.0	1.5	16.76	294.26	0.00	3.96	NO	NO	NO
2506161	0	0.20000E-01	561501.0 2834979.0	3.3	9.75	294.26	0.00	0.61	NO	NO	NO
2506231	0	0.79900E+01	565511.0 2824950.0	1.5	13.72	1172.04	0.08	3.05	NO	NO	NO
2506232	0	0.96200E+01	565511.0 2824950.0	1.5	15.24	1172.04	0.07	3.35	NO	NO	NO

	NUMBER	EMISSION RATI	Ε		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)			ELEV.	HEIGHT	TEMP.	EXIT VEL.		EXISTS	SOURCE	HOR	SCALAR
ΙD	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
2506241	0	0.40100E+00	569681.0	2868158.0	1.5	9.14	409.26	18.90	1.40	NO	ИО	NO	
2506302	0	0.83200E-02	575341.0	2849489.0	4.4	5.49	727.59	4.02	0.52	NO	NO	NO	
2506361	. 0	0.26300E-02	550501.0	2810400.0	1.5	7.62	449.82	9.11	0.36	NO	NO	NO	
2506405	0	0.36300E-01	564561.0	2860448.0	0.8	10.67	294.26	0.00	0.61	NO	NO	NO	
2506409	0	0.35400E-02	564561.0	2860448.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2506481	0	0.25200E-02	578441.0	2852648.0	2.2	13.41	810.93	4.27	0.46	NO	NO	ИО	
2506641	0	0.20200E-01	579171.0	2868708.0	3.2	9.75	293.15	0.88	0.82	NO	NO	NO	
2506642	0	0.17600E-01	579171.0	2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	ИО	
2506643	0	0.16700E-01	579171.0	2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO	
2506644	0	0.32300E-02	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	МО	
2506647	0	0.16700E-01	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO	
2506651	0	0.73100E+00	575101.0	2854838.0	1.5	7.62	294.26	0.00	0.61	NO	NO	NO	
2506652	0	0.26600E-02	575101.0	2854838.0	1.5	9.14	294.26	0.00	0.91	NO	NO	ИО	
2506821	0	0.72500E-01	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506822	0	0.13800E-02	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506825	0	0.14500E-02	569481.0	2864498.0	1.5	15.24	294.26	0.00	0.91	NO	NO	NO	
2506826	0	0.80900E-01	569481.0	2864498.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO	
2509451	0	0.24500E-02	558651.0	2852178.0	1.5	9.14	294.26	0.00	0.91	NO	NO	ИО	
2509465	0	0.29800E-01	567081.0	2858888.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2509622	0	0.54400E-02	569471.0	2865548.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511043	0	0.72700E-02	573641.0	2863228.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511461	0	0.57600E-07	572471.0	2852418.0	2.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511861	0	0.14400E-02	569201.0	2852958.0	1.6	12.19	294.26	0.00	5.33	NO	NO	NO	
2511912	0	0.48900E-03	566901.0	2853838.0	1.5	7.62	294.26	0.00	0.91	NO	NO	NO	
2511941	0	0.28800E-04	564451.0	2861488.0	1.5	13.72	294.26	0.00	0.61	NO	NO	NO	
2511962	0	0.51800E-02	566641.0	2859468.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2512851	0	0.21000E-02	574361.0	2858278.0	1.6	0.00	294.26	0.00	0.00	NO	ИО	ИО	
2512861	0	0.36500E-01	562471.0	2852938.0	1.6	FO: 00	294.26	-000	0.00	NO	NO	МО	

11101413	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101414	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	ΝО
11101415	0	0.30500E-02	585302.0 2878437.0	3.0	12.50	519.26	10.67	0.55	NO	NO	NO
11101416	0	0.11200E-01	585302.0 2878437.0	3.0	5.79	723.15	4.66	0.61	NO	NO	NO
11101417	0	0.98100E-02	585302.0 2878437.0	3.0	5.79	294.26	0.00	0.61	NO	NO	NO
11101419	0	0.33500E-01	585302.0 2878437.0	3.0	5.79	723.15	8.84	0.61	NO	NO	NO
25000310	0	0.85800E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000311	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000312	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	ΝО
25001310	0 -	0.32000E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	ИО	ИО
25001311	0	0.36000E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO
25001312	0	0.24500E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO

	NUMBER	EMISSION RAT	Ε .		BASE.	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)		Y	ELEV.	HEIGHT			DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY .
				'									
05001010	^	0 161000.00	FF27F1 A	2017260 0	2 1	15 24	765 27	62.20	0.50	210	NO	110	
25001313	0	0.16100E+00				15.24	755.37		0.52	NO	NO	ИО	
25001314	0	0.14400E+00				15.24	755.37	63.28	0.52	NO	NO	NO	
25001315	0	0.14700E+00				15.24	755.37	63.28	0.52	NO	NO	NO	
25001316	0	0.25300E+00				15.24	755.37	63.28	0.52	ИО	NO	NO	
25001317	0	0.20400E+00		-		15.24	755.37	63.28	0.52	NO	NO	NO	
25001318	0	0.14100E+01				16.46	752.59	26.12	1.27	ИО	NO	NO	
25001319	0	0.13400E+01				16.46	752.59		1.27	ИО	NO,	ИО	
25001320	Ö	0.12400E+01				14.63	755.37	75.93	0.70	ИО	NO	NO	
25001321	Ŏ	0.13700E+01				14.63	755.37	75.93	0.70	NO	NO	NO	
25001414	0	0.80800E-02				24.38	699.82	11.58	1.37	ИО	ИО	NO	
25001418	0	0.57400E+02				109.42	513.15	49.04	2.44	NO	NO	NO	
25002028	0	0.72600E+02				45.72	294.26		0.91	NO	NO	NO	
25002219	0	0.53100E-01	567301.0	2859638.0		15.85	294.26	0.00	1.22	, NO	NO	NO	
25023211	0	0.93600E-04	578031.0	2852578.0	2.2	9.14	394.26	9.08	0.46	NO	NO	NO	
25023212	0	0.84900E-01	578031.0	2852578.0	2.2	18.29	810.37	52.24	0.30	NO	NO	NO	
25028110	0	0.20700E-01	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	ИО	
25028111	0	0.29400E-01	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028112	0	0.20800E+01	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.54200E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031419	0	0.54200E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031420	0	0.87000E+00	565921.0	2843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO	
25031421	0	0.56100E-04	565921.0	2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO	
25031424	0	0.55100E+00	565921.0			6.40	608.15	47.21	0.53	NO	NO	NO	
25031425	0	0.55100E+00	565921.0	2843169.0		6.40	608.15	47.21	0.53	NO	NO	NO	
25047610	0	0.38800E+00	584292.0	2847609.0		11.58	741.48	29.26	0.46	NO	NO	NO	
25047611	0	0.36100E+00	584292.0	-		11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	Ö	0.94000E-01				4.57	663.71	23.81	0.76	NO	NO	NO	
25047614	0	0.66600E-01				4.57	663.71	23.81	0.76	NO	NO	NO	
25047615	-	0.25600E-01				4.57	663.71	23.81	0.76	NO	NO	NO	

25047619	0	0.98200E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO	NO	NO
25047620	0	0.48300E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO·	NO	NO
25052010	Ō	0.34600E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO '	NO	NO
25052013	0	0.30800E-01	565901.0 2825260.0	1.5	6.40	663.71	28.13	0.70	NO	NO	NO
77700104	0	0.37800E+00	560461.0 2854738.0	1.5	9.14	294.26	0.00	1.07	NO	NO	NO
77702503	0	0.20300E+00	562801.0 2865838.0	1.2	0.00	294.26	0.00	0.00	NO	, NO	NO
77752121	0	0.46800E+00	557311.0 2880437.0	1.5	8.23	408.15	28.59	0.99	NO	NO	NO
77752211	0	0.48400E+00	558081.0 2868748.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NО

#### \*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 1100023 , 1100024 , 1120952 , 1121411 , 1121492 , 1123701 , 1123702 , 1123703 , 1123704 , 1123991 , 1123992 , 1124101 , 1124102 , 1127045 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500133 , 2500138 , 2500139 , 2500148 , 2500204 , 2500221 , 2500223 , 2500224 , 2500227 , 2501572 , 2501573 , 2501574 , 2501575 , 2501576 , 2501578 , 2502052 , 2502328 , 2502329 , 2502451 , 2502452 , 2502501 , 2502521 , 2502578 , 2502811 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503371 , 2503372 , 2503481 , 2503482 , 2503483 , 2503484 , 2503612 , 2503783 , 2503902 , 2503903 , 2503931 , 2503933 , 2503937 , 2503938 , 2504074 , 2504223 , 2504604 , 2504701 , 2504763 , 2504764 , 2504766 , 2504767 , 2504769 , 2504793 , 2504795 , 2504796 , 2504798 , 2504882 , 2504883 , 2504884 , 2504885 , 2505051 , 2505105 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505292 , 2505534 , 2505871 , 2505937 , 2505938 , 2506002 , 2506003 , 2506004 , 2506005 , 2506007 , 2506008 , 2506031 , 2506032 , 2506111 , 2506113 , 2506151 , 2506155 , 2506161 , 2506231 , 2506232 , 2506241 , 2506302 , 2506361 , 2506405 , 2506409 , 2506481 , 2506641 , 2506642 , 2506643 , 2506644 , 2506647 , 2506651 , 2506652 , 2506821 , 2506822 , 2506825 , 2506826 , 2509451 , 2509465 , 2509622 , 2511043 , 2511461 , 2511861 , 2511912 , 2511941 , 2511962 , 2512851 , 2512861 , 11101413, 11101414, 11101415, 11101416, 11101417, 11101419, 25000310, 25000311, 25000312, 25001310, 25001311, 25001312, 25001313, 25001314, 25001315, 25001316, 25001317, 25001318, 25001319, 25001320, 25001321, 25001414, 25001418, 25002028, 25002019, 25023211, 25023212, 25028110, 25028111, 25028112, 25031418, 25031419, 25031420, 25031421, 25031424, 25031425, 25047610, 25047611, 25047613, 25047614, 25047615, 25047619, 25047620, 25052010, 25052013, 77700104, 77702503, 77752121, 77752211,

生活人 主 海外機

# \*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN MICROGRAMS/M\*\*3

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GROUP II	) 		 AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR	, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	HIGH HIGH	1ST HIGH 2ND HIGH				1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC
			** CONC		HIGHEST 8-HR RESULTS ***  ***  ROGRAMS/M**3		
GROUP II	) 		AVERAGE CONC	DATE (YYMMDDHH)	·	, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	HIGH HIGH	1ST HIGH 2ND HIGH		ON 03112324: AT (ON 03082724: AT (		1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC

2 . .

#### \*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 04/29/09 at 01:28:26 \*\*\*

Input File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naaqs 2009 03
31\_2004\_CO\_01.DTA

\*\*\*

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2004 CO 01.LST

Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA04.SFC

Number of sources - 197
Number of source groups - 198
Number of receptors - 3417

SOURCE I D	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP.	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
											<b></b> -	<b>-</b>	
40FEET1	0	0.47375E+01	565854.1	2825309.2	1.5	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.47375E+01	565866.2	2825309.2	1.6	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.47375E+01	565854.1	2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.47375E+01	565866.2	2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO	
1100023	0	0.37000E-02	581161.0	2877767.0	3.0	16.76	333.15	14.94	0.46	NO	NO	NO	
1100024	0	0.23000E-01	581161.0	2877767.0	3.0	9.14	294.26	0.34	0.61	NO	NO	NO	
1120952	0	0.36000E+00	567801.0	2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO	
1121411	0	0.72600È-01	584202.0	2881037.0	1.5	4.88	366.48	15.24	0.61	NO	NO	NO	
1121492	0	0.50400E-02	578561.0	2878547.0	2.3	6.10	366.48	9.14	0.52	NO	NO	NO	
1123701	0	0.10500E+01	557561.0	2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO	
1123702	0	0.28800E-01	557561.0	2879977.0	1.7	9.14	1088.71	1.55	2.13	NO	NO	NO	
1123703	0	0.21200E+01	557561.0	2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO	
1123704	0	0.21200E+01	557561.0	2879977.0	1.7	6.71	1033.15	20.91	0.15	NO	NO	NO	
1123991	0	0.13500E-01	564751.0	2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO	
1123992	0	0.11500E-01	564751.0	2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO	
1124101	0	0.10700E+01	555101.0	2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.72000E+00	555101.0	2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	NO	
1127045	0	0.11900E-01	571911.0	2873927.0	1.5	7.32	294.26	0.00	6.10	NO	NO	NO	
2500013	0	0.47400E+01	569741.0	2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0:80700E+01	569741.0	2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.58200E+01	566591.0	2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.52400E+01	566591.0	2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.56300E-01	566591.0	2813050.0	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.69400E-02	566591.0	2813050.0	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.65400E+01	566591.0	2813050.0	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.86000E+01	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.13700E+01	568801.0	2855238.0	1.6	7.62	346.48	30.78	1.16	ИО	NO	NO	

2500133	0	0.20200E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.18400E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	ИО
2500139	0	0.17900E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
2500148	0	0.11800E+02	557491.0 2851888.0	1.2	41.76	399.82	7.62	4.57	NO	NO	ИО
2500204	0	0.43600E+02	562271.0 2861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO
2500221	0	0.24500E+00	567301.0 2859638.0	2.0	9.14	338.71	21.03	0.70	NO	NO	NO
2500223	0	0.46400E+01	567301.0 2859638.0	2.0	15.24	522.04	43.77	0.76	NO	NO	NO
2500224	0	0.62000E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2500227	0	0.63400E+00	567301.0 2859638.0	2.0	0.00	294.26	0.00	0.00	NO	NO	NO
2501572	0	0.14600E-02	578601.0 2852438.0	2.2	50.90	344.26	1.52	1.49	NO	NO	NO
2501573	0	0.25700E+00	578601.0 2852438.0	2.2	13.72	294.26	0.00	0.61	NO	NO	NO
2501574	0	0.53200E-01	578601.0 2852438.0	2.2	10.67	294.26	0.00	1.22	NO	ИО	NO
2501575	0	0.73800E-02	578601.0 2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE		(GRAMS/SEC)		Y		HEIGHT			DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
				,									
2501576	0	0.85900E-02	578601.0	2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO	
2501578		0.21000E-02				4.57	294.26	0.00	0.30	NO	NO	NO	
2502052	0	0.19900E-01	578101.0	2859938.0	1.6	6.10	294.26	0.00	0.76	NO	NO	NO	
2502328	0	0.69400E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502329	0	0.66500E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502451	0	0.16700E-01	586002.0	2854738.0	2.3	0.00	298,15	0.00	0.00	NO	NO	NO	
2502452	0	0.27600E-02	586002.0	2854738.0	2.3	0.00	460.93	0.00	0.00	NO	NO	NO	
2502501	0	0.63300E+00	562901.0	2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	ИО	
2502521	0	0.92700E+00	557001.0	2869138.0	3.0	7.62	294.26	0.00	0.76	NO .	NO	NO	
2502578	0	0.50300E+00	550171.0	2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.12200E+01	570701.0	2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
2502816	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.70600E+00	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502819	0	0.16600E-01	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2503141	0	0.57900E+00	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503144	0	0.68900E+00	565921.0	2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.70500E+00	565921.0	2843169.0	3.0	0.00	298.15	0.00	0.00	NO	NO	NO	
2503146	0	0.17800E+01	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503371	0	0.15500E+00	578071.0	2846709.0	1.1	12.19	349.82	10.36	0.61	NO	NO	NO	
2503372	0	0.25100E-01	578071.0	2846709.0	1.1	15.24	294.26	0.00	0.30	NO	NO	NO	
2503481	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503482	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.77100E+01	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503612	0	0.11500E-02	567611.0	2857908.0	1.6	4.57	699.82	4.27	0.61	NO	NO	NO	
2503783	0	0.14400E-06	562001.0	2863738.0	1.5	7.92	422.04	18.90	0.61	NO	NO	NO	

2503902	0	0.13200E-05	570501.0 2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO
2503903	0	0.39600E-03	570501.0 2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO
2503931	0	0.34400E+00	570611.0 2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	O.	0.15800E+01	570611.0 2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.22700E+00	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.25900E-01	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	ИО	ИО	ИО
2504074	0	0.85900E-02	577501.0 2867318.0	2.0	9.14	294.26	0.00	1.22	NO	NO	NO
2504223	0	0.14400E-02	572201.0 2854038.0	2.4	7.62	294.26	0.00	0.61	NO	NO	NO
2504604	0	0.88100E-05	570401.0 2854138.0	2.2	6.10	294.26	0.00	0.91	NO	NO	NO
2504701	0	0.38000E+01	579561.0 2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2504763	0	0.23000E-02	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO
2504764	0	0.84900E-01	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2504766	0	0.54700E-02	584292.0	2847609.0	0.1	10.67	741.48	25.91	0.37	NO	NO	ио	
2504767	0	0.65600E+00	584292.0		0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
2504769	0	0.58600E+00	584292.0		0.1	11.58	741.48	29.26	0.46	ИО	NO	ΝО	
2504793	Ō	0.10900E-02	573321.0	2862978.0	1.5	10.67	549.82	14.02	0.76	NO	NO	ИО	
2504795	0	0.14700E-01	573321.0		1.5	10.67	549.82		0.76	NO	NO	ИО	
2504796	0	0.27300E-01	573321.0	2862978.0	1.5	10.67	549.82	12.19	0.76	NO	NO	NO	
2504798	0	0.19000E-01	573321.0	2862978.0	1.5	13.72	294.26	0.00	0.91	NO	NO	NO	
2504882	0	0.40300E-02	567401.0	2859238.0	1.5	1.52	294.26	-0.00	0.30	NO	NO	NO	
2504883	0	0.69900E-02	567401.0	2859238.0	1.5	3.66	294.26	0.00	0.30	NO	NO	NO	
2504884	0	0.66500E-02	567401.0	2859238.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2504885	0	0.10500E-02	567401.0	2859238.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO	
2505051	0	0.94600E-01	582301.0	2868438.0	2.2	6.10	1033.15	7.01	0.46	NO	NO	NO	
2505105	0	0.27800E-01	573621.0	2863078.0	1.6	7.62	294.26	0.00	0.30	ИО	NO	ИО	
2505201	0	0.59800E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	NO	ИО	ИО	
2505202	0	0.50100E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	ИО	NO	NO	
2505203	0	0.74900E+00	565901.0	2825260.0	1.5	12.19	688.71	21.03	0.46	ИО	ИО	NO	
2505206	0	0.42500E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	ИО	NO	NO	
2505207	0	0.21400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	ИО	ИО	NO	
2505208	0	0.30400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	ИО	ИО	
2505209	0	0.31100E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	ИО	ИО	
2505292	0	0.20400E+00		2868738.0	1.5	6.71	435.93		1.10	NO	NO	ИО	
2505534	0	0.46900E-01		2819940.0	1.5	0.00	294.26		0.00	ИО	ИО	ИО	
2505871	0	0.14400E+01		2806740.0	0.8	12.50	410.93		1.37	ИО	NO	ИО	
2505937	0	0.97900E-02		2864728.0	1.5	7.62	294.26		0.30	ИО	ИО	NO	
2505938	0	0.48700E-01		2864728.0	1.5	6.10	294.26		0.30	NO	NO	NO	
2506002	0	0.64500E-02		2866808.0	3.2	6.4.0	663.71		0.76	ИО	ИО	ИО	
2506003	0	0.11700E+01		2866808.0	3.2	. 2.74	663.71	16.52	0.91	NO	ИО	ИО	
2506004	0	0.74400E-02		2866808.0	3.2	2.74	663.71	16.52	0.91	NO	ИО	ИО	
2506005	0	0.72100E-02	584452.0	2866808.0	3.2	`± 2% 74	663.71	16.52	0.91	ИО	ИО	ИО	

2506007	0	0.36700E-02	584452.0 2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO
2506008	0	0.85000E-02	584452.0 2866808.0	3.2	7.01	703.71	29.93	0.71	NO	NO	NO
2506031	0	0.17700E+01	570671.0 2871978.0	10.3	0.00	294.26	0.00	0.00	NO	NO	NO
2506032	0	0.14100E+01	570671.0 2871978.0	10.3	9.14	810.37	10.85	2.10	NO	NO	NO
2506111	0	0.46600E+00	570411.0 2852428.0	2.7	11.28	294.26	0.00	1.22	NO	NO	NO
2506113	0	0.14400E-02	570411.0 2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	NO
2506151	0	0.70200E+01	565041.0 2859858.0	1.5	15.24	294.26	0.00	0.15	NO	NO	NO
2506155	0	0.34500E+01	565041.0 2859858.0	1.5	16.76	294.26	0.00	3.96	NO	NO	NO
2506161	0	0.20000E-01	561501.0 2834979.0	3.3	9.75	294.26	0.00	0.61	NO	NO	NO
2506231	0	0.79900E+01	5,65511.0 2824950.0	1.5	13.72	1172.04	0.08	3.05	NO	NO	NO
2506232	0	0.96200E+01	565511.0 2824950.0	1.5	15.24	1172.04	0.07	3.35	NO	NO	NO

	NUMBER	EMISSION. RAT	E		BASE	STACK-	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)		Y	ELEV.	HEIGHT	TEMP.		DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)				(DEG.K)	(M/SEC)	(METERS)				VARY BY
						· - <del>-</del> - <del>-</del>							<b></b>
2506241	0	040100E.+00		2868158.0	1.5	9.14	409.26	18.90	1.40	NO	NO	NO	
2506302	0	0.83200E-02	575341.0	2849489.0	4.4	5.49	727.59	4.02	0.52	NO	NO	NO	
2506361	0	0.26300E-02	550501.0	2810400.0	1.5	7.62	449.82	9.11	0.36	NO	NO	NO	
2506405	0	0.36300E-01	564561.0	2860448.0	0.8	10.67	294.26	0.00	0.61	NO	NO	NO	
2506409	0	0.35400E-02	564561.0	2860448.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2506481	0.	0.25200E-02	578441.0	2852648.0	2.2	13.41	810.93	4.27	0.46	NO	NO	NO	
2506641	0	0.20200E-01	579171.0	2868708.0	3.2	9.75	293.15	0.88	0.82	NO	NO	NO	
2506642	0	0.17600E-01	579171.0	2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO	
2506643	0	0.16700E-01	579171.0	2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO	
2506644	0	0.32300E-02	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO	
2506647	0	0.16700E-01	579171.0	2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO	
2506651	0	0.73100E+00	575101.0	2854838.0	1.5	7.62	294.26	0.00	0.61	NO	NO	NO	
2506652	0	0.26600E-02	575101.0	2854838.0	1.5	9.14	294.26	0.00	0.91	NO	NO .	NO	
2506821	0	0.72500E-01	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506822	0	0.13800E-02	569481.0	2864498.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506825	0	0.14500E-02	569481.0	2864498.0	1.5	15.24	294.26	0.00	0.91	NO	NO	NO	
2506826	0	0.80900E-01	569481.0	2864498.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO	
2509451	0	0.24500E-02	558651.0	2852178.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2509465	0	0.29800E-01	567081.0	2858888.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2509622	0	0.54400E-02	569471.0	2865548.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511043	0	0.72700E-02	573641.0	2863228.0	1.5	9.14	294.26	0.00	0.91	NO .	NO	NO	
2511461	0	0.57600E-07	572471.0	2852418.0	2.5	9.14	294.26	0.00	0.91	NO	NO	NO	
2511861	0	0.14400E-02	569201.0	2852958.0	1.6	12.19	294.26	0.00	5.33	NO	NO	NO	
2511912	0	0.48900E-03	566901.0	2853838.0	1.5	7.62	294.26	0.00	0.91	NO	NO	NO	
2511941	0	0.28800E-04	564451.0	2861488.0	1.5	13.72	294.26	0.00	0.61	NO	NO	NO	
2511962	0	0.51800E-02	566641.0	2859468.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
2512851	0	0.21000E-02	574361.0	2858278.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO	
2512861	0	0.36500E-01	562471.0	2852938.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO	
11101413		0.86400E-02	585302.0	2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO	
11101414	0 '	0.86400E-02	585302.0	2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO	

11101415	0	0.30500E-02	585302.0 2878437.0	3.0	12.50	519.26	10.67	0.55	NO	NO	NO
11101416	0	0.11200E-01	585302.0 2878437.0	3.0	5.79	723.15	4.66	0.61	NO	NO	NO
11101417	0	0.98100E-02	585302.0 2878437.0	3.0	5.79	294.26	0.00	0.61	NO	NO	NO
11101419	0	0.33500E-01	585302.0 2878437.0	3.0	5.79	723.15	8.84	0.61	NO	NO	NO
25000310	0	0.85800E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000311	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000312	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25001310	0	0.32000E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001311	0	0.36000E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO
25001312	0	0.24500E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	E X (METERS) (M	Y ETERS)	-			(M/SEC)	STACK DIAMETER (METERS)		URBAN SOURCE		EMIS RATE SCALAR VARY BY
			<b></b>										
25001313	0	0.16100E+00	552751.0 281	7360 0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001313	0	0.14400E+00				15.24	755.37	63.28	0.52	NO	NO	NO	
25001314	0		552751.0 281			15.24	755.37	63.28	0.52	NO	NO	NO	
25001315	0	0.25300E+00				15.24	755.37	63.28	0.52	NO	NO	NO	
25001310	0	0.20400E+00				15.24	755.37	63.28	0.52	NO	NO	NO	
25001317	0	0.14100E+01				16.46	752.59	26.12	1.27	NO	NO	NO	
25001310	0	0.13400E+01				16.46	752.59	26.12	1.27	NO	NO	NO	
25001319	0	0.12400E+01	552751.0 281			14.63	755.37	75.93	0.70	NO	NO	NO	
25001321	0	0.13700E+01	552751.0 281			14.63	755.37	75.93	0.70	NO	NO	NO	
25001414	0	0.80800E-02	557491.0 285			24.38	699.82	11.58	1.37	NO	NO	NO	
25001418	0	0.57400E+02	557491.0 285			109.42	513.15	49.04	2.44	NO	NO	NO	
25002028	0	0.72600E+02	562271.0 286			45.72	294.26		0.91	NO	NO	NO	
25002219	0	0.53100E-01	567301.0 285			15.85	294.26		1.22	NO	NO	NO	
25023211	0	0.93600E-04	578031.0 285			9.14	394.26		0.46	NO	NO	NO	
25023212	0	0.84900E-01	578031.0 285			18.29	810.37	52.24	0.30	NO	NO	NO	
25028110	0	0.20700E-01	570701.0 285			8.84	608.15	45.08	0.53	NO	NO	NO	
25028111	0	0.29400E-01	570701.0 285	6598.0		8.84	608.15	45.08	0.53	NO	NO	NO	
25028112	0	0.20800E+01	570701.0 285			8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.54200E+00	565921.0 284	3169.0	3.0	. 9.75	650.93		0.30	NO	NO	NO	
25031419	0	0.54200E+00	565921.0 284	3169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031420	0	0.87000E+00	565921.0 284	3169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO	
25031421	0	0.56100E-04	565921.0 284	3169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO	
25031424	0	0.55100E+00	565921.0 284	3169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO	
25031425	0	0.55100E+00	565921.0 284	3169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO	
25047610	0	0.38800E+00	584292.0 284	7609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
25047611	0	0.36100E+00	584292.0 284	7609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	0	0.94000E-01	584292.0 284	7609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	NO	
25047614	0	0.66600E-01	584292.0 284	7609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	NO	
25047615	0	0.25600E-01	584292.0 284	7609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	NO	
25047619	0	0.98200E-02	584292.0 284			7.01	608.15	26.09	0.70	NO	NO	NO	
25047620	0	0.48300E-02	584292.0 284	7609.0	0.1	7.01	608.15	26.09	0.70	ИО	ИО	ИО	

25052010	0	0.34600E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
25052013	0	0.30800E-01	565901.0 2825260.0	1.5	6.40	663.71	28.13	0.70	NO	NO	NO
77700104	0	0.37800E+00	560461.0 2854738.0	1.5	9.14	294.26	0.00	1.07	NO	NO	NO
77702503	0	0.20300E+00	562801.0 2865838.0	1.2	0.00	294.26	0.00	0.00	NO	NO	NO
77752121	0	0.46800E+00	557311.0 2880437.0	1.5	8.23	408.15	28.59	0.99	NO .	NO	NO
77752211	0	0.48400E+00	558081.0 2868748.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO

#### \*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL	.40FEET1 , 40FEET2 ,	40FEET3 , 40FEET4	, 1100023 ,	1100024 ,	1120952 ,	1121411 ,	1121492 ,	1123701 ,	1123702 ,	1123703 ,
	1123704 , 1123991 ,	1123992 , 1124101	, 1124102 ,	1127045 ,	2500013 ,	2500014 ,	2500031 ,	2500032 ,	2500035 ,	2500036 ,
	2500037 , 2500039 ,	2500051 , 2500133	, 2500138 ,	2500139 ,	2500148 ,	2500204 ,	2500221 ,	2500223 ,	2500224 ,	2500227 ,
	2501572 , 2501573 ,	2501574 , 2501575	, 2501576 ,	2501578 ,	2502052 ,	2502328 ,	2502329 ,	2502451 ,	2502452 ,	2502501 ,
	2502521 , 2502578 ,	2502811 , 2502816	, 2502817 ,	2502818 ,	2502819 ,	2503141 ,	2503143 ,	2503144 ,	2503145 ,	2503146 ,
	2503371 , 2503372 ,	2503481 , 2503482	, 2503483 ,	2503484 ,	2503612 ,	2503783 ,	2503902 ,	2503903 ,	2503931 ,	2503933 ,
	2503937 , 2503938 ,	2504074 , 2504223	, 2504604 ,	2504701,	2504763 ,	2504764 ,	2504766 ,	2504767 ,	2504769 ,	2504793 ,
	2504795 , 2504796 ,	2504798 , 2504882	, 2504883 ,	2504884 ,	2504885 ,	2505051 ,	2505105 ,	2505201 ,	2505202 ,	2505203 ,
	2505206 , 2505207 ,	2505208 , 2505209	, 2505292 ,	2505534 ,	2505871 ,	2505937 ,	2505938 ,	2506002 ,	2506003 ,	2506004 ,
	2506005 , 2506007 ,	2506008 , 2506031	, 2506032 ,	2506111 ,	2506113 ,	2506151 ,	2506155 ,	2506161 ,	2506231 ,	2506232 ,
	2506241 , 2506302 ,	2506361 , 2506405	, 2506409 ,	2506481 ,	2506641 ,	2506642 ,	2506643 ,	2506644 ,	2506647 ,	2506651 ,
	2506652 , 2506821 ,	2506822 , 2506825	, 2506826 ,	2509451 ,	2509465 ,	2509622 ,	2511043 ,	2511461 ,	2511861 ,	2511912 ,
	2511941 , 2511962 ,	2512851 , 2512861	, 11101413,	11101414,	11101415,	11101416,	11101417,	11101419,	25000310,	25000311,
	25000312, 25001310,	25001311, 25001312	, 25001313,	25001314,	25001315,	25001316,	25001317,	25001318,	25001319,	25001320,
	25001321, 25001414,	25001418, 25002028	, 25002219,	25023211,	25023212,	25028110,	25028111,	25028112,	25031418,	25031419,
	25031420, 25031421,	25031424, 25031425	, 25047610,	25047611,	25047613,	25047614,	25047615,	25047619,	25047620,	25052010,
	25052013, 77700104,	77702503, 77752121	, 77752211,							

#### \*\* CONC OF CO IN MICROGRAMS/M\*\*3

DATE NETWORK AVERAGE CONC GROUP ID (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID HIGH 1ST HIGH VALUE IS 6708.83252 ON 04032307: AT ( 565477.06, 2824908.25, 1.50, ALL 1.50. 0.00) DC HIGH 2ND HIGH VALUE IS 6418.22754 ON 04122818: AT ( 565477.06, 2824908.25, 1.50, 1.50. 0.00) DC \*\*\* THE SUMMARY OF HIGHEST 8-HR RESULTS \*\*\* \*\* CONC OF CO IN MICROGRAMS/M\*\*3 DATE NETWORK GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID HIGH 1ST HIGH VALUE IS 5074.27734 ON 04091424: AT ( 565475.88, 2824956.75, 1.50, 1.50, 0.00) DC HIGH 2ND HIGH VALUE IS 4302.49170 ON 04051308: AT ( 565425.88, 2824955.50, 1.50, 1.50, 0.00) DC ALL \*\*\* AERMOD - VERSION 07026 \*\*\* \*\*\* INGENCO - South Dade Landfill Location \*\*\* Model Executed on 04/29/09 at 10:10:06 \*\*\* Input File + U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2005 CO 01.DTA Output File - U:\Projects\080670A\Dade South Permit Files\Model\Class II Final Submittal\CO increment and naags 2009 03 31 2005 CO 01.LST Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA05.SFC ... Number of sources -197 Number of source groups -198 Number of receptors -3417 \*\*\* POINT SOURCE DATA \*\*\* BASE STACK STACK BLDG URBAN CAP/ EMIS RATE NUMBER EMISSION RATE STACK STACK EXIT VEL. DIAMETER EXISTS SOURCE HOR SCALAR SOURCE PART. (GRAMS/SEC) X Y EL**E**V. HEIGHT TEMP. (METERS) (METERS) (METERS) (DEG.K) (M/SEC) (METERS) VARY BY ID 0 0.47375E+01 565854.1 2825309.2 1.5 12.19 741.48 40FFFT1 45.84 0.41 YES NO ΝО 12.19 741.48 45.84 0.41 YES NO 40FEET2 0 0.47375E+01 565866.2 2825309.2 1.6

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0	0.47375E+01	565854.1 2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO
0	0.47375E+01	565866.2 2825292.0	1.5	12.19	741.48	45.84	0.41	YES	NO	NO
0	0.37000E-02	581161.0 2877767.0	3.0	16.76	333.15	14.94	0.46	NO	NO	NO
0	0.23000E-01	581161.0 2877767.0	3.0	9.14	294.26	0.34	0.61	NO	NO	NO
0	0.36000E+00	567801.0 2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NÓ
0	0.72600E-01	584202.0 2881037.0	1.5	4.88	366.48	15.24	0.61	NO	NO	NO
0	0.50400E-02	578561.0 2878547.0	2.3	6.10	366.48	9.14	0.52	NO	NO	NO
0	0.10500E+01	557561.0 2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	NO	NO
0	0.28800E-01	557561.0 2879977.0	1.7	9.14	1088.71	1.55	2.13	NO	NO	NO
0	0.21200E+01	557561.0 2879977.0	1.7	6.71	1033.15	0.09	2.13	NO	ИО	ИО
0	0.21200E+01	557561.0 2879977.0	1.7	6.71	1033.15	20.91	0.15	NO .	NO	NO
0	0.13500E-01	564751.0 2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO
0	0.11500E-01	564751.0 2883307.0	1.6	12.19	1144.26	1.43	2.44	NO	NO	NO
0	0.10700E+01	555101.0 2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO
0	0.72000E+00	555101.0 2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	NO
0	0.11900E-01	571911.0 2873927.0	1.5	7.32	294.26	0.00	6.10	NO	NO	NO
0	0.47400E+01	569741.0 2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO
0	0.80700E+01	569741.0 2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NO	NO
0	0.58200E+01	566591.0 2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO
0	0.52400E+01	566591.0 2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO
0				6.10	663.71		0.56	NO	NO	NO
0				3.96				NO	NO	NO
0				2.44				NO	NO	NO
0				39.93				ИО	NO	NO
0				7.62				NO	NO	NO
0				15.54				NO	NO	NO.
0								NO	ИО	NO
_								NO	NO	NO
								NO	NO	NO
									NO	NO
								NO	NO	NO
								ИО	NO	NO
									NO	NO
									NO	NO
0								NO	NO	NO
								NO	NO	NO
0								NO	NO	NO
0	0.73800E-02	578601.0 2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO
		0 0.47375E+01 0 0.37000E-02 0 0.23000E-01 0 0.36000E+00 0 0.72600E-01 0 0.50400E-02 0 0.10500E+01 0 0.28800E-01 0 0.21200E+01 0 0.21200E+01 0 0.13500E-01 0 0.10700E+01 0 0.72000E+00 0 0.11900E-01 0 0.47400E+01 0 0.58200E+01 0 0.58200E+01 0 0.58200E+01 0 0.56300E-01 0 0.69400E-02 0 0.65400E+01 0 0.13700E+01 0 0.13700E+00 0 0.14600E-02 0 0.24500E+00 0 0.46400E+01 0 0.62000E+00 0 0.63400E+00 0 0.14600E-02 0 0.25700E+00 0 0.25700E+00	0 0.47375E+01 565866.2 2825292.0 0.37000E-02 581161.0 2877767.0 0.23000E-01 581161.0 2877767.0 0.36000E+00 567801.0 2872738.0 0.72600E-01 584202.0 2881037.0 0.50400E-02 578561.0 2879977.0 0.10500E+01 557561.0 2879977.0 0.21200E+01 557561.0 2879977.0 0.21200E+01 557561.0 2879977.0 0.21200E+01 557561.0 2879977.0 0.11500E-01 564751.0 2883307.0 0.11500E-01 564751.0 2883307.0 0.11500E-01 555101.0 2882277.0 0.11900E-01 555101.0 2882277.0 0.11900E-01 555101.0 2882277.0 0.11900E-01 566791.0 2834789.0 0.3800E+01 566591.0 2813050.0 0.52400E+01 566591.0 2813050.0 0.56300E-01 566591.0 2813050.0 0.56300E+01 566591.0 2813050.0 0.65400E+01 566591.0 2813050.0 0.65400E+01 566591.0 2813050.0 0.13700E+01 566591.0 2813050.0 0.13800E+02 566271.0 2817360.0 0.13800E+02 55751.0 2817360.0 0.14600E+02 557491.0 2859638.0 0.44600E+02 567301.0 2859638.0 0.44600E+02 567301.0 2859638.0 0.14600E+00 567301.0 2859638.0 0.14600E+00 567301.0 2859638.0 0.14600E+00 567301.0 2859638.0 0.14600E+00 578601.0 2859438.0 0.25700E+00 578601.0 2852438.0	0 0.47375E+01 565866.2 2825292.0 1.5 0 0.37000E-02 581161.0 2877767.0 3.0 0 0.23000E-01 581161.0 2877767.0 3.0 0 0.36000E+00 567801.0 2872738.0 1.5 0 0.72600E-01 584202.0 2881037.0 1.5 0 0.50400E-02 578661.0 2878547.0 2.3 0 0.10500E+01 557561.0 2879977.0 1.7 0 0.28800E-01 557561.0 2879977.0 1.7 0 0.21200E+01 557561.0 2879977.0 1.7 0 0.13500E-01 564751.0 2883007.0 1.6 0 0.11500E-01 564751.0 2883307.0 1.6 0 0.10700E+01 555101.0 2882277.0 3.5 0 0.72000E+01 555101.0 2882277.0 3.5 0 0.72000E+01 566751.0 2882277.0 3.5 0 0.72000E+01 566991.0 28824789.0 4.4 0 0.80700E+01 566991.0 2834789.0 4.4 0 0.80700E+01 566591.0 2813050.0 1.5 0 0.56300E-01 566591.0 2813050.0 1.5 0 0.56300E-01 566591.0 2813050.0 1.5 0 0.69400E-02 566591.0 2813050.0 1.5 0 0.69400E-02 566591.0 2813050.0 1.5 0 0.69400E-03 566591.0 2813050.0 1.5 0 0.69400E-04 566591.0 2813050.0 1.5 0 0.13700E+01 566591.0 2813050.0 1.5 0 0.69400E-02 566591.0 2813050.0 1.5 0 0.13700E+01 566591.0 2813050.0 1.5 0 0.44600E+02 566591.0 2813050.0 1.5 0 0.69400E-02 566591.0 2813050.0 1.5 0 0.13700E+01 566591.0 2813050.0 1.5 0 0.69400E-02 566591.0 2813050.0 1.5	0 0.47375E+01 565866.2 2825292.0 1.5 12.19 0 0.37000E-02 581161.0 2877767.0 3.0 16.76 0 0.23000E-01 581161.0 2877767.0 3.0 9.14 0 0.36000E+00 567801.0 2872738.0 1.5 6.40 0 0.72600E-01 584202.0 2881037.0 1.5 4.88 0 0.50400E-02 578561.0 2878547.0 2.3 6.10 0 0.10500E+01 557561.0 2879977.0 1.7 6.71 0 0.28800E-01 557561.0 2879977.0 1.7 6.71 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 0 0.13500E-01 564751.0 2883307.0 1.6 12.19 0 0.10700E+01 5555101.0 2883207.0 3.5 8.53 0 0.72000E+01 555101.0 2882277.0 3.5 8.53 0 0.72000E+01 555101.0 2882277.0 3.5 6.10 0 0.11900E-01 571911.0 2873927.0 1.5 7.32 0 0.47400E+01 569741.0 2834789.0 4.4 45.72 0 0.80700E+01 566591.0 2813050.0 1.5 121.92 0 0.56300E-01 566591.0 2813050.0 1.5 121.92 0 0.56400E+01 566591.0 2813050.0 1.5 121.92 0 0.56400E+01 566591.0 2813050.0 1.5 121.92 0 0.56400E+01 566591.0 2813050.0 1.5 39.93 0 0.13700E+01 566591.0 2813050.0 2.1 18.59 0 0.18400E+00 552751.0 2817360.0 2.1 18.59 0 0.18400E+00 552751.0 2817360.0 2.1 18.59 0 0.14600E+02 567301.0 2859638.0 2.0 9.14 0 0.46400E+01 567301.0 2859638.0 2.0 9.14 0 0.46400E+01 567301.0 2859638.0 2.0 1.5 24 0 0.62000E+00 567301.0 2859638.0 2.0 0.00 0 0.63400E+00 567301.0 2859638.0 2.0 0.00 0 0.63400E+00 567301.0 2859638.0 2.2 13.72 0 0.53200E-01 578601.0 2852438.0 2.2 13.72 0 0.53200E-01 578601.0 2852438.0 2.2 13.72	0 0.47375E+01 565866.2 2825292.0 1.5 12.19 741.48 0 0.37000E-02 581161.0 2877767.0 3.0 16.76 333.15 0 0.23000E-01 581161.0 2877767.0 3.0 9.14 294.26 0 0.36000E+00 567801.0 2872738.0 1.5 6.40 427.59 0 0.72600E-01 584202.0 2881037.0 1.5 4.88 366.48 0 0.50400E+02 578561.0 2878977.0 1.5 4.88 366.48 0 0.50400E+02 578561.0 2878977.0 1.7 6.71 1033.15 0 0.28800E+01 557561.0 2879977.0 1.7 6.71 1033.15 0 0.22800E+01 557561.0 2879977.0 1.7 6.71 1033.15 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0 0.13500E-01 564751.0 2883307.0 1.6 12.19 1144.26 0 0.11500E+01 555561.0 2882277.0 3.5 6.71 1033.15 0 0.1200E+01 555061.0 2882277.0 3.5 6.10 294.26 0 0.11500E+01 555101.0 2882277.0 3.5 6.10 294.26 0 0.11900E+01 555101.0 2882277.0 3.5 6.10 294.26 0 0.11900E+01 569741.0 2873927.0 1.5 7.32 294.26 0 0.47400E+01 569741.0 2834789.0 4.4 45.72 413.71 0 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 0 0.52400E+01 566591.0 2813050.0 1.5 121.92 408.15 0 0.52400E+01 566591.0 2813050.0 1.5 121.92 408.15 0 0.56400E+01 566591.0 2813050.0 1.5 121.92 408.15 0 0.56400E+01 566591.0 2813050.0 1.5 121.92 408.15 0 0.69400E-02 566591.0 2813050.0 1.5 39.93 367.59 0 0.13700E+01 568591.0 2813050.0 1.5 121.92 408.15 0 0.69400E+02 566591.0 2813050.0 1.5 39.93 367.59 0 0.13700E+01 568591.0 2813050.0 1.5 39.93 367.59 0 0.13700E+01 568591.0 2813050.0 1.5 39.93 367.59 0 0.13700E+01 568591.0 2813050.0 1.5 39.93 367.59 0 0.13700E+00 552751.0 2817360.0 2.1 18.29 488.71 0 0.17900E+00 552751.0 2817360.0 2.1 18.29 488.71 0 0.17900E+00 552751.0 2817360.0 2.1 18.29 488.71 0 0.14600E+02 567301.0 2859638.0 2.0 9.14 338.71 0 0.44600E+02 567301.0 2859638.0 2.0 9.14 338.71 0 0.44600E+00 567301.0 2859638.0 2.0 9.14 26.0 0.63400E+00 567301.0 2859638.0 2.0 9.14 2.6 0 0.63400E+00 567301.0 2859638.0 2.0 9.00 294.26 0 0.14600E-02	0	0 0.47375E+01 565866.2 2825292.0 1.5 12.19 741.48 45.84 0.41 0.37000E+02 581161.0 2877767.0 3.0 16.76 333.15 14.94 0.46 0.32300E+01 581161.0 2877767.0 3.0 9.14 294.26 0.34 0.61 0.3600E+00 567801.0 2872738.0 1.5 6.40 427.59 23.17 1.16 0.72600E+01 584202.0 2881037.0 1.5 4.88 366.48 15.24 0.61 0.36 0.36 0.36 0.36 0.36 0.36 0.36 0.36	0 0.47375E+01 565866.2 2825292.0 1.5 12.19 741.48 45.84 0.41 YES 0 0.3700E-02 581161.0 2877767.0 3.0 16.76 333.15 14.94 0.46 NO 0 0.23000E-01 581161.0 2877767.0 3.0 9.14 294.26 0.34 0.61 NO 0 0.36000E+01 567801.0 2872738.0 1.5 6.40 427.59 23.17 1.16 NO 0 0.72600E-01 584202.0 2881037.0 1.5 4.88 366.48 15.24 0.61 NO 0 0.50400E-02 578561.0 2879874.0 2.3 6.10 366.48 9.14 0.52 NO 0 0.10500E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.10500E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.11500E-01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.11500E-01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO 0 0.11500E-01 564751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO 0 0.11700E+01 555101.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO 0 0.10700E+01 555101.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO 0 0.11900E-01 557911.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO 0 0.11900E-01 569741.0 2834789.0 4.4 45.72 413.71 15.45 4.27 NO 0 0.58200E+01 569741.0 2834789.0 4.4 45.72 413.71 15.45 4.27 NO 0 0.58200E+01 569741.0 2834789.0 4.4 45.72 413.71 15.45 4.27 NO 0 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 5.52 NO 0 0.56300E-01 566591.0 2813050.0 1.5 121.92 408.15 24.51 5.52 NO 0 0.56400E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 5.52 NO 0 0.69400E-02 566591.0 2813050.0 1.5 121.92 408.15 24.51 5.52 NO 0 0.69400E-02 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.56 NO 0 0.17900E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.56 NO 0 0.69400E-02 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.56 NO 0 0.69400E-02 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.20 NO 0 0.69400E-02 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.20 NO 0 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.20 NO 0 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 24.51 0.20 NO 0 0.66400E+02 567510.0 2813360.0 2.1 18.59 488.71 34.66 0.71 NO 0 0	0 0.47375E+01 565866.2 2825292.0 1.5 12.19 741.48 45.84 0.41 YES NO 0.3700E-02 581161.0 2877767.0 3.0 16.76 333.15 1.494 0.46 NO NO 0.23000E-01 581161.0 2877767.0 3.0 9.14 294.26 0.34 0.61 NO NO 0.3600E+01 567801.0 2872738.0 1.5 6.40 427.59 23.17 1.16 NO NO 0.72600E-01 584202.0 2881037.0 1.5 4.88 366.48 15.24 0.61 NO NO 0.50400E-02 578561.0 2878547.0 2.3 6.10 366.48 9.14 0.52 NO NO 0.10500E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO NO 0.28800E-01 557561.0 2879977.0 1.7 9.14 1088.71 1.55 2.13 NO NO 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO NO 0.21200E+01 557561.0 2879977.0 1.7 6.71 1033.15 0.09 2.13 NO NO 0.013500E-01 56751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO NO 0.11500E-01 564751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO NO 0.11500E-01 564751.0 2883307.0 1.6 12.19 1144.26 1.43 2.44 NO NO 0.10700E+01 555101.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO NO 0.72000E+01 557561.0 2882377.0 3.5 8.53 663.71 41.21 0.36 NO NO 0.72000E+01 555501.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO NO 0.72000E+01 555501.0 2882277.0 3.5 8.53 663.71 41.21 0.36 NO NO 0.72000E+01 555501.0 2882277.0 3.5 6.10 294.26 0.00 6.10 NO NO 0.72000E+01 567941.0 2834789.0 4.4 45.72 413.71 15.45 4.27 NO NO 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.58200E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 121.92 408.15 23.47 5.52 NO NO 0.66400E+01 566591.0 2813050.0 1.5 3.96 814.26 53.10 0.20 NO NO 0.66400E+01 566591.0 2813050.0 1.5 3.96 814.26 53.10 0.20 NO NO 0.66400E+01 566591.0 2813050.0 1.5 3.9

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	E X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2501576	0	0.85900E-02	578601.0	2852438.0	2.2	7.62	294.26	0.00	0.30	NO	NO	NO	
2501578	0	0.21000E-02	578601.0	2852438.0	2.2	4.57	294.26	0.00	0.30	NO	NO	NO	
2502052	Ω	0 199005-01	578101 0	2859938 N	1.6	6 10	291 26	0 00	0.76	NO	NO	NO	

2502328	0	0.69400E-01	578031.0 2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO
2502329	0	0.66500E-01	578031.0 2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO
2502451	0	0.16700E-01	586002.0 2854738.0	2.3	0.00	298.15	0.00	0.00	NO	NO	NO
2502452	0	0.27600E-02	586002.0 2854738.0	2.3	0.00	460.93	0.00	0.00	NO	NO	NO
2502501	0	0.63300E+00	562901.0 2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO
2502521	0	0.92700E+00	557001.0 2869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO
2502578	0	0.50300E+00	550171.0 2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO
2502811	0	0.12200E+01	570701.0 2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO
2502816	0	0.70600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO
2502817	0.	070600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO
2502818	0	0.70600E+00	570701.0 2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO
2502819	0	0.16600E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO
2503141	0	0.57900E+00	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	ИО
2503143	0	0.68900E+00	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.68900E+00	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	NO
2503145	0	0.70500E+00	565921.0 2843169.0	3.0	0.00	298.15	0.00	0.00	NO	NO	NO
2503146	0	0.17800E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503371	0	0.15500E+00	578071.0 2846709.0	1.1	12.19	349.82	10.36	0.61	NO	NO	NO
2503372	0	0.25100E-01	578071.0 2846709.0	1.1	15.24	294.26	0.00	0.30	NO	NO	NO
2503481	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503484	0	0.77100E+01	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503612	.0	0.11500E-02	567611.0 2857908.0	1.6	4.57	699.82	4.27	0.61	NO	NO	NO
2503783	0	0.14400E-06	562001.0 2863738.0	1.5	7.92	422.04	18.90	0.61	NO	NO	NO
2503902	0	0.13200E-05	570501.0 2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO
2503903	0	0.39600E-03	570501.0 2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO
2503931	0	0.34400E+00	570611.0 2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
250393,3	0	0.15800E+01	570611.0 2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.22700E+00	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.25900E-01	570611.0 2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504074	0	0.85900E-02	577501.0 2867318.0	2.0	9.14	294.26	0.00	1.22	NO	NO	NO
2504223	0	0.14400E-02	572201.0 2854038.0	2.4	7.62	294.26	0.00	0.61	NO	NO	NO
2504604	0	0.88100E-05	570401.0 2854138.0	2.2	6.10	294.26	0.00	0.91	NO	NO	NO
2504701	0	0.38000E+01	579561.0 2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2504763	0	0.23000E-02	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO
2504764	0	0.84900E-01	584292.0 2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2504766	0	0.54700E~02	584292.0	2847609.0	0.1	10.67	741.48	25.91	0.37	NO	NO	NO	
2504767	0	0.65600E+00	584292.0	2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
2504769	0	0.58600E+00	584292.0	2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
2504793	0	0.10900E-02	573321.0	2862978.0	1.5	10.67	549.82	14.02	0.76	ИО	NO	NO	

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2504795	0	0.14700E-01				10.67	549.82		0.76	NO	NO	NO	
2504796	0	0.27300E-01		2862978.0	1.5	10.67	549.82	12.19	0.76	NO	NO	NO	
2504798	0	0.19000E-01	573321.0	2862978.0	1.5	13.72	294.26	0.00	0.91	NO	NO	NO	
2504882	0	0.40300E-02	567401.0	2859238.0	1.5	1.52	294.26	0.00	0.30	NO	NO	NO	
2504883	0	0.69900E-02	567401.0	2859238.0	1.5	3.66	294.26		0.30	NO	NO	NO	
2504884	ō	0.66500E-02		2859238.0	1.5	0.00	294.26		0.00	NO	NO	NO	
2504885	0			2859238.0	1.5	10.67	294.26	0.00	0.91		NO	NO	
	0									·NO			
2505051	-	0.94600E-01		2868438.0	2.2	6.10	1033.15	7.01	0.46	NO	NO	NO	
2505105	0	0.27800E-01		2863078.0	1.6	7.62	294.26		0.30	NO	NO	NO	
2505201	0	0.59800E+00		2825260.0	1.5	12.19	688.71	21.03	0.46	NO	NO	NO	
2505202	0	0.50100E+00		2825260.0	1.5	12.19	688.71	21.03	0.46	ИО	NO	ИО	
2505203	0 ·	0.74900E+00			1.5	12.19	688.71	21.03	0.46	ИО	NO	ИО	•
2505206	0	0.42500E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505207	0	0.21400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505208	0	0.30400E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505209	0	0.31100E-01	565901.0	2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO	
2505292	0	0.20400E+00		2868738.0	1.5	6.71	435.93	24.69	1.10	NO	NO	NO	
2505534	0	0.46900E-01			1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2505871	0		563501.0		0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2505937	Ö	0.97900E-02			1.5	7.62	294.26	0.00	0.30	NO	NO	NO	
2505938	0	0.48700E-01		2864728.0	1.5	6.10	294.26	0.00	0.30	NO	NO	NO	
2506002	0		584452.0		3.2	6.40			0.30				
							663.71	23.81		МО	МО	ИО	
2506003	0		584452.0		3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506004	0.	0.74400E-02		2866808.0	3.2	2.74	663.71	16.52	0.91	ИО	ЙО	ИО	
2506005	0	0.72100E-02		2866808.0	3.2	. 2.74	663.71	16.52	0.91	NO	NO	ИО	
2506007	0	0.36700E-02		2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506008	0	0.85000E-02			3.2	7.01	703.71	29.93	0.71	ИО	NO	ΝО	
2506031	0	0.17700E+01	570671.0	2871978.0	10.3	0.00	294.26	0.00	0.00	NO	NO	NO	
2506032	0.	0.14100E+01	570671.0	2871978.0	10.3	9.14	810.37	10.85	2.10	NO	NO	NO	
2506111	0	0.46600E+00	570411.0	2852428.0	2.7	11.28	294.26	0.00	1.22	NO	NO	NO	
2506113.	0	0.14400E-02	570411.0	2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	NO	
2506151	0	0.70200E+01	565041.0	2859858.0	1.5	15.24	294.26	0.00	0.15	NO	NO	NO	
2506155	0	0.34500E+01		2859858.0	1.5	16.76	294.26	0.00	3.96	NO	ИО	ИО	
2506161	0	0.20000E-01			3.3	9.75	294.26	0.00	0.61	NO	NO	NO	
2506231	0	0.79900E+01		2824950.0	1.5		1172.04	0.08	3.05	NO	NO	NO	
2506232	Ö	0.96200E+01			1.5		1172.04	0.07	3.35	NO	NO	NO	
2500252	O	0.702006101	303311.0	2024930.0	1.5	13.24	11/2.04	0.07	3.33	NO	NO	NO	
				* * *	+ POINT S	OURCE DAT	n +++						
					FOINT S	JORCE DAT	A						
	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE		(GRAMS/SEC)		Y	ELEV.	HEIGHT			DIAMETER				SCALAR
ID	CATS.	(GRAND) SEC)		(METERS)					(METERS)	PV1212	SOURCE	пок	
				(661663)	/E:E1EV2)	 (LIEIEVS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
			•										
2506241	0	0.40100E+00	569681.0	2868158.0	1.5	9.14	409.26	18.90	1.40	NO	NO	NO	
2506302	Ö	0.83200E-02			4.4	5.49	727.59	4.02	0.52	NO	NO	ИО	
2506361	0	0.26300E-02		2810400.0	1.5	7.62	449.82	9.11	0.36	NO	NO	NO	
2506405	0	0.36300E-02			0.8	10.67	294.26						
	0							0.00	0.61	NO	NÓ	NO	
2506409	U	0.35400E-02	J0456I.U	20.00448.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO	

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2506481	0	0.25200E-02	578441.0 2852648.0	2.2	13.41	810.93	4.27	0.46	NO	NO	NO
2506641	0	0.20200E-01	579171.0 2868708.0	3.2	9.75	293.15	0.88	0.82	NO	NO	NO
2506642	0	0.17600E-01	579171.0 2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO
2506643	0	0.16700E-01	579171.0 2868708.0	3.2	9.75	294.26	0.00	0.61	NO	NO	NO
2506644	0	0.32300E-02	579171.0 2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO
2506647	0	0.16700E-01	579171.0 2868708.0	3.2	10.67	294.26	0.00	0.61	NO	NO	NO
2506651	0	0.73100E+00	575101.0 2854838.0	1.5	7.62	294.26	0.00	0.61	NO	NO	NO
2506652	0.	0.26600E-02	575101.0 2854838.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2506821	0	0.72500E-01	569481.0 2864498.0	1.5	.0.00	294.26	0.00	0.00	NO	NO	NO
2506822	0	0.13800E-02	569481.0 2864498.0	1.5	- 0.00	294.26	0.00	0.00	NO	NO	NO
2506825	0	0.14500E-02	569481.0 2864498.0	1.5	15.24	294.26	0.00	0.91	NO	NO	NO
2506826	0	0.80900E-01	569481.0 2864498.0	1.5	10.67	294.26	0.00	0.91	NO	NO	NO
2509451	0	0.24500E-02	558651.0 2852178.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2509465	0	0.29800E-01	567081.0 2859888.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO
2509622	0	0.54400E-02	569471.0 2865548.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511043	0	0.72700E-02	573641.0 2863228.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511461	0	0.57600E-07	572471.0 2852418.0	2.5	9.14	294.26	0.00	0.91	NO	NO	NO
2511861	0	0.14400E-02	569201.0 2852958.0	1.6	12.19	294.26	0.00	5.33	NO	NO	NO
2511912	0	0.48900E-03	566901.0 2853838.0	1.5	7.62	294.26	0.00	0.91	NO	NO	NO
2511941	0	0.28800E-04	564451.0 2861488.0	1.5	13.72	294.26	0.00	0.61	NO	NO	NO
2511962	0	0.51800E-02	566641.0 2859468.0	0.8	0.00	294.26	0.00	0.00	NO	NO	NO
2512851	0	0.21000E-02	574361.0 2858278.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO
2512861	0	0.36500E-01	562471.0 2852938.0	1.6	0.00	294.26	0.00	0.00	NO	NO	NO
11101413	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101414	0	0.86400E-02	585302.0 2878437.0	3.0	12.19	519.26	7.01	1.62	NO	NO	NO
11101415	0	0.30500E-02	585302.0 2878437.0	3.0	12.50	519.26	10.67	0.55	NO	ИО	NO
11101416	0	0.11200E-01	585302.0 2878437.0	3.0	5.79	723.15	4.66	0.61	NO	NO	NO
11101417	0	0.98100E-02	585302.0 2878437.0	3.0	5.79	294.26	0.00	0.61	NO	NO	NO
11101419	0	0.33500E-01	585302.0 2878437.0	3.0	5.79	723.15	8.84	0.61	NO	NO	NO
25000310	0	0.85800E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000311	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25000312	0	0.86000E+01	566591.0 2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO
25001310	0	0.32000E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001311	0	0.36000E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO
25001312	0	0.24500E+00	552751.0 2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	МO

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
										<del>-</del>			
25001313	0	0.16100E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	ИО	ИО	NO	
25001314	0	0.14400E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001315	0	0.14700E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001316	0	0.25300E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001317	0	0.20400E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001318	0	0.14100E+01	552751.0	2817360.0	2.1	16:46	752.59	26.12	1.27	ИО	ИО	NO	

25001319	0	0.13400E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001320	0	0.12400E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	.0.13700E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70 .	ИО	NO	NO
25001414	0	0.80800E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO
25001418	0	0.57400E+02	557491.0 2851888.0	1.2	109.42	513.15	49.04	2.44	NO	NO	NO
25002028 <sup>.</sup>	0	0.72600E+02	562271.0 2861538.0	1.5	45.72	294.26	0.00	0.91	NO	NO	NO
25002219	0	0.53100E-01	567301.0 2859638.0	2.0	15.85	294.26	0.00	1.22	NO	NO	NO
25023211	0	0.93600E-04	578031.0 2852578.0	2.2	9.14	394.26	9.08	0.46	NO	NO	NO
25023212	0	0.84900E-01	578031.0 2852578.0	2.2	18.29	810.37	52.24	0.30	ИО	NO	NO
25028110	0	0.20700E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO
25028111	0	0.29400E-01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	ИО	NO
25028112	0	0.20800E+01	570701.0 2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO
25031418	0	0.54200E+00	565921.0 2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO
25031419	0	0.54200E+00	565921.0 2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO
25031420	0	0.87000E+00	565921.0 2843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO
25031421	0	0.56100E-04	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO
25031424	0	0.55100E+00	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
25031425	0	0.55100E+00	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
25047610	0	0.38800E+00	584292.0 2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO
25047611	0	0.36100E+00	584292.0 2847609.0	0.1.	11.58	741.48	29.26	0.46	NO	ИО	ИО
25047613	0	0.94000E-01	584292.0 2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	ИО
25047614	0	0.66600E-01	584292.0 2847609.0	0.1	4.57	663.71	23.81	0.76	ИÒ	. NO	NO
25047615	0	0.25600E-01	584292.0 2847609.0	0.1	4.57.	663.71	23.81	0.76	NO	NO	ИО
25047619	0	0.98200E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO	ИО	NO
25047620	0	0.48300E-02	584292.0 2847609.0	0.1	7.01	608.15	26.09	0.70	NO	NO	NO
25052010	0	0.34600E-01	565901.0 2825260.0	1.5	6.40	616.48	0.00	0.84	NO	NO	NO
25052013	0	0.30800E-01	565901.0 2825260.0	1.5	6.40	663.71	28.13	0.70	ИО	NO	ИО
77700104	0	0.37800E+00	560461.0 2854738.0	1.5	9.14	294.26	0.00	1.07	NO	ИО	ИО
77702503	0	0.20300E+00	562801.0 2865838.0	1.2	0.00	294.26	0.00	0.00	NO	ИО	ИО
77752121	0	0.46800E+00	557311.0 2880437.0	1.5	8.23	408.15	28.59	0.99	NO	ИО	ИО
77752211	0	0.48400E+00	558081.0 2868748.0	1.5	9.14	294.26	0.00	0.91	NO	NO	NO

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

```
ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 1100023 , 1100024 , 1120952 , 1121411 , 1121492 , 1123701 , 1123702 , 1123703 , 1123704 , 1123704 , 1123992 , 1124101 , 1124102 , 1127045 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500037 , 2500039 , 2500051 , 2500138 , 2500138 , 2500139 , 2500148 , 2500204 , 2500221 , 2500223 , 2500224 , 2500227 , 2501572 , 2501573 , 2501574 , 2501575 , 2501576 , 2501578 , 2502052 , 2502328 , 2502329 , 2502451 , 2502452 , 2502501 , 2502521 , 2502578 , 2502578 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503371 , 2503372 , 2503372 , 2503481 , 2503482 , 2503483 , 2503484 , 2503612 , 2503783 , 2503902 , 2503903 , 2503931 , 2503933 ,
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# 2503937 , 2503938 , 2504074 , 2504223 , 2504604 , 2504701 , 2504763 , 2504764 , 2504766 , 2504767 , 2504769 , 2504793 , 2504795 , 2504796 , 2504796 , 2504798 , 2504882 , 2504883 , 2504884 , 2504885 , 2505051 , 2505105 , 2505201 , 2505202 , 2505203 , 2505206 , 2505206 , 2505207 , 2505208 , 2505209 , 2505292 , 2505534 , 2505871 , 2505937 , 2505938 , 2506002 , 2506003 , 2506004 , 2506005 , 2506007 , 2506008 , 2506031 , 2506032 , 2506111 , 2506113 , 2506151 , 2506155 , 2506161 , 2506231 , 2506232 , 2506241 , 2506302 , 2506301 , 2506405 , 2506409 , 2506401 , 2506641 , 2506642 , 2506643 , 2506644 , 2506647 , 2506651 , 2506652 , 2506821 , 2506826 , 2509461 , 2509465 , 2509465 , 2509622 , 2511043 , 2511461 , 2511861 , 2511912 , 2511941 , 2511962 , 2512851 , 2512861 , 11101413 , 11101414 , 11101415 , 11101416 , 11101417 , 11101419 , 25000310 , 25000311 , 25000312 , 25001321 , 25001311 , 25001312 , 25001313 , 25001313 , 25001314 , 25001315 , 25001316 , 25028112 , 25031418 , 25031419 , 25031420 , 25031424 , 25031424 , 25031425 , 25047610 , 25047611 , 25047613 , 25047614 , 25047615 , 25047619 , 25047620 , 25052010 , 25052013 , 77700104 , 77702503 , 77752121 , 77752211

\*\*\* THE SUMMARY OF HIGHEST 1-HR RESULTS \*\*\*

\*\* CONC OF CO IN MICROGRAMS/M\*\*3

		•	** CONC OF CO	IN MICROGRAMS/M**	3	* *	
GROUP I	D 	AVE	DAT		EPTOR (XR, YR, ZELE	V, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL			6892.06152 ON 05091 6886.65186 ON 05102	921: AT ( 565477.06 918: AT ( 565477.06		1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC
			*** THE S	SUMMARY OF HIGHEST 8	B-HR RESULTS ***		
			** CONC OF CO	IN MICROGRAMS/M**	·3	**	
GROUP I	D 	AVE	DAT		CEPTOR (XR, YR, ZELE	V, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
ALL	HIGH 1ST H	IGH VALUE IS	5382.79639 ON 05092	 2124: AT ( 565475.88	3, 2824956.75,	1.50, 1.50,	0.00) DC
				,		1.50, 1.50,	0.00) DC

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\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 03/31/09 at 16:53:21 \*\*\*

Input File - D:\Documents and Settings\saj\Desktop\INGENÇO MODEL\Increment and NAAQS 2009 03 31\_2001\_NOXPTE.DTA

Output File - D:\Documents and Settings\saj\Desktop\INGENCO MODEL\Increment and NAAQS 2009 03 31\_2001\_NOXPTE.LST

Met File - D:\Documents and Settings\saj\Desktop\INGENCO MODEL\MIAMIA01.SFC

Number of sources - 106 Number of source groups - 107 Number of receptors - 3417

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.18270E+01	565854.1 28	325309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	ИО	
40FEET2	0	0.18270E+01	565866.2 28	325309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.18270E+01 -	565854.1 28	325292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.18270E+01	565866.2 28	325292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2505201	0	0.26510E+01	565901.0 28	325260.0	15	12.19	688.71	20.97	0.46	NO	NO	NO	_
25052013	0	0.40100E+01	565901.0 28	325260.0	1.5	6.40	616.48	18.90	0.84	NO	NO	NO	
2506232	0	0.52100E+00	565511.0 28	324950.0	1.5	20.65	1273.00	20.00	1.09	NO	ИО	ИО	
1120952	0	0.71900E+01	567801.0 28		1.5	6.40	427.59	23.17	1.16	NO	ИО	ИО	
1124101	0	0.46400E+01	555101.0 28		3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.70000E+01	555101.0 28		3.5	6.10	294.26	0.00	0.30	NO	NO	NO	
2500013	0	0.23700E+02	569741.0 28		4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.40900E+02	569741.0 28		4.4	45.72	413.71	18.50	4.27	NO	ИО	NO	•
2500031	0	0.25700E+03	566591.0 28		1.5	121.92	408.15	24.51	5.52	NO	ИО	NO	
25000310	0	0.10000E+02	566591.0 28		1.5	39.93	294.26	17.98	5.79	NO	ИО	NO	
25000311	0	0.10000E+02	566591.0 28	313050.0	1.5	39.93	367.59	17.98	5.79	NO	ИО	NO	
25000312	0	0.10000E+02	566591.0 28		1.5	39.93	367.59	17.98	5.79	NO	ИО	NO	
2500032	0	0.25700E+03	566591.0 28	313050.0	1.5	121.92	408.15	23.47	5.52	NO	ИО	ИО	
2500033	0	0.14900E+02	566591.0 28		1.5	4.27	663.71	44.41	0.56	NO	NO	NO	
2500035	0	0.22600E+01	566591.0 28		1.5	6.10	663.71	44.41	0.56	ИО	ИО	ИО	
2500036	0	0.36300E+01	566591.0 28		1.5	3.96	814.26	53.10	0.20	NO	ИО	ИО	
2500037	0 ·	0.13900E+01	566591.0 28	313050.0	1.5	2.44	683.15	66.51	0.10	NO	ИО	NO	
2500039	0	0.10000E+02	566591.0 28		1.5	39.93	367.59	17.98	5.79	NO	ИО	NO	
2500051	0	0.12100E+01	568801.0 28		1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
25001310	0	0.97900E+00	552751.0 28	317360.0	2.1	18.59	367.59	34.66	0.71	NO	ΝО	NO	
25001311	0	0.26800E+00	552751.0 28		2.1	16.15	488.71	33.62	0.82	NO	ИÒ	NO	
25001312	0	0.19600E+00.	552751.0 28		2.1	16.15	488.71	33.62	0.82	NO	NO	, NO	
25001313	0	0.29700E+00	552751.0 28		2.1	15.24	755.37	63.28	0.52	NO	ИО	NO	
25001314	0	0.43800E+00	552751.0 28	317360.0	2.1	15.24	755.37	63.28	0.52	ИО	NO	NO	

25001315	0	0.44900E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001316	0	0.16400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001317	0	0.19000E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001318	0	0.43100E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001319	0	0.40900E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
2500132	0	0.15500E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
25001320	0.	0.37800E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.41900E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
2500133	0	0.16700E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.56100E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.54400E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	ИО
25001414	0	0.99500E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO

	NUMBER	EMISSION RATE	Ξ		BASE	STACK	STACK	STACK	STACK	BLDG		CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
											- <b></b> ~		
05001410	•	0.01700=.00		0051000		100 10	512.15	40.04	2 44				
25001418	0	0.81700E+02				109.42	513.15		2.44 4.57	NO	NO	NO NO	
2500148	0	0.32900E+02		2851888.0		41.76	399.82			NO	NO		
25002021	0	0.93700E+00		2861538.0		6.10	505.37		0.69	NO	NO	NO	
25002028	0	0.90800E+02		2861538.0		45.72	294.26		0.91	NO	МО	NO	
2500204	0	0.27800E+02		2861538.0		60.96	422.04		2.29	NO	NO	NO	
2500206	0	0.74700E+02			1.5	60.96	482.04	10.97	4.27	NO	NO	NO	
25023211	0	0.14200E-03		2852578.0	2.2	9.14	394.26		0.46	ИО	NO	ИО	
25023212	0	0.39400E+00		2852578.0	2.2	18.29	810.37		0.30	ИО	ИО	ИО	
2502326	0	0.25200E+00		2852578.0		13.11	1366.48	10.97	0.52	NO	ИО	NO	
2502328	0	0.82600E-01	578031.0	2852578.0		17.07	502.04		0.61	NO	ИО	NO	
2502329	0	0.79200E-01	578031.0	2852578.0		17.07	502.04		0.61	NO	NO	NO	
2502501	0	0.63300E-02	562901.0	2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.39200E+00	557001.0	2869138.0	3.0	7.62	294.26	0.00	0.76	ИО	NO	NO	
2502578	0	0.23400E+01	550171.0	2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.84100E+00	570701.0	2856598.0	. 1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
25028110	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	ИО	NO	NO	
25028111	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028112	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2502816	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502819	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2503141	0	0.26600E+01	565921.0	2843169.0	3.0.	8.53	394.26	0.00	0.30	NO	NO	ИО	
25031410	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031411	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031412	Ō	0.14100E+02		2843169.0		8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.55500E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031419	Ö	0.55500E+00		2843169.0		9.75	650.93	7.89	0.30	NO	NO	NO	
25031420	Ō	0.40400E+00	+ - +	2843169.0		9.75	652.59	3.63	0.46	NO	NO	NO	

25031421	0	0.26100E-03	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO
25031423	0	0.47300E+01	565921.0 2843169.0	3.0	5.49	746.48	105.64	0.20	NO	NO	NO
25031424	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
25031425	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
2503143	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	NO
2503146	0	0.82300E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503147	0	0.23700E+01	565921.0 2843169.0	3.0	0.00	349.82	50.60	0.91	NO	NO	NO
2503149	0	0.14100E+02	565921.0 2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	ИО
2503481	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT	Х	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
			•										
2503483	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503902	0	0.37400E-02	570501.0	2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO	
2503903	0	0.51900E-02	570501.0	2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO	
2503931	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO	
2503933	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO	
2503937	0	0.10500E+01	570611.0	2853218.0	2.5	2.44	477.59	. 0.00	0.15	NO	NO	NO	
2503938	0	0.11300E+00	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	ИО	ИО	NO	
2504701	0	0.10800E+02	579561.0	2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO	
25047610	0	0.28800E+01	584292.0		0.1	11.58	741.48	29.26	0.46	NO	NO	ИО	
25047613	0	0.39600E+01	584292.0		0.1	4.57	663.71	23.81	0.76	NO	NO	NO	
2504763	0	0.77700E-02	584292.0		0.1	10.67	741.48	31.39	0.21	NO	NO	ИО	
2504764 <sub>.</sub>	0	0.36100E+00	584292.0	2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	ИО	
2504766	0	0.12400E-01	584292.0		0.1	10.67	741.48	25.91	0.37	ИО	NO	NO	
2505871	0	0.13600E+01	563501.0		1.0	12.50	410.93	22.86	1.37	ИО	NO	NO	
2506003	0	0.66100E+01	584452.0		3.2	2.74	663.71	16.52	0.91	ИО	NO	ИО	
2506081 <	0	0.52200E+00	563811.0		1.8	4.88	422.04	23.77	0.67	ИО	NO	ИО	
2506082	0	0.16700E-01	563811.0		1.8	7.62	294.26	0.00	0.91	ИО	ИО	ио .	
2506111	0	0.97600E+00	570411.0		2.7	11.28	294.26	0.00	1.22	NO	NO	ИО	
2506113	0	0.63300E-02	570411.0		2.7	0.00	294.26	0.00	0.00	ИО	ИО	NO	
2506141	0	0.50400E+01	562401.0		1.5	0.00	294.26	0.00	0.00	ИО	NO	NO	
2506151	0	0.28800E-03	565041.0		1.5	15.24	294.26	0.00	0.15	ИО	ИО	NO	
2506155	0	0.10300E+01	565041.0		1.5	16.76	294.26	0.00	3.96	ИО	ИО	ИО	
2506241	0	0.13600E+01	569681.0		1.5	9.14	409.26	18.90	1.40	NO	ИО	NO	
2511962		0.13500E+01			0.8	0.00	294.26	0.00	0.00	NO	NO	ИО	
77702503	0	0.94000E+00	562801.0	2865838.0	1.2	0.00	294.26	0.00	0.00	NO	NO	ИО	

<sup>\*\*\*</sup> SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2505201 , 25052013 , 2506232 , 1120952 , 1124101 , 1124102 , 2500013 , 2500014 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001316 , 25001317 , 25001318 , 25001319 , 2500132 , 25001320 , 25001321 , 2500133 , 2500133 , 2500138 , 2500139 , 25001414 , 25001418 , 2500148 , 25002021 , 25002028 , 2500204 , 2500206 , 25002321 , 25002321 , 25002326 , 25002328 , 25002329 , 2500201 , 2500251 , 2500258 , 2500201 , 250

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL ( 1 YRS) RESULTS \*\*\*

\*\* CONC OF NOXPTE IN MICROGRAMS/M\*\*3

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

ALL 1ST HIGHEST VALUE IS 21.25110 AT ( 565466.06, 2825345.50, 1.50, 1.50, 0.00) DC

\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 03/31/09 at 16:52:39 \*\*\*

Input File - D:\Documents and Settings\slk\Desktop\Ingenco\New Folder\increment and naaqs 2009 0331\_2002\_NOXPTE\_01.DTA

Output File - D:\Documents and Settings\slk\Desktop\Ingenco\New Folder\increment and naaqs 2009 0331\_2002\_NOXPTE\_01.LST

Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA02.SFC

Number of sources - 106
Number of source groups - 107
Number of receptors - 3417

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	Х	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.18270E+01	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.18270E+01	565866.2	2825309.2	11.3	12.19	741.48	.45.84	0.41	YES	NO	NO	
40FEET3	0	0.18270E+01	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.18270E+01	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2505201	0	0.26510E+01	565901.0	2825260.0	1.5	12.19	688.71	20.97	0.46	NO	NO	NO	
25052013	0	0.40100E+01	565901.0	2825260.0	1.5	6.40	616.48	18.90	0.84	NO	NO	NO	
2506232	0	0.52100E+00	565511.0	2824950.0	1.5	20.65	1273.00	20.00	1.09	NO	NO	NO	
1120952	0	0.71900E+01	567801.0	2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO	
1124101	0	0.46400E+01	555101.0	2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.70000E+01	555101.0	2882277.0	3.5	6.10	294.26	0.00	0.30	NO	ИО	NO	
2500013	0	0.23700E+02	569741.0	2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.40900E+02	569741.0	2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NÒ	NO	
2500031	0	0.25700E+03	566591.0	2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
25000310	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	294.26	17.98	5.79	NO	NO	NO	
25000311	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500032	0	0.25700E+03	566591.0	2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500033	0	0.14900E+02	566591.0	2813050.0	1.5	4.27	663.71	44.41	0.56	NO	NO	NO	
2500035	0	0.22600E+01	566591.0	2813050.0	1.5	6.10	663.71	44.41	0.56	· NO	NO	NO	
2500036	0	0.36300E+01	566591.0	2813050.0	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.13900E+01	566591.0	2813050.0	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.12100E+01	568801.0	2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
25001310	0	0.97900E+00	552751.0	2817360.0	2.1	18.59	367.59	34.66	0.71	NO	NO	NO	
25001311	0	0.26800E+00	552751.0		2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001312	0	0.19600E+00	552751.0	2817360.0	2.1	16.15	488.71.	33.62	0.82	NO	NO	NO	
25001313	0	0.29700E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NÓ	NO	NO	
25001314	Ó	0.43800E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	

25001315	0	0.44900E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001316	0	0.16400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28 .	0.52	NO	NO	NO
25001317	0	0.19000E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001318	0	0.43100E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001319	0	0.40900E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
2500132	0	0.15500E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
25001320	0	0.37800E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.41900E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
2500133	0	0.16700E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.56100E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.54400E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001414	0	0.99500E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO

\*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
						<del>-</del>							
25001418		0.81700E+02				109.42	513.15	49.04	2.44	NO	NO	NO	
2500148		0.32900E+02		2851888.0		41.76	399.82	7.62	4.57	NO	NO	NO	
25002021	_	0.93700E+00		2861538.0		6.10	505.37	27.86	0.69	NO	NO	NO	
25002028	.0	0.90800E+02	562271.0	2861538.0	1.5	45.72	294.26	0.00	0.91	NO	NO	NO	
2500204		0.27800E+02		2861538.0		60.96	422.04	10.06	2.29	NO	NO	NO	
2500206	0	0.74700E+02	562271.0	2861538.0	1.5	60.96	482.04	10.97	4.27	NO	NO	NO	
25023211	0	0.14200E-03	578031.0	2852578.0	2.2	9.14	394.26	9.08	0.46	NO	NO	NO	
25023212	0	0.39400E+00	578031.0	2852578.0	2.2	18.29	810.37	52.24	0.30	NO	NO	NO	
2502326	0	0.25200E+00	578031.0	2852578.0	2.2	13.11	1366.48	10.97	0.52	NO	NO	NO	
2502328	0	0.82600E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502329	0	0.79200E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502501	0	0.63300E-02	562901.0	2849638.0	. 1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.39200E+00	557001.0	2869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO	
2502578	0	0.23400E+01	550171.0	2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.84100E+00	570701.0	2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
25028110	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028111	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028112	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2502816	0.	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502819	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2503141	0	0.26600E+01	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
25031410	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031411	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031412	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.55500E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031419	0	0.55500E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031420	0	0.40400E+00	565921.0	2843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO	

25031421	0	0.26100E-03	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO
25031423	0	0.47300E+01	565921.0 2843169.0	3.0	5.49	746.48	105.64	0.20	NO	NO	NO
25031424	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
25031425	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
2503143	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	NO
2503146	0	0.82300E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503147	0	0.23700E+01	565921.0 2843169.0	3.0	0.00	349.32	50.60	0.91	NO	NO	NO
2503149	0	0.14100E+02	565921.0 2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO
2503481	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO

\*\*\* POINT SOURCE DATA \*\*\*

SOURCE	NUMBER PART. CATS.	EMISSION RAT	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2503483	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503902	0	0.37400E-02	570501.0	2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO	·
2503903	0	0.51900E-02	570501.0	2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO	
2503931	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO	
2503933	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	NO	
2503937	0	0.10500E+01	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO	
2503938	0	0.11300E+00	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO	
2504701	0	0.10800E+02	579561.0	2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO	
25047610	-	0.28800E+01	584292.0	2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	0	0.39600E+01	584292.0	2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	NO	
2504763	0	0.77700E-02	584292.0	2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	ŃО	
2504764	0	0.36100E+00	584292.0	2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO	
2504766	0	0.12400E-01	584292.0	2847609.0	0.1	10.67	741.48	25.91	0.37	NO	NO	NO	
2505871	0	0.13600E+01	563501.0	2806740.0	1.0	12.50	410.93	22.86	1.37	NO	NO	NO	
2506003	0	0.66100E+01	584452.0		3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506081	0	0.52200E+00	563811.0	2851978.0	1.8	4.88	422.04	23.77	0.67	NO	NO	NO	
2506082	0	0.16700E-01	563811.0	2851978.0	1.8	7.62	294.26	0.00	0.91	NO	NO	NO	
2506111	0	0.97600E+00	570411.0		2.7	11.28	294.26	0.00	1.22	NO	NO	NO	
2506113	0	0.63300E-02	570411.0		2.7	0.00	294.26	0.00	0.00	NO	NO	NO	
2506141	0	0.50400E+01	562401.0		1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506151	0	0.28800E-03	565041.0		1.5	15.24	294.26	0.00	0.15	NO	NO	NO	
2506155	0	0.10300E+01	565041.0 2		1.5	16.76	294.26	0.00	3.96	NO	NO	NO	
2506241	0	0.13600E+01	569681.0		1.5	9.14	409.26	18.90	1.40	NO	NO	NO	
2511962	0	0.13500E+01	566641.0		0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
77702503	0	0.94000E+00	562801.0	2865838.0	1.2	0.00	294.26	0.00	0.00	NO	NO	NO	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2505201 , 25052013, 2506232 , 1120952 , 1124101 , 1124102 , 2500013 , 2500014 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001316 , 25001317 , 25001318 , 25001319 , 2500132 , 25001320 , 25001321 , 2500133 , 2500138 , 2500139 , 25001414 , 25001418 , 2500148 , 2500201 , 25002028 , 2500204 , 2500206 , 2502321 , 25023212 , 2502326 , 2502328 , 2502329 , 2502501 , 2502521 , 2502578 , 2502811 , 25028110 , 2502811 , 25028112 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 25031410 , 25031411 , 25031412 , 25031418 , 25031419 , 25031420 , 25031421 , 25031423 , 25031424 , 25031425 , 2503143 , 2503144 , 2503146 , 2503147 , 2503149 , 2503481 , 2503482 , 2503483 , 2503484 , 2503902 , 2503903 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 25047610 , 25047613 , 2504763 , 2504764 , 2504766 , 2505871 , 2506003 , 2506081 , 2506082 , 2506111 , 2506113 , 2506141 , 2506151 , 2506155 , 2506241 , 2511962 , 77702503

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL ( 1 YRS) RESULTS \*\*\*

\*\* CONC OF NOXPTE IN MICROGRAMS/M\*\*3

										NETWO:	RK	
GROUP II	ס	AVERAGE CONC		RECEPTOR	(XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	OF TYPE	GRID-ID	
												. –
<b>Δ</b> .Τ.Τ.	1ST HIGHEST VALUE IS	5 24 06512 AT (	565464	88. 28253	94 00.		1.50.		1.50.	0.001	DC.	

\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 03/31/09 at 17:09:22 \*\*\*

Input File - D:\Documents and Settings\jfl\Desktop\Ingenco\increment and naaqs 2009 0331\_2003\_NOXPTE\_01.DTA.

Output File - D:\Documents and Settings\jfl\Desktop\Ingenco\increment and naaqs 2009 0331\_2003\_NOXPTE\_01.LST

Met File - D:\Documents and Settings\jfl\Desktop\Ingenco\MIAMIA03.SFC

Number of sources - 106
Number of source groups - 107
Number of receptors - 3417

# \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION. RAT (GRAMS/SEC)	X	(METERS)				STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	-	EMIS RATE SCALAR VARY BY
									<del>-</del>				
40FEET1	0	0.18270E+01	565854.1°	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.18270E+01		2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.18270E+01	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.18270E+01	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2505201	0	0.26510E+01	565901.0	2825260.0	1.5	12.19	688.71	20.97	0.46	NO	NO	NO	
25052013	0	0.40100E+01	565901.0	2825260.0	1.5	6.40	616.48	18.90	0.84	NO	NO	NO	
2506232	0	0.52100E+00	565511.0	2824950.0	1.5	20.65	1273.00	20.00	1.09	NO	NO	NO	
1120952	0	0.71900E+01	567801.0	2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO	
1124101	0	0.46400E+01	555101.0	2882277.0	3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.70000E+01	555101.0	2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	ИО	
2500013	0	0.23700E+02	569741.0	2834789.0	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.40900E+02	569741.0	2834789.0	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.25700E+03	566591.0	2813050.0	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
25000310	0	0.10000E+02		2813050.0		39.93	294.26	17.98	5.79	NO	NO	ИО	
25000311	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.10000E+02		2813050.0	1.5	39.93	367.59	17.98	5.79	ИО	NO	ИО	
2500032	0	0.25700E+03		2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	ИО	
2500033	0	0.14900E+02		2813050.0	1.5	4.27	663.71	44.41	0.56	NO	NO	NO	
2500035	0	0.22600E+01	566591.0	2813050.0	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.36300E+01	566591.0		1.5	3.96	814.26	53.10	0.20	NO	NO	ИО	
2500037	0	0.13900E+01		2813050.0	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.10000E+02	566591.0		1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.12100E+01		2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
25001310	0	0.97900E+00		2817360.0	2.1	18.59	367.59	34.66	0.71	NO.	NO.	NO	
25001311	0	0:26800E+00	552751.0		2.1	16.15	488.71	33.62	0.82	NO.	NO	NO	
25001312	0	0.19600E+00		2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001313	0	0.29700E+00		2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001314	0	0.43800E+00	552751.0	2817360.0	2.1	1524	755.37	63.28	0.52	NO	NO	NO	

25001315	0	0.44900E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001316	0	0.16400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001317	0	0.19000E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001318	0	0.43100E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001319	0	0.40900E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
2500132	0	0.15500E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	ИО
25001320	0	0.37800E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.41900E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
2500133	0	0.16700E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.56100E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.54400E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NÔ	NO
25001414	0	0.99500E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
			555404 0			100 10	510 15	40.04	2.44				
25001418	0	0.81700E+02	557491.0		1.2	109.42	513.15	49.04	2.44	NO	NO	NO	
2500148	0	0.32900E+02	557491.0		1.2	41.76	399.82	7.62	4.57	NO	NO	NO	
25002021	0	0.93700E+00	562271.0		1.5	6.10	505.37	27.86	0.69	NO	NO	NO	
25002028	0	0.90800E+02	562271.0		1.5	45.72	294.26	0.00	0.91	NO	NO	NO	
2500204	0	0.27800E+02	562271.0	-	1.5 1.5	60.96	422.04	. 10.06	2.29	NO	NO	NO	
2500206	0	0.74700E+02 0.14200E-03	562271.0 578031.0		2.2	60.96 9.14	482.04 394.26	10.97	4.27 0.46	NO	NO NO	NO NO	
25023211	0		578031.0		2.2	18.29	810.37	9.08 52.24	0.46	NO NO			
25023212	0	0.39400E+00 0.25200E+00	578031.0		2.2	13.11	1366.48	10.97	0.30	NO	NO NO	NO NO	
2502326	0		578031.0		2.2	17.07		7.83		NO NO	NO NO		
2502328	0	0.82600E-01			2.2		502.04	7.83	0.61 0.61	_		NO	
2502329	0	0.79200E-01	578031.0			17.07	502.04	-		NO	NO	NO	
2502501	0	0.63300E-02	562901.0		1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.39200E+00	557001.0		3.0	7.62	294.26	0.00	0.76	ИО	NO	NO	
2502578	0	0.23400E+01	550171.0		1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.84100E+00		2856598.0	1.5	. 22.86	313.71	0.73	0.91	NO	NO	NO	
25028110	0	0.14100E+02	570701.0		1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028111	0	0.14100E+02	570701.0		1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028112	0	0.14100E+02	570701.0		1.5	8.84	608.15	45.08	0.53	NO	NO	ИО	
2502816	0	0.73500E+01	570701.0		1.5	8.23	663.71	66.11	0.46	NO	ИО	МО	
2502817	0	0.73500E+01		2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.73500E+01		2856598.0	1.5	8.23	663.71	66.11	0.46	ИО	NO	ИО	
2502819	0	0.14100E+02		2856598.0	1.5	8.84	608.15	45.08	0.53	ИО	NO	NO	
2503141	0	0.26600E+01		2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	ИО	
25031410	0	0.14100E+02		2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	ИО	
25031411	0	0.14100E+02		2843169.0	3.0	8.84	608.15	45.08	0.53	NO	ИО	NO	
25031412	0	0.14100E+02		2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.55500E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	ИО	ИО	
25031419	0	0.55500E+00	565921.0	2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031420	0	0.40400E+00	565921.0	2843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO	

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25031421	0	0.26100E-03	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	ΝО
25031423	0	0.47300E+01	565921.0 2843169.0	3.0	5.49	746.48	105.64	0.20	NO	NO	NO
25031424	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
25031425	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
2503143	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	NO	NO	ИО
2503146	0	0.82300E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503147	0	0.23700E+01	565921.0 2843169.0	3.0	0.00	349.82	50.60	0.91	NO	NO	NO
2503149	0	0.14100E+02	565921.0 2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO
2503481	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO

+++ POINT SOURCE DATA +++

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	E X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2503483	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503902	0	0.37400E-02	570501.0	2854138.0	2.2	8.53	294.26	0.00	0.91	NO	NO	NO	
2503903	0	0.51900E-02	570501.0	2854138.0	2.2	9.14	294.26	0.00	0.91	NO	NO	NO	
2503931	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO	
2503933	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	ИО	
2503937	0	0.10500E+01	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO	
2503938	0	0.11300E+00	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	ИО	NO	NO	
2504701 ,	0	0.10800E+02	579561.0	2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	NO	
25047610	0	0.28800E+01		2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	Ο.	0.39600E+01		2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	ИО	
2504763	0	0.77700E-02		2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	ИО	
2504764	0	0.36100E+00		2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	ИО	
2504766	0	0.12400E-01		2847609.0	0.1	10.67	741.48	25.91	0.37	NO	ИО	ИО	
2505871	0	0.13600E+01		2806740.0	1.0	12.50	410.93	22.86	1.37	NO	NO	NO	
2506003	0	0.66100E+01		2866808.0	3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506081	0	0.52200E+00		2851978.0	1.8	4.88	422.04	23.77	0.67	NO	NO	NO	
2506082	0	0.16700E-01		2851978.0	1.8	7.62	294.26	0.00	0.91	NO	NO	NO	•
2506111	0	0.97600E+00		2852428.0	2.7	11.28	294.26	0.00	1.22	NO	ЙО	NO	
2506113	0	0.63300E-02		2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	ИО	
2506141	0	0.50400E+01		2816240.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506151	0	0.28800E-03		2859858.0	1.5	15.24	294.26	0.00	0.15	NO	NO	NO	
2506155	0	0.10300E+01		2859858.0	1.5	16.76	294.26	0.00	3.96	NO	NO	NO	
2506241	0	0.13600E+01		2868158.0	1.5	9.14	409.26	18.90	1.40	NO	NO	NO	
2511962	0	0.13500E+01		2859468.0	0.8	0.00	294.26	0.00	0.00	NO	NO	ИО	
77702503	0	0.94000E+00	562801.0	2865838.0	1.2	0.00-	294.26	0.00	. 0.00	NO	ИО	NO	

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2505201 , 25052013 , 2506232 , 1120952 , 1124101 , 1124102 , 2500013 , 2500014 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001315 , 25001316 , 25001317 , 25001318 , 25001319 , 2500132 , 25001320 , 25001321 , 2500133 , 2500138 , 2500139 , 25001414 , 25001418 , 2500148 , 25002021 , 25002028 , 2500204 , 2500206 , 25023211 , 25023212 , 2502326 , 2502328 , 2502329 , 2502501 , 2502521 , 2502578 , 2502811 , 2502810 , 2502811 , 25028112 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 25031410 , 25031411 , 25031412 , 25031418 , 25031419 , 25031420 , 25031421 , 25031423 , 25031424 , 25031425 , 2503143 , 2503144 , 2503146 , 2503147 , 2503149 , 2503481 , 2503482 , 2503483 , 2503484 , 2503902 , 2503903 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 25047610 , 25047613 , 2504763 , 2504764 , 2504766 , 2505871 , 2506003 , 2506081 , 2506082 , 2506111 , 2506113 , 2506141 , 2506151 , 2506155 , 2506241 , 2511962 , 77702503

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL ( 1 YRS) RESULTS \*\*\*

\*\* CONC OF NOXPTE IN MICROGRAMS/M\*\*3

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

ALL 1ST HIGHEST VALUE IS 19.87892 AT ( 565463.62, 2825442.75, 1.50, 1.50, 0.00) DC

the plant of the second

\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 03/31/09 at 17:13:08 \*\*\*

Output File - D:\Documents and Settings\slk\Desktop\Ingenco\Class II Final Run\Final\increment and naaqs 2009 0331\_2004 NOXPTE 01.LST

Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA04.SFC

Number of sources - 106 Number of source groups - 107 Number of receptors - 3417

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	X	Y (METERS) ~	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.18270E+01	565854.1	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.18270E+01	565866.2	2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.18270E+01	565854.1	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEE <b>T</b> 4	0	0.18270E+01	565866.2	2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2505201	0	0.26510E+01	565901.0	2825260.0	1.5	12.19	688.71	20.97	0.46	NO	NO	NO	
25052013	0	0.40100E+01	565901.0	2825260.0	1.5	6.40	616.48	18.90	0.84	NO	NO	NO	
2506232	0 .	0.52100E+00	565511.0	2824950.0	1.5	20.65	1273.00	20.00	1.09	NO	NO	NO	
1120952	0	0.71900E+01	567801.0	2872738.0	1.5	6.40	427.59	23.17	1.16	NO	NO	NO	
1124101	0	0.46400E+01	555101.0		3.5	8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.70000E+01	555101.0	2882277.0	3.5	6.10	294.26	0.00	0.30	NO	NO	NO	
2500013	0	0.23700E+02	569741.0		4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.40900E+02	569741.0		4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.25700E+03	566591.0		1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
25000310	0	0.10000E+02	566591.0		1.5	39.93	294.26	17.98	5.79	NO	NO	NO	
25000311	0	0.10000E+02	566591.0		1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500032	0	0.25700E+03	566591.0	2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500033	0	0.14900E+02	566591.0		1.5	4.27	663.71	44.41	0.56	NO	NO	NO	
2500035	0	0.22600E+01	566591.0		1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	. 0	0.36300E+01	566591.0	2813050.0	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.13900E+01	566591.0		1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.12100E+01	568801.0	2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
25001310	0	0.97900E+00	552751.0	2817360.0	2.1	18.59	367.59	34.66	0.71	NO	NO	NO	
25001311	0	0.26800E+00	552751.0		2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001312	0	0.19600E+00	552751.0		2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001313	0	0.29700E+00	552751.0		2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001314	0	0.43800E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO.	NO	NO	

25001315	0	0.44900E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001316	0	0.16400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001317	0	0.19000E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	ИО	ИО	NO
25001318	0	0.43100E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
25001319	0	0.40900E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
2500132	0	0.15500E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	ИО	ИО	ИО
25001320	0	0.37800E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.41900E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
2500133	0	0.16700E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.56100E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.54400E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001414	0	0.99500E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

		EMISSION RAT			BASE	STACK	STACK	STACK	STACK	BLDG	URBAN		EMIS RATE
SOURCE		(GRAMS/SEC)			ELEV.	HEIGHT	TEMP.		DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
25001418	0	0.81700E+02	557491.0 2	851888.0	1.2	109.42	513.15	49.04	2.44	NO	NO	NO	
2500148	0	0.32900E+02	557491.0 2	851888.0	1.2	41.76	399.82	. 7.62	4.57	NO	NO	NO	
25002021	0	0.93700E+00	562271.0 2	861538.0	1.5	6.10	505.37	27.86	0.69	NO	NO	NO	
25002028	0	0.90800E+02	562271.0 2	861538.0	1.5	45.72	294.26	0.00	0.91	NO	NO	NO	
2500204	0	0.27800E+02	562271.0 2	861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO	
2500206	0	0.74700E+02	562271.0 2	861538.0	- 1.5	60.96	482.04	10.97	4.27	NO	NO	NO	
25023211	0	0.14200E-03	578031.0 2	852578.0	2.2	9.14	394.26	9.08	0.46	NO	NO	NO	
25023212	0	0.39400E+00	578031.0 2	852578.0	2.2	18.29	810.37	52.24	0.30	NO	NO	NO	
2502326	0	0.25200E+00	578031.0 2	852578.0	2,2	13.11	1366.48	10.97	0.52	NO	NO	NO	
2502328	0	0.82600E-01	578031.0 2	852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502329	0	0.79200E-01	578031.0 2	852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
2502501	0	0.63300E-02	562901.0 2	849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
2502521	0	0.39200E+00	557001.0 2	869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO	
2502578	0	0.23400E+01	550171.0 2	842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2502811	0	0.84100E+00	570701.0 2	856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
25028110	0	0.14100E+02	570701.0 2	856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
25028111	0	0.14100E+02	570701.0 2	856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO.	
25028112	0	0.14100E+02	570701.0 2	856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
2502816	0	0.73500E+01	570701.0 2	856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502817	0	0.73500E+01	570701.0 2	856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
2502818	0	0.73500E+01	570701.0 2	856598.0	1.5	8.23	663.71	66.11	0.46	NO	ИО	NO	
2502819	0	0.14100E+02	570701.0 2	856598.0	1.5	8.84	608.15	45.08	0.53	NO	ИО	NO	
2503141	0	0.26600E+01	565921.0 2	843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
25031410	0	0.14100E+02	565921.0 2	843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	МО	
25031411	0	0.14100E+02	565921.0 2	843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031412	0	0.14100E+02	565921.0 2	843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
25031418	0	0.55500E+00	565921.0 2	843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
25031419	0	0.55500E+00	565921.0 2	843169.0	3.0	9.75	650.93	7.89	0.30	NO	ИО	ИО	
25031420	0	0.40400E+00	565921.0 2	843169.0	3.0	9.75	652.59	3.63	0.46	NO	NO	NO	

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25031421	0	0.26100E-03	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	ИО	NO
25031423	0	0.47300E+01	565921.0 2843169.0	3.0	5.49	746.48	105.64	0.20	NO	NO	NO
25031424	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	ИО	NO	ИО
25031425	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	ИО	ИО
2503143	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	МО	ИО
2503144	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	ИО	ИО	ИО
2503146	0	0.82300E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	ИО	NO
2503147	0	0.23700E+01	565921.0 2843169.0	3.0	0.00	349.82	50.60	0.91	NO	ИО	NO
2503149	0	0.14100E+02	565921.0 2843169.0	3.0	8.84	608.15	45.08	0.53	NO	ИО	NO
2503481	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO
2503482	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO

\*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	PART.	EMISSION RAT: .(GRAMS/SEC)	Х	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2503483	0	0.17700E+02	563831.0	2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503484	0	0.17700E+02	563831.0		1.5	76.20	422.04	41.21	2.57	NO	ИО	NO	
2503902	0	0.37400E-02	570501.0		2.2	8.53	294.26		0.91	NO	NO	NO	
2503903	0	0.51900E-02	570501.0	2854138.0	2.2	9.14	294,26		0.91	ИО	ИО	NO	
2503931	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	1255.37	11.61	0.91	NO	ИО	NO	
2503933	0	0.47300E+00	570611.0	2853218.0	2.5	11.58	538.71	6.40	1.22	NO	NO	ИО	
2503937	0	0.10500E+01	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO	
2503938	0	0.11300E+00	570611.0	2853218.0	2.5	2.44	477.59	0.00	0.15	NO	NO	NO	
2504701	0	0.10800E+02	579561.0	2850618.0	2.0	39.62	388.71	16.46	2.74	NO	NO	ИО	
25047610	0	0.28800E+01	584292.0	2847609.0	0.1	11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	0	0.39600E+01	584292.0	2847609.0	0.1	4.57	663.71	23.81	0.76	NO	NO	ИО	
2504763	0	0.77700E-02	584292.0	2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO	
2504764	0	0.36100E+00	584292.0	2847609.0	0.1	10.67	741.48	31.39	0.21	NO	NO	NO	
2504766	0	0.12400E-01	584292.0	2847609.0	0.1	10.67	741.48	25.91	0.37	NO	NO	NO	
2505871	0	0.13600E+01	563501.0	2806740.0	1.0	12.50	410.93	22.86	1.37	NO	NO	NO	
2506003	0	0.66100E+01	584452.0	2866808.0	3.2	2.74	663.71	16.52	0.91	ИО	NO	NO	
2506081	0	0.52200E+00	563811.0	2851978.0	1.8	4.88	422.04	23.77	0.67	NO	NO	NO	
2506082	0	0.16700E-01	563811.0	2851978.0	1.8	7.62	294.26	0.00	0.91	NO	NO	NO	
2506111	0	0.97600E+00	570411.0	2852428.0	2.7	11.28	294.26	0.00	1.22	NO	NO	ИО	
2506113	0	0.63300E-02	570411.0	2852428.0	2.7	0.00	294.26	0.00	0.00	NO	NO	NO	•
2506141	0	0.50400E+01	562401.0	2816240.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506151	0	0.28800E-03	565041.0	2859858.0	1.5	15.24	294.26	0.00	0.15	NO	ИО	NO	
2506155	0	0.10300E+01	565041.0	2859858.0	1.5	16.76	294.26	0.00	3.96	NO	. NO	NO	
2506241	0	0.13600E+01	569681.0	2868158.0	1.5	9.14	409.26	18.90	1.40	NO	ИО	ИО	
2511962	0	0.13500E+01	566641.0	2859468.0	0.8	0.00	294.26	0.00	0.00	NO	ИО	NO	
77702503	0	0.94000E+00	562801.0 2	2865838.0	1.2	0.00	294.26	0.00	0.00	ИО	NO	ИО	

<sup>\*\*\*</sup> SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2505201 , 25052013, 2506232 , 1120952 , 1124101 , 1124102 , 2500013 , 2500014 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001316 , 25001317 , 25001318 , 25001319 , 2500132 , 25001320 , 25001321 , 2500133 , 2500138 , 2500139 , 25001414 , 25001418 , 2500148 , 25002021 , 25002028 , 2500204 , 2500206 , 25002321 , 25002321 , 25002326 , 25002328 , 25002329 , 25002501 , 2500251 , 25002578 , 2502811 , 25028110 , 2502811 , 25028112 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 25031410 , 25031411 , 25031412 , 25031418 , 25031419 , 25031420 , 25031421 , 25031423 , 25031424 , 25031425 , 2503933 , 2503937 , 2503938 , 2504701 , 25047610 , 25047613 , 2504763 , 2504764 , 2504766 , 2505871 , 2506003 , 2506081 , 2506082 , 2506111 , 2506113 , 2506141 , 2506151 , 2506155 , 2506241 , 2511962 , 77702503

THE SUMMARY OF MAXIMUM ANNUAL ( 1 YRS) RESULTS \*\*\*

\*\* CONC OF NOXPTE IN MICROGRAMS/M\*\*3

							NETWOR	K
GROUP I	D A	VERAGE CONC	RECEPTOR (	XR, YR,	ZELEV, ZHILL,	ZFLAG)	OF TYPE	GRID-ID
						:		
ALL	1ST HIGHEST VALUE IS	24.47800 AT ( 565	467.31, 2825297	.00,	1.50,	1.50,	0.00)	DC

\*\*\* AERMOD - VERSION 07026 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 03/31/09 at 21:16:40 \*\*\*

Output File - D:\Documents and Settings\slk\Desktop\Ingenco\Class II Final Run\Final\increment and naaqs 2009 0331\_2005 \_NOXPTE\_01.LST

Met File - d:\Documents and Settings\slk\Desktop\Ingenco\Met Data\MIAMIA05.SFC

Number of sources - 106
Number of source groups - 107
Number of receptors - 3417

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION-RATE (GRAMS/SEC)	X	Y (METERS)		STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
				•				•					
40FEET1	0	0.18270E+01		2825309.2		12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.18270E+01		2825309.2	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.18270E+01		2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.18270E+01		2825292.0	11.3	12.19	741.48	45.84	0.41	YES	NO	ИО	
2505201	0	0.26510E+01		2825260.0	1.5	12.19	688.71	20.97	0.46	NO	NO	NO	
25052013	0	0.40100E+01		2825260.0		6.40	616.48	18.90	0.84	NO	NO	NO	
2506232	0	0.52100E+00	565511.0	2824950.0		20.65	1273.00	20.00	1.09	NO	NO	NO	
1120952	0	0,71900E+01		2872738.0		6.40	427.59	23.17	1.16	NO	NO	ИО	
1124101	0	0.46400E+01		2882277.0		8.53	663.71	41.21	0.36	NO	NO	NO	
1124102	0	0.70000E+01		2882277.0		6.10	294.26	0.00	0.30	NO	NO	NO	
2500013	0	0.23700E+02		2834789.0		45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.40900E+02	569741.0	2834789.0		45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.25700E+03		2813050.0		121.92	408.15	24.51	5.52	NO	NO	NO	
25000310	0	0.10000E+02		2813050.0		39.93	294.26		5.79	NO	NO	ИО	
25000311	0	0.10000E+02		2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.10000E+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500032	0	0.25700E+03	566591.0	2813050.0	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500033	0	0.14900E+02		2813050.0		4.27	663.71	44.41	0.56	NO	NO	NO.	
2500035	0	0.22600E+01		2813050.0		6.10	663.71	44.41	0.56	NO	NO	ИО	
2500036 .	0	0.36300E+01	566591.0	2813050.0		3.96	814.26	53.10	0.20	NO	NO	ИО	
2500037	0	0.13900E+01	566591.0	2813050.0		2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.10000E,+02	566591.0	2813050.0	1.5	39.93	367.59	17.98	5.79	NO	NO	ИО	
2500051	0	0.12100E+01	568801.0	2855238.0	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
25001310	0	0.97900E+00	552751.0	2817360.0	2.1	18.59	367.59	34.66	0.71	NO	NO	NO	
25001311	0	0.26800E+00		2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001312		0.19600E+0 <u>0</u>		2817360.0	2.1	16.15	488.71	33.62	0.82	NO	NO	NO	
25001313		0.29700E+00		2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	
25001314	0	0.43800E+00	552751.0	2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO	

25001315	0	0.44900E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001316	0	0.16400E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001317	0	0.19000E+00	552751.0 2817360.0	2.1	15.24	755.37	63.28	0.52	NO	NO	NO
25001318	0	0.43100E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	ИО	NO	NO
25001319	0	0.40900E+01	552751.0 2817360.0	2.1	16.46	752.59	26.12	1.27	NO	NO	NO
2500132	0	0.15500E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
25001320	0	0.37800E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
25001321	0	0.41900E+01	552751.0 2817360.0	2.1	14.63	755.37	75.93	0.70	NO	NO	NO
2500133	0	0.16700E+00	552751.0 2817360.0	2.1	15.54	755.37	63.28	0.52	NO	NO	NO
2500138	0	0.56100E+00	552751.0 2817360.0	2.1	18.29	488.71	34.66	0.71	NO	NO	NO
2500139	0	0.54400E+00	552751.0 2817360.0	2.1	18.59	488.71	34.66	0.71	NO	NO	NO
25001414	0	0.99500E-02	557491.0 2851888.0	1.2	24.38	699.82	11.58	1.37	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

		NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
	SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
	ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
-														
	25001418	0	0.81700E+02				109.42	513.15	49.04	2.44	NO	NO	ИО	
	2500148	0	0.32900E+02				41.76	399.82	7.62	4.57	NO	NO	NO	
	25002021	0	0.93700E+00				6.10	505.37	27.86	0.69	NO	NO	ИО	
	25002028	0	0.90800E+02		2861538.0	1.5	45.72	294.26	0.00	0.91	NO	NO	NO	
	2500204	0	0.27800E+02		2861538.0	1.5	60.96	422.04	10.06	2.29	NO	NO	NO	
	2500206	0	0.74700E+02	562271.0	2861538.0	1.5	60.96	482.04	10.97	4.27	NO	NO	NO	
	25023211	0	0.14200E-03		2852578.0	2.2	9.14	394.26	9.08	0.46	ИО	NO	NO	
	25023212	0	0.39400E+00	578031.0	2852578.0	2.2	18.29	810.37	. 52.24	0.30	NO	NO	NO	
	2502326	0	0.25200E+00	578031.0	2852578.0	2.2	13.11	1366.48	10.97	0.52	NO	NO	NO	
	2502328	0	0.82600E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
	2502329	0	0.79200E-01	578031.0	2852578.0	2.2	17.07	502.04	7.83	0.61	NO	NO	NO	
	2502501	0	0.63300E-02	562901.0	2849638.0	1.7	9.14	424.82	10.67	0.76	NO	NO	NO	
	2502521	0	0.39200E+00	557001.0	2869138.0	3.0	7.62	294.26	0.00	0.76	NO	NO	NO	
	2502578	0	0.23400E+01	550171.0	2842239.0	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
	2502811	0	0.84100E+00	570701.0	2856598.0	1.5	22.86	313.71	0.73	0.91	NO	NO	NO	
	25028110	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
	25028111	0	0.14100E+02	570701.0	2856598.0	1:5	8.84	608.15	45.08	0.53	NO	NO	NO	
	25028112	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	МО	NO	NO	
	2502816	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
	2502817	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO	NO	NO	
	2502818	0	0.73500E+01	570701.0	2856598.0	1.5	8.23	663.71	66.11	0.46	NO :	NO	NO	
	2502819	0	0.14100E+02	570701.0	2856598.0	1.5	8.84	608.15	45.08	0.53	NO	NO	NO	
	2503141	0	0.26600E+01	565921.0	2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
	25031410	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
	25031411	0	0.14100E+02	565921.0	2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
	25031412	0	0.14100E+02		2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO	
	25031418	0	0.55500E+00		2843169.0	3.0	9.75	650.93	7.89	0.30	NO	NO	NO	
	25031419	Ō	0.55500E+00		2843169.0		9.75	650.93	7.89	0.30	NO	NO	NO	
	25031420	Ō	0.40400E+00		2843169.0		9.75	652.59	3.63	0.46	NO	NO	NO	

25031421	0	0.26100E-03	565921.0 2843169.0	3.0	12.19	294.26	0.00	0.08	NO	NO	NO
25031423	0	0.47300E+01	565921.0 2843169.0	3.0	5.49	746.48	105.64	0.20	ИО	NO	NO
25031424	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	ОИ	NO	NO
25031425	0	0.14000E+02	565921.0 2843169.0	3.0	6.40	608.15	47.21	0.53	NO	NO	NO
2503143	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.30	NO	NO	NO
2503144	0	0.32100E+01	565921.0 2843169.0	3.0	8.53	298.15	0.00	0.30	NO	ИО	NO
2503146	0	0.82300E+01	565921.0 2843169.0	3.0	8.53	394.26	0.00	0.37	NO	NO	NO
2503147	0	0.23700E+01	565921.0 2843169.0	3.0	0.00	349.82	50.60	0.91	NO	NO	NO
2503149	0	0.14100E+02	565921.0 2843169.0	3.0	8.84	608.15	45.08	0.53	NO	NO	NO
2503481	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503482	0	0.17700E+02	563831.0 2857458.0	1.5	76.20	422.04	41.21	2.57	NO	NO	NO

#### +++ POINT SOURCE DATA +++

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)			STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
2503483	0	0.17700E+02	563831.0 28574		76.20	422.04	41.21	2.57	NO	NO	ИО	
2503484	0	0.17700E+02	563831.0 28574		76.20	422.04	41.21	2.57	NO	NO	NO	
2503902	0	0.37400E-02	570501.0 28541		8.53	294.26	0.00	0.91	NO	NO	NO	
2503903	0	0.51900E~02	570501.0 28541		9.14	294.26	0.00	0.91	NO	NO	NO	
2503931	0	0.47300E+00	570611.0 28532		11.58	1255.37	11.61	0.91	NO	NO	NO	
2503933	0	0.47300E+0 <i>0</i>	570611.0 28532		11.58	538.71	6.40	1.22	NO	NO	NO	
2503937	0	0.10500E+01	570611.0 28532		2.44	477.59	0.00	0.15	NO	NO	NO	
2503938	0	0.11300E+00	570611.0 28532		2.44	477.59	0.00	0.15	NO	NO	NO	
2504701	0	0.10800E+02	579561.0 28506		39.62	388.71	16.46	2.74	NO	NO	NO	
25047610	0	0.28800E+01	584292.0 28476		11.58	741.48	29.26	0.46	NO	NO	NO	
25047613	0	0.39600E+01	584292.0 28476		4.57	663.71	23.81	0.76	NO	NO	NO	
2504763	0	0.77700E-02	584292.0 28476		10.67	741.48	31.39	0.21	NO	NO	NO	
2504764	0	0.36100E+00	584292.0 28476		10.67	741.48	31.39	0.21	NO	NO	NO	
2504766	0	0.12400E-01	584292.0 28476		10.67	741.48	25.91	0.37	NO	NO	NO	
2505871	0	0.13600E+01	563501.0 28067	40.0 1.0	12.50	410.93	22.86	1.37	NO	ИО	NO	
2506003	0	0.66100E+01	584452.0 28668	08.0 3.2	2.74	663.71	16.52	0.91	NO	NO	NO	
2506081	0	0.52200E+00	563811.0 28519	78.0 1.8	4.88	422.04	23.77	0.67	NO	NO	NO	
2506082	0	0.16700E-01	563811.0 28519	78.0 1.8	7.62	294.26	0.00	0.91	NO	NO	NO	
2506111	0	0.97600E+00	570411.0 28524	28.0 2.7	11.28	294.26	0.00	1., 22	NÓ	NO	NO	
2506113	0	0.63300E-02	570411.0 28524	28.0 2.7	0.00	294.26	0.00	0.00	NO	NO	NO	
2506141	0	0.50400E+01	562401.0 28162	40.0 1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506151	0	0.28800E~03	565041.0 28598	58.0 1.5	15.24	294.26	0.00	0.15	ИО	NO	ИО	
2506155	0	0.10300E+01	565041.0 28598	58.0 1.5	16.76	294.26	0.00	3.96	NO	NO	NO	
2506241	0	0.13600E+01	569681.0 28681	58.0 1.5	9.14	409.26	18.90	1.40	NO	NO	NO	
2511962	0	0.13500E+01	566641.0 28594	68.0 0.8	0.00	294.26	0.00	0.00	NO	NO	NO	
77702503	0	0.94000E+00	562801.0 28658	38.0 1.2	0.00	294.26	0.00	0.00	NO	NO	NO	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2505201 , 25052013, 2506232 , 1120952 , 1124101 , 1124102 , 2500013 , 2500014 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 2500031 , 25001310 , 25001311 , 25001312 , 25001313 , 25001314 , 25001315 , 25001316 , 25001317 , 25001318 , 25001319 , 2500132 , 25001320 , 25001321 , 2500133 , 2500138 , 2500138 , 2500139 , 25001414 , 25001418 , 2500148 , 25002021 , 25002028 , 2500204 , 2500206 , 25023211 , 25023212 , 2502326 , 2502328 , 2502329 , 2502501 , 2502521 , 2502578 , 2502811 , 25028110 , 25028111 , 25028112 , 2502816 , 2502817 , 2502818 , 2502819 , 2503141 , 25031410 , 25031411 , 25031412 , 25031418 , 25031419 , 25031420 , 25031421 , 25031423 , 25031424 , 25031425 , 2503143 , 2503144 , 2503146 , 2503147 , 2503149 , 2503481 , 2503482 , 2503484 , 2503484 , 2503902 , 2503903 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 25047610 , 25047613 , 2504763 , 2504764 , 2504766 , 2505871 , 2506003 , 2506081 , 2506082 , 2506111 , 2506113 , 2506114 , 2506151 , 2506155 , 2506241 , 2511962 , 77702503

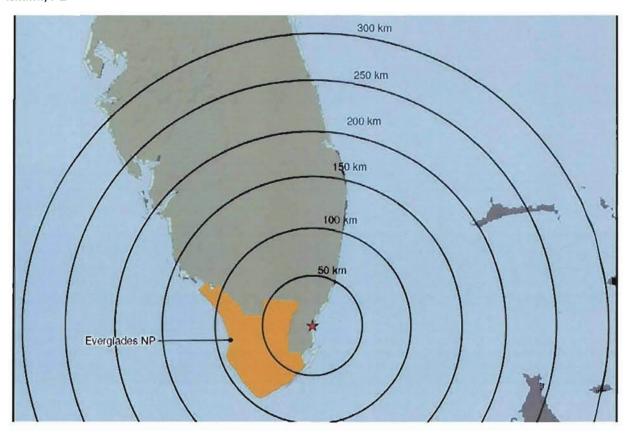
\*\*\* THE SUMMARY OF MAXIMUM ANNUAL ( 1 YRS) RESULTS \*\*\*

\*\* CONC OF NOXPTE IN MICROGRAMS/M\*\*3

										NETWOR	KK.	
C	GROUP ID		A'	VERAGE CONC	RE	CEPTOR (XR,	YR, ZE	LEV, ZHILL,	ZFLAG)	OF TYPE	GRID-ID	
-									:			-
P	ALL	1ST HIGHEST	VALUE IS	18.83999 AT (	565466.06,	2825345.50	,	1.50,	1.50,	0.00}	DC	

# **Attachment 1C**

Prepared for: Industrial Power Generating Company, LLC Miami, FL



# Modeling Analysis for AQRVs in National Parks for INGENCO's 8-MW Landfill Gas and Oil Electrical Generating Station

AECOM, Inc.

March 2009

Document No.: 13042-001-100

Prepared for: Industrial Power Generating Company, LLC Miami, FL

# Modeling Analysis for AQRVs in National Parks for INGENCO's 8-MW Landfill Gas and Oil Electrical Generating Station

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Dan Wand

Reviewed by David W. Heinold

AECOM, Inc. March 2009

Document No.: 13042-001-100

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Tabl Tabl Tabl Tabl Tabl Tabl	e 2-1 e 2-2 e 2-3 e 3-1 e 3-2 e 3-3 e 3-4	Hourly Emissions at 92% LFG  Maximum Emissions for Alternate Operating Modes  Stack Exhaust Parameters  Level 2 VISCREEN Parameters for 92% LFG Firing at 8,760 Hours Per Year for ENP  Level 2 VISCREEN Parameters for 71% Oil Firing at 4,083 Hours Per Year for ENP  Level 2 VISCREEN Parameters for 92% LFG Firing at 8,760 Hours Per Year for BNP  Level 2 VISCREEN Parameters for 71% Oil Firing at 4,083 Hours Per Year for BNP  Level 2 VISCREEN Parameters for 71% Oil Firing at 4,083 Hours Per Year for BNP	2-3 2-4 3-6 3-6 3-7 3-7

# 1.0 Introduction

### 1.1 Project Overview

INGENCO intends to submit a Construction Permit Application for a proposed 8 MW (net) landfill gas (LFG) and oil fuel electrical generating station, to be constructed within the existing boundary of the Miami-Dade South Landfill, located at S.W. 97<sup>th</sup> Avenue, Miami, Florida. Currently, the landfill gas is flared and no useful energy products are derived from this resource. The proposed INGENCO facility will generate electricity for distribution to the electric power grid system. The facility will consist of 24 Detroit Diesel Series 60 (12.7-L) engines, each mated with a 350 kW generator. The location of the proposed INGENCO facility relative to Prevention of Significant Deterioration (PSD) Class I areas (and the nearby Biscayne National Park PSD Class II area) is illustrated in Figure 1-1. The potential annual emissions of pollutants regulated under the PSD regulations exceed the significant emission thresholds for NOx, CO and PM<sub>10</sub> established pursuant to 40 CFR 52.21 and Florida Administrative Code 62-212.400. Therefore, a dispersion modeling analysis was performed following the PSD guidelines found in both the federal and state regulations.

There are many environmental benefits that will occur when INGENCO builds and operates the proposed electrical generating station at the South Dade Landfill. LFG is an alternative fuel to coal, oil and natural gas, and is being formed in the landfill from the decomposition of wastes. South Dade Landfill has excess LFG, which they are currently flaring. Rather than flaring a potential energy source, INGENCO will utilize the LFG as a fuel to produce energy for the electrical grid. The energy produced by INGENCO will in turn offset the energy production of Florida power plants that utilize coal, oil and/or natural gas to produce energy. The operation of this LFG generating station will, therefore, have a beneficial impact toward the goal of reducing greenhouse gas emissions.

## 1.2 Modeling at Federal Land Manager-Administered Areas

PSD regulations require that facilities within 100 km of a PSD Class I area perform a modeling evaluation of the ambient air quality in terms of Class I PSD Increments and Air Quality Related Values (AQRVs). In addition, for large projects, Federal Land Managers (FLMs) may request an evaluation of Class I air quality impacts for sources beyond 100 km and up to 300 km distant. As shown in Figure 1-1, Everglades National Park (ENP) is the only PSD Class I area within 300 km of the project site.

A portion of ENP is within 50 km of the proposed project. Modeling of project impacts within 50 km was conducted using AERMOD, as described in a separate short-range modeling protocol (FTC&H, 2008). This protocol document addresses long-range dispersion modeling analysis using CALPUFF, as well as the visible plume analysis to be conducted within 50 km of the proposed project for points within the ENP.

As requested by the National Park Service, a supplemental assessment was conducted for Biscayne National Park (BNP), for which Class I area impact criteria do not apply.

Section 2 discusses the project-related emissions characterization in the modeling. Section 3 provides the results of the visible plume modeling analysis, and Section 4 provides the results of the nitrogen deposition analysis. References are provided in Section 5.

## 1.3 Overview of Modeling Results

A VISCREEN analysis was conducted for both Everglades National Park and Biscayne National Park. A Level 1 analysis, which is a conservative worst-case assessment using an F stability class and a wind speed of 1.0 m/sec (the most stable conditions), was initially conducted. This analysis indicated that the potential for a visible plume was present within 50 km of the project site. Therefore, a Level 2 analysis was conducted for both National Parks. Level 2 is a site-specific worst-case assessment that is intended to evaluate the day with

the highest potential impacts over a year. This analysis involved a meteorological analysis of plume transport directions toward the Class I and Class II areas to determine the combination of stability and wind speed associated with worst-case conditions, defined by at least a 1% frequency of occurrence, according to time of day (midnight to 6 AM, 6 AM to noon, noon to 6 PM and 6 PM to midnight) for each possible wind direction that would bring a plume from the project site to the particular National Park. Five years of meteorological data from Miami International Airport were used in this frequency analysis. The combinations of stability class and wind speed that were determined to be the worst-case scenarios for each wind direction during the combined daytime hours (6 AM to 6 PM) and combined nighttime hours (6 PM to 6 AM) for each National Park were then used in VISCREEN to determine the potential for a visible plume at each National Park.

Based on the Level 2 VISCREEN analysis, the results of which are presented in Section 3, it was determined that:

- the preferred operational scenario will not result in a visible plume within ENP, and
- the backup worst-case emission scenario will result in a barely visible plume only in very transient conditions near sunrise for only two wind direction sectors for ENP.

However, this modeling does not account for the reduced emissions from avoided flaring operations that currently take place.

We conclude that the Level-2 VISCREEN analysis indicates that the proposed project will not have an adverse impact upon visibility within the Everglades National Park. VISCREEN results for Biscayne National Park are also provided in Section 3 for informational purposes.

The results of the conservative nitrogen deposition analysis indicate that the annual nitrogen deposition within both Everglades and Biscayne National Parks will be below the applicable Deposition Analysis Threshold (DAT) screening value of 0.01 kg/ha-yr.

300 km 250 km 200 km 150 km 100 km 50 km Biscayne NP Everglades NP Broward Collier Class I Areas Within 300 km INGENCO Landfill Location of the Ingenco Dade South Miami-Dade NPS Class I Areas Monroe Landfill in Dade County, FL **ENSR AECOM** Morroe Scala 200 Kilometers 20 40

Figure 1-1 National Parks Within 300 km of the INGENCO Project Site

# 2.0 Project Description

#### 2.1 Engine Operation and Emissions

INGENCO is proposing to install 24 Detroit Diesel, Series 60, Dual-Fuel engines, each of which will be mated to a 350 kW generator. The engines will be arranged in four groups of six engines, for a total of four stacks. Each engine has a 6 cylinder, 12.7-L total displacement with compression ignition, and is rated at 550 BP. However, when mated with a 350 kW generator, each engine can produce no more than 469 BHP. The engine generators are capable of producing 350 kW of power each, with a nominal facility generation of 8 MW. The engines can also operate on backup supplies of 100% No. 2 fuel oil or biodiesel, or varying amounts of No. 2 fuel oil, or biodiesel and methane from LFG ranging from 1% to 96%. Although the engines will be capable of operating 24 hours per day, 365 days per year; the operating hours and output will be dependent on the ability of the distribution grid to accept electricity, the supply of LFG, and engine maintenance.

INGENCO will be located on the Dade South Landfill property located in Miami, Miami-Dade County, Florida, near the landfill's existing LFG collection and control system. Miami-Dade County is currently classified as attainment for all criteria air pollutants (PM<sub>2.5</sub>, PM<sub>10</sub>, CO, Pb, NO<sub>x</sub>, O<sub>3</sub>, and SO<sub>2</sub>).

A gas blower/compressor will draw LFG from the existing flare, directing the LFG to the proposed energy project location. LFG consists primarily of CH<sub>4</sub>, CO<sub>2</sub>, and N<sub>2</sub>, with varying smaller amounts of O<sub>2</sub>. HAPs, NMOC, and sulfur compounds. The size of the energy plant and the number of engines operating at any given time will depend on the available heat input (volume and % CH<sub>4</sub>) delivered by the landfill, or the amount of diesel fuel to be burned. The engines will typically operate in the single-fuel mode – burning as a backup fuel only No. 2 fuel oil or biodiesel, or in the dual-fuel-mode – burning ultra-low sulfur diesel No. 2 fuel oil (or biodiesel) and LFG. The energy requirements for the engines are approximately 9,500 BTU/kW in the single-fuel mode and approximately 10,500 BTU/kW in the dual-fuel mode. Fuel oil supplies a relatively constant energy of approximately 137,000 BTU/gal. The heat content of biodiesel is dependent on the source and blend of the biodiesel and usually ranges from about 130,000 to 145,000 BTU/gal. The heat content of LFG varies with the CH<sub>4</sub> content and can range from ~300 BTU/ft<sup>3</sup> to ~600 BTU/ft<sup>3</sup>. The energy content of LFG is affected by the type and age of the waste placed in the landfill, landfill temperature, and moisture content.

INGENCO owns and operates 11 similar facilities in 4 states, and has acquired extensive knowledge of emissions at various operating modes. An evaluation of the LFG indicates the landfill is currently achieving a heating value of greater than 540 BTU/ft<sup>3</sup>. Because the engines require some liquid fuel (pilot charge) under all conditions, obtaining the proper heating value to operate the engines will be easily achieved, even if the LFG heating value were to decline. The amount of LFG substituted for liquid fuel will depend on the availability of LFG and the demands for power output. Although the facility can theoretically operate over the range of 0% LFG to 96% LFG, the range between 31% and 80% will be avoided due to the potential for engine knock. The 31% to 80% range requires INGENCO to reduce power output to prevent engine damage. Therefore, the facility will not operate between 31% and 81% LFG, except during brief transitions from lower to higher use of LFG. The facility will operate at 0% LFG during startup and shutdown (each lasting a few minutes), as well as during periods of high electrical demand and no LFG supply. The periods for firing diesel fuel as the primary fuel as a backup to LFG will not exceed 500 hours per year, which is a typical permit limit for emergency backup fuel use. The facility may elect to operate at up to 30% LFG with the diesel fuel during periods of high electrical demand. However, a majority of the operations will be in the range of 81% to 96% LFG, with the target being between 92% and 94%. This range maximizes the use of LFG and, generally, produces the lowest emission rates at the facility. The facility may also operate for short periods in mixed modes; that is, with a majority of the engines operating at high LFG and the remainder operating at either low LFG or in the single fuel-mode to maximize both power output and LFG use.

As indicated, INGENCO's targeted LFG range is 92% to 94% LFG, which produces the emission rates presented in Table 2-1 (shown for 92% LFG, which has the highest NOx and CO emissions in this target range).

Table 2-1 Hourly Emissions at 92% LFG

Pollutant	Projected Short- Term Engine Emissions (lb/hr per engine)	Projected Short- Term Engine Emissions (lb/hr all engines combined)	Projected Annual Average Engine Emissions (tpy all engines combined)
PM	0.24	5.67	24.8
PM <sub>10</sub> <sup>1</sup>	0.24	5.67	24.8
PM <sub>2.5</sub> <sup>1</sup>	0.24	5.67	24.8
SO₂	0.31	7.48	32.8
NO <sub>x</sub>	2.13	51.12	224
CO	3.15	75.6	331
VOCs	0.32	7.56	33.1

<sup>&</sup>lt;sup>1</sup> Assumed to be equal to PM.

For operational flexibility, INGENCO's permitted emission limits need to account for emissions during periods of high electrical demand and low LFG flow. However, the backup operations have limited hours per year to limit the annual NO<sub>x</sub> emissions. INGENCO proposes to limit its annual NO<sub>x</sub> emissions for any emission scenario to not exceed 254 tpy, which is slightly higher than the emissions associated with the normal operations case as listed in Table 2-1. Table 2-2 presents maximum emission rates from the INGENCO engines at a range of fuel mixtures for backup operations. At 254 tpy of NO<sub>x</sub>, the annual hourly average emission rate of NO<sub>x</sub> is 58.0 lb/hr, while the peak short-term emission rate over all operating modes is 187.4 lb/hr. INGENCO will manage operations and emissions to assure that the annual NOx limit of 254 tpy is not exceeded. While INGENCO requires higher than optimal emission rate limits to maintain operational flexibility, the targeted optimal operational range of 92% to 94% LFG maximizes fuel and engine efficiency and minimizes emissions. As such, this case as shown in Table 2-1 should be considered the normal operating mode.

At INGENCO's targeted operational range of 92% to 94% use of LFG, the engines would use about 1,100 MMCF to 1,300 MMCF of LFG per year. Assuming the LFG has a percent CH<sub>4</sub> of 54%, and using AP-42 emission factors for flaring of LFG at municipal solid waste landfills, INGENCO would offset 12.3 to 13.8 tpy of NO<sub>x</sub>; 230.2 to 258.7 tpy of CO; and 5.2 to 5.9 tpy of PM relative to the current practice of flaring the LFG.

Table 2-2 Maximum Emissions for Alternate Operating Modes

	Engine Em Operating on Oil	100% Fuel	Engine Emissions Operating on 99% Fuel Oil and 1% LFG	_	ions Operating on il and 29% LFG	Engine Emissions Operating on 4% Fuel Oil and 96% LFG		
Annual Hours <sup>1</sup>	500	l	only during transitions	4	4,083			
	Short term	Annual	Short term	Short term	Annual	Short term	Annual	
Pollutant	(lb/hr) (tpy) (lb/hr)		(lb/hr)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	
PM	5.99	1.5	6.62	6.62	13.5	6.62	29.0	
PM <sub>10</sub> <sup>2</sup>	5.99 1.5		6.62	6.62	13.5	6.62	29.0	
PM <sub>2.5</sub> <sup>2</sup>	5.99	1.5	6.62	6.62	13.5	6.62	29.0	
SO <sub>2</sub>	0.12	0.03	0.23	2.84	5.8	9.10	39.9	
NO <sub>X</sub>	171.6	42.9	187.4	124.4	254	41.07	179.9	
со	20.75	5.2	27.33	150.6	307	55.98	245.2	
VOCs	3.99 1.0		8.82	8.82	18.0	8.82	38.6	

Annual maximum hourly operation to maintain NO<sub>X</sub> at 254 tpy

Highlighted green cells show maximum annual emission rates, and highlighted blue cells show maximum short-term emissions rates.

All filterable PM assumed to also be  $PM_{10}$  and  $PM_{2.5}$ .

#### 2.2 INGENCO Emission Source Parameters

This section describes the exhaust parameters for all of the sources to be located at the proposed INGENCO facility. The base elevation for the proposed facility is 37 feet above mean sea level.

Sources that will have emissions exhausted from a stack were considered point sources in the model. The engines will be arranged in four groups of six engines (Groups A, B, C, and D). The engines in each group will exhaust to a common header and then to a stack containing a silencer and muffler for noise control. Estimated stack parameters for these sources are provided in Table 2-3.

**Table 2-3 Stack Exhaust Parameters** 

Equipment	Description	Stack Height (feet)	Stack Diameter (inches)	Exhaust Temperature (°F)	Exhaust Flow (acfm)
Group A	Six 550 hp engines, each driving a 350 kW generator	40	16	875 – 1025	12,600
Group B	Six 550 hp engines, each driving a 350 kW generator	40	16	875 – 1025	12,600
Group C	Six 550 hp engines, each driving a 350 kW generator	40	16	875 – 1025	12,600
Group D	Six 550 hp engines, each driving a 350 kW generator	40	16	875 – 1025	12,600

# 3.0 Short-Range Plume Visibility Modeling Results

For Class I area locations within 50 km of a proposed major source, a pertinent Air Quality Related Value is the potential for a plume to be discernable to an observer enjoying a scenic vista. The emissions that contribute to plume visibility are oxides of nitrogen ( $NO_X$ ), sulfur dioxide ( $SO_2$ ), and primary particulate. Some of the  $NO_X$  is transformed to  $NO_2$ , which can cause a plume to be visible (brown or yellow) because it preferentially absorbs blue light. If there is sufficient transport time,  $SO_2$  and  $NO_X$  can be transformed to particulate sulfate and nitrate, which scatter light. These effects are dealt with using CALPUFF for long-range regional haze modeling at distances exceeding 50 km, which is not addressed in this document. Primary particulate can both absorb and scatter light. Because emissions of optically active pollutants vary depending on whether the power generation units are fired with landfill gas or diesel fuel, two cases have been evaluated. Case 1, the preferred operational case, is for all units fired mostly with landfill gas (92% LFG and 8% oil), while Case 2 is a worst-case emission rate backup case that involves mostly oil firing (71% oil and 29% LFG) for all units for at most 4,083 hours a year.

According to EPA's Workbook for Plume Visual Impact Screening and Analysis (Revised) (EPA-454/R-92-023), the degree to which a plume could be seen inside the Class I area is indicated by two parameters, Plume Perceptibility ( $\Delta E$ ) and Plume Contrast ( $C_p$ ). These two parameters are evaluated by comparing light intensities along a line of sight passing through plume centerline versus the background sky. The  $\Delta E$  parameter is an integral measure of the differences in brightness and coloration, based on human perception. The  $C_p$  parameter is a fractional difference of light intensity at the 550 nm wavelength, representing the center of the visible spectrum. EPA guidance indicates that values above 2.0 for  $\Delta E$  and/or +/- 0.05 for  $C_p$  are likely to be perceptible to an observer under optimal viewing conditions.

The Class I area of interest, ENP, is located at its closest point about 20 km to the west of the proposed facility. A Class II area that has been included for informational purposes, BNP, is located at its closest point about 1 km to the east of the proposed facility. The analysis followed a tiered process as outlined in the VISCREEN workbook. The present analysis focused upon the second tier of analysis, referred to as a VISCREEN Level 2 screening assessment. As noted below, it has been judged from the findings of the Level 2 analysis that a refined Level 3 analysis is not required.

Optically active pollutants addressed in VISCREEN are  $NO_x$  (total  $NO_x$  and primary  $NO_2$ ) and primary particulate ( $PM_{10}$  and elemental carbon). For the cases involving mostly landfill gas firing as well as mostly oil firing, the following emissions were used:

#### Modeled Emissions (lb/hr)

Case	NO <sub>x</sub>	PM10	Carbon								
92% LFG, 8% Oil	51.12	5.67	0.29								
71% Oil, 29% LFG	124.40	6.62	4.30								

For these emissions, it was conservatively assumed that during oil firing, 65% of the particulate matter is elemental carbon (McDonald, 2005). For 92% LFG firing, and 8% oil firing, a particulate carbon fraction of 5.2% (65% x 8%) is assumed. Following the ozone limiting method referenced in the Guideline on Air Quality Models (U.S. EPA, 2005), 10% of the NO<sub>x</sub> emissions are assumed to be NO<sub>2</sub>.

#### Level 1 VISCREEN Analysis

Level 1 is a conservative worst-case assessment in which EPA's VISCREEN model was applied using the default settings. This analysis assumed that the stability class is F and the wind speed is 1.0 m/sec. For Level

1, the only additional information required is the distance to the Class I area, background visual range (as specified by FLAG guidance) and maximum short-term (e.g., 24-hour) emission rates. The background visual range was set to 169 km as listed in the 2008 draft FLAG guidance for annual average natural conditions at ENP. For the normal emission scenario of 92% LFG firing, the Level 1 VISCREEN indicated that the potential for a visible plume was present according to  $\Delta E$  criteria only. For the 71% oil firing case, the potential for a visible plume was indicated by both plume visibility parameters. Therefore, a Level 2 analysis was conducted as discussed below.

#### Level 2 VISCREEN Analysis

VISCREEN Level 2 is a site-specific visibility assessment that accounts for the joint frequency distribution of the plume being released toward the Class I area in various combinations of wind speed and stability conditions. This involves an analysis of plume transport directions toward the Class I area to determine the combination of stability and wind speed associated with worst-case conditions, defined by at least a 1% frequency of occurrence, according to time-of-day (midnight to 6 AM, 6 AM to noon, noon to 6 PM and 6 PM to midnight).

The VISCREEN Level 2 analysis involved analyzing a 5-year sequential data set of wind speed, wind direction, and atmospheric stability from National Weather Service hourly observations at nearby Miami International Airport (1986-1990 was provided by the Florida DEP in ISC-compatible format). The frequency analysis was based on the individual 22.5° wind direction sectors as shown in Figures 3-1 and 3-2. The combinations of wind speed and stability were ranked according to the variable associated with three dispersion factors multiplied together ( $U\sigma_y\sigma_z$ ) at the shortest downwind distance within each sector, where U is the plume transport wind speed and  $\sigma_y$  and  $\sigma_z$  are the cross-wind and vertical plume standard deviations using P-G dispersion that VISCREEN is based upon. Only hours with a transport time of less than 12 hours were included in the frequency analysis, consistent with the VISCREEN guidance. For the Level 2 analysis, we reviewed site-specific data to determine the median measured ozone concentration from the Miami-Dade monitor at Purdue Medical Center. We found that the median ozone concentration was equal to the default VISCREEN value of 0.04 ppm. The natural background visual range applied in the Level 2 assessment was 169 km, the same as described above for the Level 1 assessment.

In accordance with EPA guidance, site-specific worst-case plume visibility conditions, in terms of atmospheric stability class and wind speed, were determined for each 22.5° wind direction sector. For purposes of conservatism, the VISCREEN guidance indicates that all hours of the day with wind speeds indicating less than 12 hours of transport time to the Class I area should be included in the frequency analysis, even though during the nighttime hours of darkness, plume visibility should not be considered to be an Air Quality Related Value. In addition, plume visibility models are not applicable during twilight when the sun is below the horizon because these models simulate human perception of a plume only when the plume is illuminated by direct sunlight. The rationale given in the guidance for including overnight periods is to conservatively evaluate plume visibility during early morning hours when a stable plume could be present over the Class I area due to overnight transport. However, due to the rapid rate of ascent of the solar elevation angle in these sub-tropical latitudes, early morning stable conditions are highly transient, resulting in rapid plume dispersal after sunrise.

Following the guidance, the combination of wind speed and stability that resulted in at least a 1% occurrence of worst-case conditions for continuous emissions (or a 2% occurrence for emissions occurring half the time) was computed for each of four 6-hour periods during both day and night. Daytime was divided into two periods (6 AM to Noon and Noon to 6 PM) and night was divided into two periods (6 PM to Midnight and Midnight to 6 AM). Because the daytime periods more realistically represent the experience of most visitors to ENP and BNP, the Level 2 frequency analysis was conducted two ways, 1) including all four time periods and 2) including only the two daytime periods. The daytime frequency assessment is conservative because at this latitude and longitude the sun rises after 6 AM (standard time) about two thirds of the days in a year (see http://www.gaisma.com/en/location/everglades-national-park-florida.html).

The frequency analysis for ENP is provided in Appendix A (Table A-1 (a through f)), corresponding to compass sectors SSW to NW. The frequency analysis for BNP is provided in Appendix A (Table A-2 (a through f)).

corresponding to compass sectors NE to SSE. The worst-case meteorological conditions are in bold with the daytime frequencies highlighted in yellow and the nighttime frequencies highlighted in green.

The corresponding VISCREEN visible plume parameters for the ENP case are provided in Table 3-1 for the 92% LFG firing case and in Table 3-2 for the 71% oil firing case. These tables indicate that for the normal operations when the generators are fired primarily with LFG, the plume will not be perceptible at ENP at any time of day. For the unrealistic worst case where it is assumed that all 24 generators continuously burn 71% oil for up to 4,083 hours per year, the VISCREEN results indicate that the plume will not be perceptible during daylight hours (6 AM to 6 PM EST) at ENP. When overnight penods are included in the analysis, the worst-case visibility parameters barely exceed the plume detection thresholds for two of the sectors only – W and WNW. However, given that the 6 PM to 6 AM frequency assessment is dominated by periods of darkness when the plume visibility is not an Air Quality Related Value and the percent of time that all eight generators will be burning oil is likely to very small, the Level 2 visibility analysis indicates that it is highly unlikely that a plume from INGENCO would ever be visible from locations within Everglades National Park. If a plume were ever to be seen, it would only be for a brief period very early in the day because at these low latitudes, the atmosphere rapidly becomes destabilized shortly after sunrise. It is also important to mention that this analysis does not account for the pollutant reduction from the flaring operation that this project will provide.

In the case of the Class II area, BNP, the corresponding VISCREEN visible plume parameters are provided in Table 3-3 for the 92% LFG firing case and in Table 3-4 for the 71% oil firing case. Tables 3-3 and 3-4 indicate that for both the LFG and oil firing scenarios, the PSD Class I criteria thresholds (which are not applicable to this area) are exceeded at BNP at any time of day for most, if not all, of the sectors. This is not surprising, due to the short distance of the project site from the closest boundary of BNP.

The visibility parameters for the nighttime hours exceed the plume detection thresholds for both  $\Delta E$  and  $C_p$ , for both the LFG and oil scenarios. However, as previously mentioned, it is highly unlikely that a plume from INGENCO would ever be visible in Biscayne National Park during the nighttime hours except for a brief period very early in the day. During the daytime scenario, the VISCREEN visibility results at BNP are considerably lower than the results during the night.

We conclude that the Level 2 visibility plume analysis indicates that:

- the preferred operational scenario will not result in a visible plume within ENP, and
- the backup worst-case emission scenario will result in a barely visible plume only in very transient conditions near sunrise for only two wind direction sectors for ENP.

These results do not account for the retirement of the flare emissions.

The VISCREEN results for BNP indicate that the Class I criteria are exceeded, but much less so during the daytime period versus night hours.

We conclude that the Level-2 VISCREEN analysis indicates that the proposed project will not have an adverse impact upon visibility within the Everglades National Park. Therefore, no further visibility modeling analysis is required.

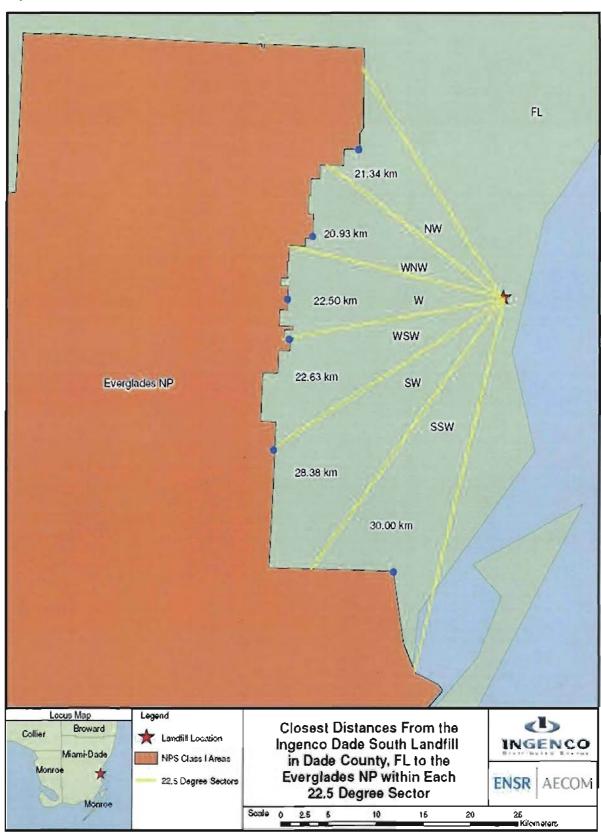


Figure 3-1 Downwind Sectors for the Level 2 Visible Plume Assessment for ENP

FL 1.88 km NE 1.18 km ENE E 1.35 km ESE 1.04 km SE SSE 1.05 km 1.20 km Biscayne NP Locus Map Legend **Closest Distances From the** Broward Collier Landfill Location Ingenco Dade South Landfill Miami-Dade in Dade County, FL to the NPS Class I Areas Monroe Biscayne NP within Each 22.5 Degree Sectors **ENSR AECOM** 22.5 Degree Sector 0 0.2 0.4 Scale 8.0 1.2 1.6 2 ■ Kilometers

Figure 3-2 Downwind Sectors for the Level 2 Visible Plume Assessment for BNP

Table 3-3 Level 2 VISCREEN Parameters for 92% LFG Firing at 8,760 Hours Per Year for BNP

Level 2 Sectors	el 2 Visibility Parameters: All Hours for 92% LFG Firing a rs Distance (km) Stability Wind Speed (m/sec)				Per Year Cp	
NE	1.88	F	. 3	4.624	-0.037	
ENE	1.18	1.18 F		6.045	-0.048	
E	1.35	1.35 F		5.589	-0.045	
ESE	1.04	F	2	9.223	-0.076	
\$E	1.05	F	2	9.299	-0.076	
SSE	1.20	F	2	8.760	-0.071	
	PSD Class I Plun	2	-0.05			

Level 2 V	Level 2 Visibility Parameters: 6 AM to 6 PM for 92% LFG Firing at 8,760 Hours Per Year									
Sectors	Distance (km)	Distance (km) Stability Wind Speed (m/sec)		ΔΕ	Ср					
NE	1.88	D	7	0.818	-0.006					
ENE	1.18	D	8	0.991	-0.008					
E	1.35	D	7	1.030	-0.008					
ESE	1.04	D	4	2.149	-0.017					
SE	1.05	D	2	4.197	-0.033					
SSE	1.20	E	3	3.848	-0.030					
	PSD Class I Plur	2	-0.05							

Table 3-4 Level 2 VISCREEN Parameters for 71% Oil Firing at 4,083 Hours Per Year for BNP

Level 2	Level 2 Visibility Parameters: All Hours for 71% Oil Firing at 4,083 Hours Per Year									
Sectors	Distance (km)	Distance (km) Stability Wind Speed (m/sec)		ΔΕ	Ср					
NE	1.88	E	2	11.088	-0.144					
ENE	1.18	E	3	10.171	-0.129					
E	1.35	F	3	13.095	-0.178					
ESE	1.04	F	3	11.497	-0.192					
\$E	1.05	F	3	11,542	-0.191					
SSE	1.20	F	2	13.567	-0.248					
	PSD Class I Plum	2	-0.05							

Level 2 \	Level 2 Visibility Parameters: 6 AM to 6 PM for 71% Oil Firing at 4,083 Hours Per Year									
Sectors	Distance (km	Pistance (km) Stability Wind Speed (m/sec)		ΔΕ	Ср					
NE	1.88	D	8	1.959	-0.025					
ENE	1.18	1.18 D 8		2.715	-0.034					
E	1.35	D	8	2.471	-0.031					
ESE	1.04	D	8	2.967	-0.037					
\$E	1.05	D	4	5.750	-0.072					
SSE	1.20	1.20 E 5		6.269	-0.079					
	PSD Class I Plui	2	-0.05							

# 4.0 Nitrogen Deposition Modeling with AERMOD

As requested by the National Park Service, a nitrogen deposition analysis was conducted using the annual  $NO_x$  concentrations predicted by AERMOD. A Tier 1 assessment was based in part upon the highly conservative recommendations outlined in the IWAQM Phase I guidance (USEPA, 1993). NO and  $NO_2$  have low deposition velocities and solubility and thus do not contribute substantially to nitrogen deposition. It was, therefore, assumed that all of deposition associated with oxides of nitrogen emissions are due to the dry deposition of nitric acid. IWAQM makes the highly conservative assumption that <u>all</u> modeled annual average  $NO_x$  has been transformed to  $NO_x$  will be considered.

Modeling results for this conservative approach indicated that are refined Tier 2 approach is recommended. The Tier 2 approach takes into account the fact that because the two National Parks are near the facility, it is overly conservative to assume that all of the  $NO_x$  is converted to  $HNO_3$ . As a conservative refinement, the average rate of conversion of  $NO_x$  to  $HNO_3$  was computed by applying the MESOPUFF-II formulation that is used in CALPUFF:

During daylight hours, the conversion occurs according to the MESOPUFF-II equation provided below:

$$k_3 = 1261 \left[ O_3 \right]^{1.45} S^{-1.34} \left[ NO_x \right]^{-0.12}$$

where S is the stability category (1=A to 4= D),  $[O_3]$  is the ambient ozone concentration and  $[NO_x]$  is the average concentration within a puff in ppm. This equation is inversely proportional to the  $NO_x$  concentration. A conservative treatment that <u>overestimates</u> the chemical transformation rate uses the modeled annual average <u>ground-level</u> concentration, which is likely to be much higher than the in-puff concentration. Another factor that adds to the conservatism is that this equation is used in CALPUFF to estimate the conversion of  $NO_x$  to nitrates, which is comprised of both ammonium nitrate and nitric acid, depending on a variety of factors including the availability of ammonia and temperature. Ammonium nitrate, which is a fine particulate, has a much lower deposition velocity than nitric acid (HNO<sub>3</sub>) and is not prevalent in this warm climate, which is why it is not considered here. The background ozone concentration of 0.04 ppm was used, consistent with the VISCREEN plume visibility assessment. A conservatively extreme annual average daytime stability category of B was assumed. For nighttime periods, the conversion rate (-k") used in CALPUFF was 2%/hr.

The daytime and nighttime deposition rates were estimated by computing the fraction of the modeled NO<sub>x</sub>that has been converted to HNO<sub>3</sub> according to the conversion rates noted above, the distance to the peak AERMOD annual NO<sub>x</sub> concentration (X, km) and the average daytime and nighttime wind speeds (u, km/hr).

Fraction converted to  $HNO_3 = (1-exp((k/100)*X/u))$ 

This concentration was then multiplied by the 0.05 m/sec deposition velocity as recommended by IWAQM Phase I and the day and night contributions were then added to estimate the total annual nitrogen deposition.

The Tier 2 nitrogen deposition results for the peak annual NO<sub>x</sub> concentration modeled by AERMOD are:

- 0.0062 kg/ha-yr for ENP
- 0.0022 kg/ha-yr for BNP.

Since these conservative results are below the screening Deposition Analysis Threshold value for PSD Class I areas of 0.01 kg/ha-yr, the project nitrogen deposition will not adversely affect the areas within ENP and BNP.

#### 5.0 References

- Federal Land Managers, 2008. Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase I Report—Revised (June 27, 2008 draft). Available at <a href="http://www.nature.nps.gov/air/permits/flag/docs/FLAG">http://www.nature.nps.gov/air/permits/flag/docs/FLAG</a> RevisedFinalDraft20080624.pdf.
- FTC&H, 2008. Dispersion Modeling Protocol PSD Class II For An 8 Megawatt (Net) Landfill gas and oil Electrical Generating Stations. Project No. G080670A. October, 2008.
- MacDonald, Jake, 2005. Diesel and Gasoline Engine Emissions: Characterization of Atmospheric Composition and Health Responses to Inhaled Emissions. 5.0 2005 Diesel Engine Emissions Reduction (DEER), August 21-25, Chicago (available at: http://www1.eere.energy.gov/vehiclesandfuels/resources/proceedings/2005\_deer\_presentations.html# session2)
- Scire, J.S., D.G. Strimaitis, and R.J. Yamartino, 2000a: A User's Guide for the CALPUFF Dispersion Model (Version 5). (available at <a href="http://www.src.com/calpuff/download/CALPUFF">http://www.src.com/calpuff/download/CALPUFF</a> UsersGuide.pdf), Earth Tech, Inc., Concord, MA.
- U.S. EPA. 1992. Workbook for Visual Impact Screening and Analysis (Revised). EPA-450/R-92-023. Office of Air Quality Planning and Standards, Research Triangle Park, NC. (referenced at http://www.epa.gov/scram001/dispersion screening.htm).
- U.S. EPA, 1993. Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 1 Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility. EPA-454/R-93-015. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC.
- U. S. EPA. 1995. User's guide for the Industrial Source Complex (ISC3) dispersion models. Volume II: Description of model algorithms. EPA-454/B-95-003b, 120 pp. [NTIS PB95-222758.], available at <a href="http://www.epa.gov/scram001/userg/regmod/isc3v2.pdf">http://www.epa.gov/scram001/userg/regmod/isc3v2.pdf</a>.
- U.S. EPA. 2004. User's Guide for the AMS/EPA Regulatory Model (AERMOD). EPA-454/B-03-001 (September 2004). Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. (available at <a href="http://www.epa.gov/scram001/dispersion\_prefrec.htm#aermod">http://www.epa.gov/scram001/dispersion\_prefrec.htm#aermod</a>).
- U.S. EPA 2005. Guideline on Air Quality Models, 40 CFR Part 51, Appendix W.

# Appendix A VISCREEN Level 2 Frequency Analysis

Table A-5-1(a) Level 2 Visibility Analysis Meteorological Frequency Table for SSW Sector for ENP

	SSW Downwind Sector: Wind Direction from 11.25								re es		
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	49258	17	0.009	0	0.027	0.119	0	0	0	0
F	2	98516	6	0.037	0	0.329	0.465	0.037	0	0.329	0.465
E	1	136801	17	0	0	0	0	0.037	0	0.329	0.465
F	3	147774	3	0.11	0	0.566	1.022	0.146	0	0.894	1.488
E	2	273603	6	0.027	0	0.018	0.037	0.173	0	0.913	1.524
D	1	360396	17	0	0	0	٥	0.173	0	0.913	1.524
E	3	410404	3	0.137	0.018	0.256	0.228	0.310	0.018	1.168	1.752
E	4	547206	2	0.055	0.018	0.438	0.265	0.365	0.037	1.606	2.017
E	5	884007	2	0.009	0.1	0.73	0.1	0.374	0.137	2.337	2.118
D	2	720792	6	0.027	0	0	0.009	0.402	0.137	2.337	2.127
D	3	1081168	3	0.356	0.046	0.037	0.046	0.758	0.183	2.373	2.172
D	4	1441584	2	0.265	0.119	0.183	0.128	1.022	0.301	2.556	2.300
D	5	1801981	2	0.146	0.082	0.301	0.091	1.168	0.383	2.857	2.391
D	6	2162377	2	0.192	0.374	0.219	0.064	1.360	0.758	3.076	2.455
D	7	2522773	1	0.119	0.374	0.155	0.009	1.479	1.132	3.231	2.464
D	8	2883169	1	0.155	0.785	0.173	0.027	1.634	1.917	3.405	2.492

Table A-1(b) Level 2 Visibility Analysis Meteorological Frequency Table for SW Sector for ENP

	SW Downwind Sector: Wind Direction from 33.75								ees		
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	46075	16	0	0	0.018	0.055	0	0	0	0
F	2	92150	5	0.018	0	0.192	0.329	0.018	0	0.192	0.329
E	1	127611	16	0	0	0	0	0.018	0	0.192	0.329
F	3	138226	3	0.046	0	0.484	0.73	0.064	0	0.675	1.059
E	2	255221	5	0.027	0	0.046	0.037	0.091	0	0.721	1.095
D	1	332676	16	0	0	0	0	0.091	0	0.721	1.095
E	3	382832	3	0.064	0.009	0.301	0.164	0.155	0.009	1.022	1.260
Е	4	510443	2	0.018	0.055	0.639	0.347	0.173	0.064	1.661	1.606
E	5	638054	2	0.037	0.119	1.579	0.329	0.210	0.183	3.240	1.935
D	2	665353	5	0.046	0	0.009	0.018	0.256	0.183	3.249	1.953
D	3	998029	3	0.301	0.082	0.082	0.018	0.557	0.265	3.332	1.972
D	4	1330706	2	0.356	0.128	0.21	0.183	0.913	0.392	3.541	2.154
D	5	1663382	2	0.237	0.356	0.392	0.155	1.150	0.748	3.934	2.309
D	6	1996059	1	0.456	1.141	0.84	0.283	1.606	1.889	4.774	2.592
Q	7	2328735	1	0.584	1.406	0.831	0.265	2.191	3.295	5.604	2.857
D	8	2661411	1	1.132	2.227	0.712	0.329	3.322	5.522	6.316	3.185

Table A-1(c) Level 2 Visibility Analysis Meteorological Frequency Table for WSW Sector for ENP

	WSW Downwind Sector: Wind Direction from 56.25 to 78.75 degrees											
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	
F	1	35067	13	0	0	0.018	0.027	0	0	0	0	
F	2	70134	4	0.009	0	0.246	0.246	0.009	0	0.246	0.246	
E	1	96050	13	0	0	0	0	0.009	0	0.246	0.246	
F	3	105202	3	0.027	0	1.095	1.46	0.037	0	1.342	1.707	
Е	2	192100	4	0.027	0	0.018	0.009	0.064	0	1.360	1.716	
D	1	239891	13	0	0	0	0	0.064	0	1.360	1.716	
E	3	288150	3	0.073	0.037	0.329	0.265	0.137	0.037	1.689	1.981	
E	4	384200	2	0.073	0.073	1.543	0.986	0.210	0.110	3.231	2.966	
D	2	479782	4	0.064	0.009	0.009	0.009	0.274	0.119	3.24	2.976	
E	5	480250	1	0.046	0.265	3.249	1.132	0.319	0.383	6.49	4.107	
D	3	719673	3	0.146	0.119	0.055	0.037	0.465	0.502	6.544	4.144	
D	4	959564	2	0.319	0.319	0.529	0.329	0.785	0.821	7.074	4.472	
D	5	1199455	1	0.648	0.776	0.922	0.575	1.433	1.597	7.996	5.047	
D	6	1439346	1	1.104	2.245	1.378	0.748	2.537	3.843	9.374	5.796	
D	7	1679237	1	1.205	2.994	1.36	0.465	3.742	6.836	10.734	6.261	
D	8	1919128	1	1.707	2.711	0.94	0.447	5.449	9.547	11.674	6.709	

Table A-1(d) Level 2 Visibility Analysis Meteorological Frequency Table for W Sector for ENP

			W Downs	wind Secto	or: Wind D	irection fro	om 78.75 to	101.25 degr	ees		
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	34824	13	0.009	0	0.009	0.064	0	Û	0	0
F	2	69648	4	0.018	0	0.429	0.52	0.018	0	0.429	0.520
E	1	95357	13	0.009	0	0	0	0.018	0	0.429	0.520
F	3	104472	3	0.064	0	1.88	2.966	0.082	0	2.309	3.487
E	2	190715	4	0.018	0.018	0.082	0.009	0.100	0.018	2.391	3.496
D	1	237901	13	0.009	0	0	0	0.100	0.018	2.391	3.496
Е	3	286072	3	0.064	0.064	0.639	0.465	0.164	0.082	3,030	3.961
Е	4	381429	2	0.21	0.027	2.273	1.926	0.374	0.110	5.303	5.887
D	2	475802	4	0.018	0.018	0.037	0.009	0.392	0.128	5.340	5.896
Е	5	476786	1	0.128	0.173	4.874	2.82	0.520	0.301	10.214	8.717
D	3	713703	3	0.173	0.137	0.091	0.018	0.694	0.438	10.305	8.735
D	4	951604	2	0.612	0.429	0.566	0.767	1.305	0.867	10.871	9.502
D	5	1189505	1	0.94	1.041	1.634	1.086	2.245	1.908	12.505	10.588
D	6	1427406	1	1.57	3.012	2.519	1.132	3.815	4.920	15.024	11.720
D	7	1665307	1	1.433	2.519	1.506	0.712	5.248	7.439	16.530	12.432
D	8	1903208	1	1.488	1.47	0.612	0.319	6.736	8.908	17,141	12,751

Table A-1(e) Level 2 Visibility Analysis Meteorological Frequency Table for WNW Sector for ENP

			WNW Down	wind Sec	rom 101.25	to 123.75 de	grees				
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	31910	12	0	0	0.037	0.046	0	0	0.037	0.046
F	2	63821	4	0.046	0	0.329	0.539	0.046	0	0.365	0.584
Е	1	87069	12	0	0	0	0.009	0.046	0	0.365	0.593
F	3	95731	2	0.082	0	1.041	2.008	0.128	0	1.406	2.601
E	2	174138	4 .	0.037	0	0.018	0.037	0.164	0	1.424	2.638
D	1	214269	12	0.009	0	0	0	0.173	0	1.424	2.638
Е	3	261207	2	0.064	0.009	0.374	0.338	0.237	0.009	1.798	2.976
E	4	348277	2	0.128	0.018	1.269	1.369	0.365	0.027	3.067	4.345
D	2	428537	4	0.037	0	0.018	0	0.402	0.027	3.085	4.345
E	5	435346	1	0.119	0.146	2.592	1.999	0.520	0.173	5.677	6.344
D	3	642806	2	0.146	0.164	0.064	0.055	0.666	0.338	5.741	6.398
D	4	857075	2	0.356	0.292	0.456	0.402	1.022	0.630	6.198	6.800
D	5	1071344	1	0.748	0.767	0.84	0.566	1.771	1.396	7.037	7.366
D	6	1285612	1	1.177	1.899	1.241	1.086	2.948	3.295	8.279	8.452
D	7	1499881	1	1.67	2.327	0.904	0.758	4.618	5.622	9.182	9.210
D	8	1714150	1	1.625	1.743	0.475	0.502	6.243	7.366	9.657	9.712

Table A-1(f) Level 2 Visibility Analysis Meteorological Frequency Table for NW Sector for ENP

			NW Down	wind Secto	om 123.75 t	o 146.25 deg	rees				
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	32667	12	0	0	0.018	0.128	0	0	0.018	0.128
F	2	65335	4	0.037	0	0.301	0.402	0.037	0	0.319	0.529
E	1	89219	12	0	0	0	0.037	0.037	0	0.319	0.566
F	3	98002	2	0.073	0	1.351	1.287	0.110	0	1.670	1.853
Ë	2	178439	4	0.037	0	0.055	0.055	0.146	0	1.725	1.908
D	1	220368	12	0.009	0	0	0	0.155	0	1.725	1.908
Е	3	267658	2	0.128	0.073	0.292	0.347	0.283	0.073	2.017	2.254
E	4	356877	2	0.183	0.018	1.168	0.685	0.465	0.091	3.185	2.939
D	2	440736	4	0.046	0	0.009	0	0.511	0.091	3.195	2.939
E	5	446096	1	0.146	0.201	2.045	1.387	0.657	0.292	5.239	4.326
D	3	661104	2	0.21	0.091	0.064	0.037	0.867	0.383	5.303	4.363
D	4	881472	2	0.356	0.329	0.374	0.31	1.223	0.712	5.677	4.673
D	5	1101840	1	0.502	0.657	0.621	0.511	1.725	1.369	6.298	5.184
D	6	1322208	1	1.187	1.999	0.922	0.703	2.912	3.368	7.220	5.887
D	7	1542576	1	1.634	2.93	0.657	0.675	4.545	6.298	7.877	6.563
D	8	1762943	1	2.647	2.985	0.529	0.758	7.192	9.283	8.406	7.320

Table A-5-2(a) Level 2 Visibility Analysis Meteorological Frequency Table for NE Sector for BNP

	NE Downwind Sector: Wind Direction from 213.75 to 236.25 degrees										
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	1252	1	0.009	0	0.009	0.119	0.009	0	0,009	0.119
F	2	2504	0	0.046	0	0.301	0.739	0.055	0	0.310	0.858
E	1	2914	1	0.009	0	0	0	0.064	0	0.310	0.858
F	3	3756	0	0.009	0	0.913	1.095	0.073	0	1.223	1.953
Е	2	5828	0	0.027	0	0.018	0.055	0.100	0	1.241	2.008
D	1	5830	1	0.018	0	0	0	0.119	0	1.241	2.008
È	3	8742	0	0.073	0	0.183	0.237	0.192	0	1.424	2.245
E	4	11656	0	0.027	0	0.475	0.192	0.219	0	1.899	2.437
D	2	11659	0	0.055	0.018	0.027	0.009	0.274	0.018	1.926	2.446
E	5	14570	0	0.009	0	0.347	0.128	0.283	0.018	2.273	2.574
D	3	17489	0	0.192	0.064	0.037	0.037	0.475	0.082	2.309	2.610
D	4	23319	0	0.183	0.037	0.073	0.137	0.657	0.119	2.382	2.747
D	5	29149	0	0.091	0.146	0.192	0.173	0.748	0.265	2.574	2.921
D	6	34978	0	0.192	0.201	0.173	0.073	0.940	0.465	2.747	2.994
D	7	40808	0	0.173	0.246	0.091	0.037	1.114	0.712	2.839	3.030
0	8	46638	0	0.274	0.475	0.018	0.018	1.387	1.187	2.857	3.049

Table A-2(b) Level 2 Visibility Analysis Meteorological Frequency Table for ENE Sector for BNP

	ENE Downwind Sector: Wind Direction from 236.25 to 258.75 degrees											
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	
F	1	610	1	0	0	0.018	0.128	0	0	0.018	0.128	
F	2	1221	0	0.073	0	0.237	0.694	0.073	0	0.256	0.821	
E	1	1422	1	0.009	0	0	0	0.082	0	0.256	0.821	
F	3	1831	0	0.018	0	0.803	0.995	0.100	0 -	1.059	1.816	
D	1	2828	1	0,009	0	0	0	0.110	0	1.059	1.816	
E	2	2844	0	0.046	0	0.027	0.027	0.155	0	1.086	1.844	
E	3	4266	0	0.055	0.018	0.164	0.219	0.210	0.018	1.250	2.063	
D	2	5657	0	0.091	0	0.009	0.027	0.301	0.018	1.260	2.090	
E	4	5689	0	0.055	0.009	0.411	0.246	0.356	0.027	1.670	2.337	
E	5	7111	0 .	0.018	0.027	0.621	0.11	0.374	0.055	2.291	2.446	
D	3	8485	0	0.119	0.037	0.027	0.082	0.493	0.091	2.318	2.528	
D	4	11314	0	0.11	0.128	0.128	0.137	0.602	0.219	2.446	2.665	
D	5	14142	0	0.037	0.1	0.21	0.073	0.639	0.319	2.656	2.738	
D	6	16970	0	0.1	0.119	0.246	0.082	0.739	0.438	2.903	2.820	
D	7	19799	0	0.119	0.265	0.173	0.009	0.858	0.703	3.076	2.830	
D	8	22627	0	0.091	0.575	0.128	0.027	0.949	1.278	3.204	2.857	

Table A-2(c) Level 2 Visibility Analysis Meteorological Frequency Table for E Sector for BNP

	E Downwind Sector: Wind Direction from 258.75 to 281.25 degrees											
Stability	Wind Speed (m/sec)	σy*σz*WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	
F	1	751	1	0.018	0	0.027	0.24	0.018	0	0.027	0.246	
F	2	1503	0	0.064	0	0.338	0.73	0.082	0	0.365	0.977	
E	1	1750	1	0.018	0	0	0	0.100	0	0.365	0.986	
F	3	2254	0	0.055	0	0.575	1.24	0.155	0	0.940	2.227	
D	1	3486	1	0.009	0	Ō	0	0.164	0	0.940	2.227	
E	2	3500	0	0.037	0.009	0.037	0.07	0.201	0.009	0.977	2.300	
Ε	3	5250	0	0.046	0.018	0.265	0.22	0.246	0.027	1.241	2.528	
D	2	6973	0	0.119	0	0.009	0.01	0.365	0.027	1.250	2.547	
E	4	7000	0	0.055	0.009	0.392	0.36	0.420	0.037	1.643	2.912	
Ε	5	8750	0	0.018	0.027	0.602	0.22	0.438	0.064	2.245	3.140	
D	3	10459	0	0.192	0.037	0.018	0.05	0.630	0.100	2.264	3.195	
D	4	13946	0	0.137	0.173	0.11	0.12	0.767	0.274	2.373	3.322	
D	5	17432	0	0.128	0.173	0.146	0.05	0.894	0.447	2.519	3.377	
D	6	20919	0	0.082	0.347	0.228	0.1	0.977	0.794	2.747	3.478	
D	7	24405	0	0.1	0.319	0.228	0.02	1.077	1.114	2.976	3.505	
D	8	27892	0	0.128	0.63	0.082	Q	1.205	1.743	3.058	3.505	

Table A-2(d) Level 2 Visibility Analysis Meteorological Frequency Table for ESE Sector for BNP

			ESE Down	wind Secto	om 281.25 t	to 303.75 deg	rees				
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	502	1	0.009	0	0.046	0.301	0.009	0	0.046	0,301
F	2	1005	0	0.091	0	0.383	1.150	0.100	0	0.429	1.451
E	1	1170	1	0.018	0	0	0.009	0.119	0	0.429	1.460
F	3	1507	0	0.037	0	0.465	1.625	0.155	0	0.894	3.085
D	1	2324	1	0.018	0	0.018_	0.018	0.173	0	0.913	3.103
E	2	2341	0	0.137	0	0.027	0.055	0.310	0	0.940	3,158
E	ധ	3511	0	0.1	0.009	0.228	0.392	0.411	0.009	1.168	3.551
D	2	4648	0	0.146	0.018	0.064	0.027	0.557	0.027	1.232	3.578
E	4	4682	0	0.064	0.027	0.402	0.438	0.621	0.055	1.634	4.016
E	5	5852	0	0.027	0.018	0.511	0.465	0.648	0.073	2.145	4.482
D	3	6972	0	0.292	0.137	0.037	0.073	0.940	0.210	2.181	4.555
D	4	9296	0	0.21	0.246	0.146	0.119	1.150	0.456	2.327	4.673
D	5	11620	0	0.192	0.237	0.219	0.146	1.342	0.694	2.547	4.819
D	6	13944	0	0.173	0.429	0.283	0.155	1.515	1.123	2.829	4.974
D	7	16268	0	0.237	0.511	0.201	0.1	1.752	1.634	3.030	5.075
D	8	18592	0	0.274	0.63	0.246	0.128	2.026	2.264	3.277	5.203

Table A-2(e) Level 2 Visibility Analysis Meteorological Frequency Table for SE Sector for BNP

SE Downwind Sector: Wind Direction from 303.75 to 326.25 degrees											
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hı)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	510	1	0.018	0	0.046	0.283	0.018	0	0.046	0.283
F	2	1020	0	0.155	0	0.429	1.698	0.173	0	0.475	1.981
E	1	1188	1	0.073	0	0	0.018	0.246	0	0.475	1.999
F	3	1529	0	0.137	0	0.712	2.921	0.383	0	1.187	4.920
D	1	2359	1	0.046	0	0	0	0.429	0	1.187	4.920
Ш	2	2376	0	0.155	0.009	0.037	0.1	0.584	0.009	1.223	5.020
Ш	3	3564	0	0.347	0.027	0.301	0.703	0.931	0.037	1,524	5.723
D	2	4718	0	0.128	0	0.009	0.055	1.059	0.037	1.533	5.778
Ш	4	4751	0	0.228	0.064	0.42	0.712	1.287	0.100	1.953	6.490
Ш	5	5939	0	0.055	0.073	0.612	1.123	1.342	0.173	2.565	7.612
D	3	7077	0	0.529	0.073	0.046	0.21	1.871	0.246	2.610	7.822
D	4	9436	0	0.639	0.246	0.192	0.283	2.510	0.493	2.802	8.105
D	5	11794	0	0.447	0.292	0.256	0.31	2.957	0.785	3.058	8.415
D	6	14153	0	0.575	0.456	0.383	0.356	3.532	1.241	3.441	8.771
D	7	16512	0	0.694	0.557	0.356	0.365	4.226	1.798	3.797	9.137
D	8	18871	0	0.73	0.922	0.447	0.456	4.956	2.720	4.244	9.593

Table A-2(f) Level 2 Visibility Analysis Meteorological Frequency Table for SSE Sector for BNP

			SSE Downy	vind Secto	om 326.25 t	to 348.75 deg	rees				
Stability	Wind Speed (m/sec)	σy'σz'WS (m3/sec)	Transport Time (hr)	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM	6 AM to Noon	Noon to 6 PM	6 PM to Midnight	Midnight to 6 AM
F	1	627	1	0.037	0	0.119	0.365	0.037	0	0.119	0.365
F	2	1253	0	0.173	0	0.593	2.072	0.210	0	0.712	2.437
E	1	1459	1	0.009	0.009	0	0.027	0.219	0.009	0.712	2.464
F	3	1880	0	0.319	0	1.552	4.573	0.539	0.009	2.264	7.037
D	1	2903	1	0.018	0	0.009	0	0.557	0.009	2.273	7.037
E	2	2919	0	0.21	0.009	0.091	0.137	0.767	0.018	2.364	7.174
E	3	4378	0	0.429	0.018	0.602	1.26	1.196	0.037	2.966	8.434
D	2	5807	0	0.192	0	0.037	0.064	1.387	0.037	3.003	8.498
E	4	5838	0	0.484	0.1	1.104	1.908	1.871	0.137	4.107	10.405
E	5	7297	0	0.146	0.082	1.26	1.962	2.017	0.219	5.367	12.368
D	3	8710	0	0.831	0.219	0.128	0.183	2.848	0.438	5.495	12.55
D	4	11613	0	1.196	0.274	0.465	0.602	4.043	0.712	5.960	13.153
D	5	14516	0	1.177	0.329	0.548	0.849	5.221	1.041	6.508	14.001
D	6	17420	0	1.031	0.557	0.63	0.803	6.252	1.597	7.138	14.805
D	7	20323	Û	0.721	0.593	0.438	0.438	6.973	2.191	7.576	15.243
D	8	23226	0	0.712	0.429	0.338	0.365	7.685	2.620	7.913	15.608

# **Attachment 2**

	Siloxane	SC	R		Oxio	lation Catalyst	
				per yr (assumed half		-	per yr (assumed half
				of Siloxane Annualed			of Siloxane Annualed
Annualized Cost For Siloxane System	\$ 3,016,143.46 per yr	\$	1,508,071.73	Cost)	\$	1,508,071.73	Cost)
Annualized Cost For SCR System		\$	2,050,325.70	per yr	\$	958,550.25	per yr
Total Annualized Cost		\$	3,558,397.43	per yr	\$	2,466,621.98	per yr
Tons Removed			203	tpy @ 80% efficiency		265	tpy @ 80% efficiency
				<u> </u>	Inclu	ides engine map,	and startup assistance
Cost of removal			\$17,512	/ton		\$9,315	/ton

#### Siloxane Removal

Annual Electricity Cost

\$ 20,119

#### Capital Cost

Description	Cost	t	Data or Formula	Source/Comment:
Siloxane Pretreatment Equipment Cost				
Equipment Capital Cost of Siloxane Removal System		\$5,123,890		Back Calculated from Total Installed Plant Cost
Installation Labor and Materials	\$2	2,818,139.3	=Equipment Capital X 0.55	EAPCCM (8% foundation and support, 14% handling, 16% electrical, 16% Piping, 1% Insulation)
Total Direct Capital Costs (\$) (A)		\$7,942,029	A = Direct Capital Cost for Siloxane Remov	val
Indirect Installation Costs				
General Facilities		\$397,101	=0.05 X A	EAPCCM
Engineering and Home Office Fees		\$794,203	=0.10 X A	EAPCCM
Process Contigency		\$397,101	=0.05 X A	EAPCCM
Total Indirect Installation Costs (\$) (B)		\$1,588,406	B = A X (0.05 + 0.10 + 0.05)	EAPCCM
Project Contigency (\$) (C)		\$1,429,565	C = (A + B) X 0.15	EAPCCM
Total Plant Cost (\$) (D)	\$	10,960,000	D = A + B + C	Applied Filter Technologies Engineering Report for the City of Manitooc WWTP, May 31, 2007. Total Installed Cost Ratioed from 117 SCFM to 2700 SCFM
Allowance for Funds During Construction	\$	-	E = 0	EAPCCM
Royalty Allowance	\$	-	F = 0	EAPCCM
Preproduction Cost		\$219,200	G = 0.02 X (D + E)	EAPCCM
Inventory Capital	\$	-		
Initial Catalyst and Chemicals	\$	•	I = 0	
Total Capital Investment (\$) (TCI)	\$	11,179,200	TCI = D + E + F + G + H +I	Characterization of the Installed Costs of Prime Movers using Gaseous Opportunity Fuels, prepared for DOE, Resource Dynamics Corp. Sept. 2007
Annual Costs				
Description	Cost	t .	Data or Formula	Source/Comment:
Direct Annual Costs				
Operating Labor				
Operator	\$	21,900.00	1 hr/shift, \$20.00 per hour, 3 shifts per day	
Supervisor	\$	3,285.00	= 0.15 * Operator	EAPCCM
Maintenance				
Labor & Material	\$	167,688	= 0.015 * TCI	EAPCCM
Variable Costs				
Annual Siloxane Removal Media Replacement	\$	760,385	Applied Filter Technologies Engineering R	eport for the City of Manitooc WWTP, May 31, 2007. Annual Regenerative Media Cost Ratioed from 117 SCFM to 2700 SCFM

, united Econolity Cool	\$ 0.0	0671 kWh assumed	
Total Direct Annual Cost	\$ 973,377	DAC =Maintenance + Variable + Siloxane	EAPCCM
Indirect Annual Costs	-		
Overhead	\$ 115,723.80	= 0.6 * Operating Labor and Maintance	EAPCCM
Property Tax			
Insurance	\$ 111,792.00	= 0.01 * TCI	
Administration	\$ 223,584.00	= 0.02 * TCI	
Total Indirect Annual Cost	\$ 451,100	DAC =Maintenance + Variable	EAPCCM

= Power \* operating hours/yr \* electricity cost

Capital Recovery	\$1,591,667	= TCI * CRF				
Capital Recovery Fa	actor	0.14238 CRF = -	i X (1 + <sub>i</sub> ) <sup>EL</sup> (1 + <sub>i</sub> ) <sup>EL</sup> - 1			
Equipment	t Life	10 yrs				
Interest	Rate	7%				
Capital recovery factor (C	CRF)	0.14238			_	
Total Annual Cost (\$) (TAC)	\$ 3,016,143	TAC = Total	Direct Annual Costs + Indirect A EAPCCM	<del>-</del>		

#### **Capital Cost**

Description	Cost	Data or Formula	Source/Comment:
SCR Equipment Cost Cost per HP Engine Horse Power Number of Engines Direct Capital Cost* of SCR for 24 engines	\$121 /HP 469 HP 24 \$1,361,976	=\$/HP X Engine HP X # of Engines	Alpha Gamma Technologies Inc, 2005 Memorandum to US EPA Client Client Includes engine map, and startup assistance.
Total Direct Capital Costs (\$) (A)	\$1,361,976	A = Direct Capital Cost for SCR	
Indirect Installation Costs General Facilities Engineering and Home Office Fees Process Contigency	\$68,099 \$136,198 \$68,099	=0.05 X A =0.10 X A =0.05 X A	EAPCCM EAPCCM EAPCCM
Total Indirect Installation Costs (\$) (B)	\$272,395	$B = A \times (0.05 + 0.10 + 0.05)$	EAPCCM
Project Contigency (\$) (C)	\$245,156	C = (A + B) X 0.15	EAPCCM
Total Plant Cost (\$) (D)	\$1,879,527	D = A + B + C	EAPCCM
Allowance for Funds During Construction Royalty Allowance Preproduction Cost Inventory Capital Initial Catalyst and Chemicals	\$ - \$ - \$37,591 \$ - \$ -	E = 0 F = 0 G = 0.02 X (D + E) H = Vol <sub>reag</sub> (gal) X Cost <sub>reag</sub> (\$/gal) I = 0	EAPCCM EAPCCM EAPCCM SCR Capital Cost assumes first fill of reagent Included in SCR Capital Cost
Total Capital Investment (\$) (TCI)	\$1,917,117	TCI = D + E + F + G + H +I	EAPCCM

#### **Annual Costs**

Description	Cost			Data or Formula	Source/Comment:
Direct Annual Costs					
Operating Labor					
Operator	\$	-			Negligible (per EAPCCM - in general no additional personnel is required to operate or maintain an SCR)
Supervisor	\$	-			
Maintenance					
Labor & Material	\$	28,757		= 0.015 * TCI	EAPCCM
Variable Costs					
Annual Reagent Cost	\$	977,926		= q <sub>sol</sub> * Cost <sub>reagent</sub> * 8760 hr/yr	
Reagent Cost =		,	\$ 2.00	\$/gal assumed	
Annual Electricity Cost	\$	20,119		= Power * operating hours/yr * elec	ctricity cost
Site specific electricity cost =			\$ 0.0671	kWh assumed	•
Annualized Catalyst Replacement	\$	750,569		=FWF X n <sub>SCR</sub> X Vol <sub>catalyst</sub> X CC	
interest rate (i) =			7%	assumed	
Operating Life of Catalyst =			700	hours assumed	
Years for FWF(Y) =			0.080		
Future Worth Factor (FWF) =			12.91	=i X (1 / ((1+i) <sup>Y</sup> -1)	
Catalyst Cost (CC) =			\$ 65		
Total Direct Annual Cost	\$	1,777,371		DAC =Maintenance + Variable + Sil	loxane EAPCCM

#### Capital Cost

Description Indirect Annual Costs	Cost	Data or Formula	Source/Comment:	
Overhead Property Tax Capital Recovery	\$272,954	) ) = TC( * CRF		
,	Capital Recovery Factor	0.14238 CRF = $\frac{i \times (1+i)^{EL}}{(1+i)^{EL}-1}$		
Cap	Equipment Life Interest Rate ital recovery factor (CRF)	10 yrs 7% 0.14238		
Total Indirect Annual Cost	\$272,954	DAC =Maintenance + Variable	EAPCCM	
Total Annual Cost (\$) (TAC)	\$2,050,326	DAC =Maintenance + Variable	EAPCCM	

Plant Design Assumption/Variables		
		Notes
Heat Input (Q <sub>b)</sub>	88.2 MMBTU/hr	Based on 24 Dual Fuel Engines
Uncontrolled NO <sub>X</sub> Emission rate (NOX <sub>in</sub> )	2.12 lb/MMBTU	Client testing - 1% LFG and 99% diesel usage
Actual Stoichiometric Ratio (ASR)	1.05	EAPCCM Equation 2.11, Section 4.2, Chapter 2
NO <sub>X</sub> removal efficiency (ŋ <sub>NOX</sub> )	80%	assumed
Molecular weight of reagent (M <sub>reag</sub> )	60.06 g/mol	molecular weight of urea
Molecular weight of NO2(M <sub>NOx</sub> )	46 g/mol	molecular weight of NO2
Mass flow rate of reagent (m <sub>reagent</sub> )	205.074 lb/hr	$\dot{m}_{reagent} = \frac{NOX_{in} Q_b ASR \eta_{NOX} M_{reag}}{M_{NOX}}$ EAPCCM Equation 2.32, Section 4.2, Chapter 2
Concentration of Urea in aqueous solution (C <sub>sol</sub> )	400/	·····
Concentration of Orea in aqueous solution (C <sub>sol</sub> )	40%	assumed Includes engine map, and startup assistance.
Mass flow rate of diluted solution $(\dot{m}_{\text{sol}})$	512.686 lb/hr	$\dot{m}_{sol} = \frac{\dot{m}_{reagent}}{C_{sol}}$ EAPCCM Equation 2.33, Section 4.2, Chapter 2
Specific Gravity of 40% aqueous urea solution (SG)	1.1 g/cm <sup>3</sup>	
Solution volumetric flow rate (q <sub>sol</sub> )	55.8 gph	$q_{sol} = \frac{\dot{m}_{sol}}{SG*8.35 \text{ lb/gal}}$
Pressure drop across duct work (ΔP <sub>duct</sub> )	3 inches of H2O	EAPCCM
Pressure drop across catalyst layer (ΔP <sub>catalyst</sub> )	1 inches of H2O	EAPCCM
Power Consumption (Power)	34.2 kW	
NOX efficiency adjustment (η <sub>adj</sub> )	1.1333	EAPCCM Equation 2.20, Section 4.2, Chapter 2
NOX inlet adjustment (NOX <sub>adi</sub> )	1.5325	EAPCCM Equation 2.21, Section 4.2, Chapter 3
Slip	0.25	Slip = ASR - $\eta_{NOX}$
Slip adjustment	1.26933	EAPCCM Equation 2.22, Section 4.2, Chapter 3
Fuel Sulfur content (wt%)	0.0015%	,
Sulfur Adjsutment (S <sub>adj</sub> )	0.9636	
Temperature of Flue Gas	875 °F	
Temperature adjustment (T <sub>adj</sub> )	1.68937	
number of SCRs (n <sub>SCR</sub> )	4	one per stack
Catalyst Volume (Vol <sub>catalyst</sub> )	222,359 ft <sup>3</sup> /SCR	$Vol_{catalyst} = \underbrace{2.81* Q_b * \eta_{adj} * Slip_{adj} * NOX_{adj} * S_{adj} * T_{adj}}_{} * T_{adj}$
		Neén

#### **Capital Cost**

Description	Cost	Data or Formula	Source/Comment:
Oxidation Catalyst. Equipment Cost Cost per HP Engine Horse Power Number of Engines Direct Capital Cost of Oxidation Catalyst for 24 engines	\$15 /HP 469 HP 24 \$168,840	=\$/HP X Engine HP X # of Engines	9/3/1998 Catalyst Control Cost Information Memorandum From Reciprocating Internal Combustion Engine Work Gri Client Client Includes engine map, and startup assistance.
Total Direct Capital Costs (\$) (A)	\$168,840	A = Direct Capital Cost for Oxidation Ca	talyst
Indirect Installation Costs General Facilities Engineering and Home Office Fees Process Contigency	\$8,442 \$16,884 \$8,442	=0.05 X A =0.10 X A =0.05 X A	EAPCCM EAPCCM EAPCCM
Total Indirect Installation Costs (\$) (B)	\$33,768	$B = A \times (0.05 + 0.10 + 0.05)$	EAPCCM
Project Contigency (\$) (C)	\$30,391	C = (A + B) X 0.15	EAPCCM
Total Plant Cost (\$) (D)	\$232,999	D = A + B + C	EAPCCM
Allowance for Funds During Construction Royalty Allowance Preproduction Cost Inventory Capital Initial Catalyst and Chemicals	\$ - \$ - \$4,660 \$ - \$ -	E = 0 F = 0 G = 0.02 X (D + E)	EAPCCM EAPCCM EAPCCM Included in Oxidation Catalyst Capital Cost
Total Capital Investment (\$) (TCI)	\$237,659	TCI = D + E + F + G + H +I	EAPCCM

#### **Annual Costs**

Description	Cost		Data or F	ormula	Source/Comment:
Direct Annual Costs					
Operating Labor					
Operator	\$	-			Assume Negligible
Supervisor	\$	-			
Maintenance					
Labor & Material	\$	3,565	= 0.015 *	* TCI	EAPCCM
Variable Costs					
Annual Electricity Cost	\$	20,119		* operating hours/yr * electricity o	ost
Site specific electricity cost =			\$ 0.0671 kWh	assumed same as SCR	
Annualized Catalyst Replacement	\$	901,029			
Operating Life of Catalyst =			700 hours	assumed	
Catalyst Cost (CC) =			\$ 18,000 /OC/yr	assumed	
Total Direct Annual Cost	\$	924,713	DAC =Ma	aintenance + Variable + Siloxane	EAPCCM
Indirect Annual Costs					<del></del>
Overhead		0			
Property Tax		0			
Capital Recovery		\$33,837	= TCI * C	:RF	
Capital Recovery Factor			0.14238 CRF =	$= \frac{i \times (1+i)^{EL}}{(1+i)^{EL} - 1}$	
Equipment Life Interest Rate Capital recovery factor (CRF)			10 yrs 7% 0.14238	(1-1)	
Total Indirect Annual Cost		\$33,837	DAC =Ma	aintenance + Variable	EAPCCM
Total Annual Cost (\$) (TAC)		\$958,550	DAC =Ma	aintenance + Variable	EAPCCM

## **Attachment 3**



## For City of Manitowoc WWTP 900 Quay Street Manitowoc, WI 54220

Engineering Report on Digester Gas Critical Analysis
and Recommended Pre-treatment for Upgrade to Cogen Specifications

Date: 31 May, 2007

On April 30, 2007, the digester gas was sampled for siloxanes at the Manitowoc WWTP using Tedlar bags. for "permanent gases" analysis (major gases, such as Methane, Carbon Dioxide, and Nitrogen), sulfur species and VOCs. Samples were also taken for siloxanes analysis by the methanol impinger method. The full results of all the tests are presented in the back of this report.

The Manitowoc WWTP digester gas contains an abnormally high complement of VOCs and siloxanes and will require their removal to protect power generation equipment. Below is an overview of these data with a comparison to typical digester gas contaminant values:

Siloxanes and Organosilicons	30-April-2007	30-April-2007 Duplicate	Typical Range
	ppbv		ppbv
Hexamethyldisiloxane (MM)	not detected	pe strate	< 100 to 500
Octamethyltrisiloxane (MDM)	not detected	***	< 100 to 500
Hexamethylcyclotrisiloxane (D3)	not detected		250 to 1,000
Octamethyltcyclotetrasiloxane (D4)	491		250 to 2,500
Decamethylcyclopentasiloxane (D5)	13,500		500 to 5,000
Dodecamethylcyclohexasilxane (D6)	464	****	<100 to 500
Total Siloxanes and Organosilicons	14,455		2,500 to 7,500

Gas Constituents (Based on Estimates)	30-April-2007	30-April-2007 Duplicate	Typical Range
Methane (% by Volume)	62.6%	ene.	58 to 73
Carbon Dioxide (% by Volume)	36.2%		35 to 41
Nitrogen (% by Volume)	0.90%		0.1 to 2.5
Oxygen (% by Volume)	0.39%		0 to 1.5
Total BTU per ft <sup>3</sup>	635		580 to 730
Total specific gravity (relative to air)	0.911		0.89 to 0.96
Silicon in Fuel, µg Si / ft <sup>3</sup>	2,334		400 to 2,000
Silicon in Fuel, µg Si / BTU	3.73		0.60 to 1.80

Sulfur Species <sup>2</sup>	30-April-2007	30-April-2007 Duplicate	Typical Range
	ppbv	ppbv	ppbv
Hydrogen Sulfide	12,000		250,000 to 800,000
Butyl Mercaptan	not detected		0 to 500
tert-Butyl Mercaptan	130		0 to 5,000
Carbon Disulfide	not detected		0 to 2,500
Carbonyl Sulfide	not detected		0 to 2,500
Diethyl Disulfide	not detected		0 to 2,500
Diethyl Sulfide	not detected	E3-2070	0 to 1,500
Dimethyl Disulfide	not detected		0 to 1,500
Dimethyl Sulfide	440		0 to 2,000
2,5-Dimethyl Thiophene	not detected		0 to 1,500
Ethyl Mercaptan	not detected		0 to 1,500
Ethyl Methyl Sulfide	not detected		0 to 1,500
2-Ethyl Thiophene	not detected		0 to 1,500
Isobutyl Mercaptan	not detected		0 to 1,500
Isopropyl Mercaptan	not detected		0 to 2,500
Methyl Mercaptan	not detected		0 to 1,500
3-Methyl Thiophene	not detected		0 to 500
n-Propyl Mercaptan	not detected	<del></del>	0 to 1,500
Tetrahydrothiophene	not detected		0 to 1,000

VOCs	30-April-2007	30-April-2007 Duplicate	Typical Range
	ppbv	ppbv	ppbv
EPA Method TO-15 Compounds	5,531		500 to 5,000
C6+ Compounds From TO-15	5,468		2,500 to 7,500
Tentatively Identified Compounds (TICs)	212,000		2,500 to 15,000
Total VOCs from TO-15 and TICs	217,531	<u></u>	3,000 to 20,000
Total VOCs including siloxanes	231,986		5,000 to 25,000

(TIC = "Tentatively Identified Compound"

#### Discussion:

The complete analytical results appear on the following pages. The siloxanes are very high for digester gas, nearly double the upper end of the typical concentration range. Organosilicons and siloxanes comprise about 6.2% of the total VOCs identified. In digester gas, organosilicons can comprise up to 80% of the total VOCs.



## **Applied Filter Technology**

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### SAG<sup>™</sup> TVOCS<sup>™</sup> Laboratory Report

Project: Manitowoc

Report Date: 05/23/2007

Siloxanes (By SIL- ND = Not Detected	i Sampling Me	uiod and G	CINO Analysis)	Т	Sample Date	4/30/2007	Sample ID: A		
ND - Not Detected			Reporting Limit	Sample ID: "A"					
		• '	-ppbv	ppbv	μg/m³	ppbv	μg/m³	ppbv	μg/m³
Pentamethyldisiloxane		47 (	(Interpreted by AFT)	not detected	not detected	bboa	μg/iii	PPD4	μg/m
Hexamethyldisiloxane (N	лм\		(Interpreted by AFT)	not detected	not detected				
Hexamethylcyclotrisiloxa	,	- 1	(Interpreted by AFT)	not detected	not detected				
Octamethyltrisiloxane (M	, ,	,	(Interpreted by AFT)	not detected	not detected	,			
Octamethyltcyclotetrasile	•		(Interpreted by AFT)	491	. 5,950				
Decamethylcyclopentasi	, ,	,	(Interpreted by AFT)	13,500	204,000				
Dodecamethylcyclohexa			(Interpreted by AFT)	464	8,430				
	(,		Total	14.455	218,380				
Major Gas Constitu	ents (By AST	M D1945)	, ,	Sulfur Spe	cies (By AS	TM D5504)	···········		
Sample Date					Sample Date:				
Sample ID: "Tedlar Bag		Duplicate	Reporting Limit, % Vol.	Sample ID: "		Value	Reporting Limit	Duplicate	Reporting Limi
(not run - all values est		•		· '	•	ppbv	ppbv	ppbv	ppbv
Oxygen	0.150%	(Est.)	0.10	Hydrogen Sul	lfide	12000	100	_	
Nitrogen	0.850%	(Est.)	0.10	Butyl Mercap	tan	not detected	100		
Carbon Monoxide	36.0%	(Est.)	0.010	tert-Butyl Mer	rcaptan	130	<b>10</b> 0		
Methane	63.0%	(Est.)	0.00010	Carbon Disult	fide	not detected	100		
Carbon Dioxide			0.010	Carbonyl Sulf	fide	not detected	100		
Ethane			0.0010	Diethyl Disulf	fide	not detected	100		·
Ethene			0.0010	Diethyl Sulfid	le	not detected	10 <b>0</b>		•••
Acetylene .			0.0010	Dimethyl Disu	ulfide	not detected	100		
Propane			0.0010	Dimethyl Sulf	fide	180	100		
Isobutane			0.0010	2,5-Dimethyl	Thiophene	not detected	100	_	
Butane			0.0010	Ethyl Mercap	tan	not detected	100		
Neopentane		*	0.0010	Ethyl Methyl	Sulfide	not detected	100		
Isopentane			0.0010	2-Ethyl Thiop	hene	not detected	100		•••
Pentane			0.0010	Isobutyi Merc	captan	not detected	100		
Ç6+			0.010	Isopropyl Me	rcaptan	not detected	100	<del></del> -	
Hydrogen			0.010	Methyl Merca	•	not detected	100		
Total BTU/cubic foot	630	(Est.)		3-Methyl Thic	•	not detected	100		
Total Sp. Gravity	0.90	(Est.)		n-Propyl Mer		not detected	100		<del></del>
Total	100.00%			Tetrahydrothi	iophene	not detected	250		
				Thiophene	_	not detected	100	***	





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### SAG<sup>™</sup> TVOCS<sup>™</sup> Laboratory Report

Project: Manitowoc

Report Date: 05/23/2007

VOCs	Sample Date:						·	· -	
(Modified EPA Metho	od TO-14A +	Top 10 TIC	s - Vinyl Acetate exclu	ıded)		TICs (Tentatively Ident	ified Comp	ounds)	
Sample ID: "Tedlar Bag"	ppbv	Rpt. Limit	•	ppbv	Rpt. Limit	1100 (1011atively lacil	anea comp	ounus)	
Freon 12	Not Detected	4	1.0.4 Trimethy the areas	400		_	CAS No.	p <b>p</b> bv	
Freon 114	Not Detected		1,2,4-Trimethylbenzene	160	4	Decane	124-18-5	1 <b>70</b> 00	ΝJ
Vinyl Chloride	Not Detected	4	1,3-Dichlorobenzene	Not Detected	4	Decane, 2,2,5-trimethyl-	62237 <b>-</b> 96-1	33000	ΝJ
Bromomethane		4	1,4-Dichlorobenzene	Not Detected	4	Heptadecane	629-78-7	25000	ΝJ
	Not Detected	4	alpha-Chlorotoluene	Not Detected	4	Cyclohexane, butyl-	1678-93-9	13000	ΝJ
Chloroethane	Not Detected	4	1,2-Dichlorobenzene	Not Detected	4	Nonane, 3-methyl-	5911-04- <b>6</b>	13000	ΝJ
Freon 11	Not Detected	4	1,3-Butadiene	Not Detected	4	Hexane, 2,2,3-trimethyl-	16747-25-4	29000	ΝJ
1,1-Dichloroethene	Not Detected	4	Hexane	34	4	Dodecane, 2,7,10-tnmethyl-	74645-98-0	12000	ΝJ
Freon 113	Not Detected	4	Cyclohexane	Not Detected	4	Tridecane	629-50-5	12000	ΝJ
Methylene Chloride	Not Detected	4	Bromodichloromethane	Not Detected	4	Spiro[4.5]decane	176-63-6	17000	ΝJ
1,1-Dichloroethane	Not Detected	4	Dibromochloromethane	Not Detected	4	Benzeneacetic acid, .alpha.,	55334-40-2	41000	ΝJ
cis-1,2-Dichloroethene	Not Detected	4	Heptane	80.	4	4-bis[(trimethyl)]-	55334-40-2	4 1000	N J
Chloroform	Not Detected	4	Cumene	23	4				
1,1,1-Trichloroethane	Not Detected	4	Propylbenzene	35	4				
Carbon Tetrachloride	Not Detected	4	Chloromethane	Not Detected	16				
Benzene	77	4	1,2,4-Trichlorobenzene	Not Detected	16				
1,2-Dichloroethane	Not Detected	. 4	Hexachlorobutadiene	Not Detected	16	VOC Summary:			
Trichloroethene	38	4	Acetone	Not Detected	16		ppbv	ug/m3	
1,2-Dichloropropane	Not Detected	4	Carbon Disulfide	Not Detected	16	VOCs from TO-14A	5,531	21,640	
cis-1,3-Dichloropropene	Not Detected	4	2-Propanol	Not Detected	16	VOCs from TICs	212,000	1,433,090	
Toluene	4500	4	trans-1,2-Dichloroethene	Not Detected	16	Total VOCs	217,531	1,454,730	_
trans-1,3-Dichloropropene	Not Detected	4	2-Butanone (MEK)	Not Detected	16	Total Toos	217,001	1,101,100	
1,1,2-Trichloroethane	Not Detected	4	Tetrahydrofuran	Not Detected	16	Siloxanes	14,455	218,380	
Tetrachloroethene	25	4	1,4-Dioxane	Not Detected	16	Total VOCs + siloxanes	231,986	1,673,110	
1,2-Dibromoethane (EDB)	Not Detected	4	4-Methyl-2-pentanone	Not Detected	16	Total VOOS / Siloxunes	201,000	1,070,110	
Chlorobenzene	Not Detected	4	2-Hexanone	Not Detected	16				
Ethyl Benzene	62	4	Bromoform	Not Detected	16				
m,p-Xylene	180	4	4-Ethyltoluene	130	16	E = Exceeds Instrument Cali	hration Range		
o-Xylene	71	4	Ethanol	Not Detected	16	J = Estimated Value	oranon nange		
Styrene	Not Detected	4	Methyl tert-butyl ether	Not Detected	16	N = identification is based or	accumptive d	ata	
1,1,2,2-Tetrachloroethane		4	3-Chloropropene	Not Detected	16	not detected = compound is			iit
1,3,5-Trimethylbenzene	59	4		57	16	not detected - compound is	DelOM HIGHIOU	uetecoon IIII	
1,0,5 I fill lett lyiberizerie	38		2,2,4-Trimethylpentane	5/	10				

The siloxane concentration in this gas is expected to cause significant damage to power generation or other combustion equipment. The hydrogen sulfide level and other sulfur species are atypically very low, and do not require additional treatment to remove them. The trace amounts of hydrogen sulfide and other sulfur species should be removed by the siloxane removal media (SAG™ type PMG™). Thus, the siloxanes removal equipment should remove all or most of the remaining H₂S, mercaptans, and most sulfides (except for dimethyl sulfide) for about the same length of time it will remove the major portion of the siloxanes D4, D5, and D6) The removal of reduced sulfur species by the siloxane removal media is not expected to shorten its life. Siloxanes D4, D5 and D6 account for 100% of the silicon dioxide formed during combustion. For this type of gas, our engineering approach for a siloxane removal system would be a non-regenerable system employing specialized SAG™ media. However, the media usage is so high that this is not economical. Thus, we are proposing a regenerable system. The proposed treatment system would remove the siloxanes from the gas on a continuous basis with the regenerable media requiring replacement once or twice per year, depending on operating conditions.

#### **Data Interpretation**

A standard digester gas treatment train consists of a water knockout followed by hydrogen sulfide removal (not required), then moisture removal, siloxane and VOC removal and final particulate filtration. AFT is proposing to supply the complete treatment train. The moisture removal step is necessary to protect the SAG™ siloxane media from fouling. An adequate moisture removal system is a treatment train comprised of a gas chiller, a condenser, water removal and gas reheat.

#### Gas Compression and Moisture Removal

Ahead of the treatment system, the gas pressure will be boosted nominally to 4 psig by a small 5 HP booster. Then the gas will enter a gas to liquid exchanger where the gas will be chilled (nominal 4 ton draw) to a target temperature of 40 degrees F, with the condensed water removed through a trap. The gas will then be reheated +25 to +30 degrees F in a gas to gas exchanger. The approximate capital for the blower and complete gas conditioning package is included in the package price listed at the end of the equipment description section. The annual O&M costs for the gas pressure booster and moisture removal package is primarily electrical. Based on a Kwh cost of \$0.05, the annual cost for continuous operation is approximately \$3,300 to \$6,600 depending on the gas flow.

#### Siloxane Removal

The organosilicon content of the Manitowoc WWTP WWTP digester gas is extremely high based on identifiable siloxanes and organosilicons compared to typical digester gas in Canada and the United States. Where the siloxanes are well over 100 ppvb total, removal of the organosilicon content is necessary to protect the ultimate combustion equipment from operational problems and potential failure. At the measured levels of siloxanes, a treatment system for their removal system is required. Combustion of this untreated digester gas will produce approximately 763 lb. of silicon dioxide per year. This silicon dioxide can build up a deposit at the point of combustion to levels where critical components can fail.

In the following Design Report, various parameters of the gas are listed relating to the organosilicon content of the digester gas. Two values that relate to allowable siloxanes concentrations are commonly used by reciprocating internal combustion engine-driven generator manufacturers. These are micrograms of siloxanes per standard cubic foot of gas (  $\mu g$  / SCF ) and micrograms of siloxanes per BTU or micrograms of silicon per BTU (  $\mu g$  / BTU ). Your combustion equipment specifications should also address one of these indexes or a similar parameter. You will find the calculated values for each of these parameters toward the middle of the page of the report on the left side of the page.

 $_{ji}$ 

AFT prefers the  $\mu g$  / BTU of silicon parameter since it takes into consideration the mass of silicon in the gas rather than the concentration of siloxanes, which vary from 1 to as many as 6 silicon atoms per individual siloxane molecule. In the following Engineering Report, you will notice that the total  $\mu g$  / BTU of silicon is 3.73. AFT recommends this value to be less than 0.1  $\mu g$  / BTU to properly protect most combustion devices. This is the basis for the design of the siloxane removal system proposed below.

#### Siloxane Removal System

The proposed siloxane removal system will consist of two 3.0 foot diameter by 8 foot straight side VOC and siloxanes removal vessels. Included is a media handling system to transport the spent media from the vessels to a microwave regeneration module and back to the vessels during regeneration. The media life between regenerations is expected to be as shown in the following table.

Gas Flow	Media Depth	E	Estimated Media Life, Days per vessel <sup>2</sup>							
SCFM	feet (pounds)	D5	D6	D4	% of SiO₂					
59	8 (1,600)	16	16	16	100					
76	8 (1,600)	13	13	13	100					
117	8 (1,600)	9	9	9	100					
120	8 (1,600)	8	8	8	100					

<sup>2</sup>Assumes continuous digester gas flow. Media depth in feet of media represents 1 vessel, although vessels can be operated in series.

For the proposed complete treatment system, AFT will provide Manitowoc WWTP with a formal proposal and firm quotation separately, based on an mutually derived scope of work, including the initial media fill. Additional information, including media weights and resistance to flow, are included in the attached Engineering Summary. Budgetary information on capital and O&M is listed below, but is not to be construed as a firm proposal.

#### **Equipment:**

#### SAGPack™ Moisture removal system (sized for 59 120 SCFM)

Manual inlet shutdown valve.

Condensate and particulate scrubber (0.3 micron)

A single rotary lobe 5 BHP (maximum) blower to boost gas to a nominal 4 psig.

Gas drying by a glycol chiller (est. 4 ton) and a glycol/gas heat exchanger

Circulation pump and glycol reservoir.

The heat exchanger will be a combined dryer/recuperator

Gas recirculation for up to 100% of the full 117 SCFM gas flow.

A final particulate filter to remove particulates greater than 4 microns (after siloxane removal vessels) Instrumentation for monitoring and troubleshooting. At a minimum the following gauges or sensors will be provided:

Incoming temperature and pressure

Differential pressure across the inlet and outlet filters

Temperature and pressure after the blower

Saturation temperature and pressure after drying

Delivery temperature and pressure

A NEMA 12 control panel will be provided for remote mounting outside of the classified area.

Controls will be based upon an Allen Bradley PLC.

System will be mounted on a carbon steel skid. The skid and all support structure will be powder coated for corrosion resistance. The chiller and control panel will be shipped loose for remote mounting by others. The complete system will be fabricated and tested prior to shipment.

#### WavPack™ Siloxane Removal System (sized for 120 SCFM maximum)

Microwave regenerable Siloxane Removal System Including:

2 x 3 ft. diameter dish top, cone bottom vessels, 8 ft. straight side, mounted on 4 legs each
Piping train for series operation, 4" SS 304, Schedule 10, ASME 150 lb. flanges
Ball valves to complete piping train − SS 304

SAG™ Media - Initial Fill (3,200 lb. for both vessels)

Ladder and Platform

Final Particulate Filter (0.4 micron)

Pneumatic Media transport system for intermittent regeneration campaigns

SAG WavPack™ 250 Microwave Regeneration unit, 1250 MHz, 25 pounds per hour capacity

WavPack Dstrux™ module for non-combustion based destruction of stripped VOCs

All components for a complete system as per agreed final scope

#### Also included in budgetary price:

Equipment Freight
Media Freight
Process Engineering
Project Engineering, Drawings, Seismic Calculations
Startup – 5 days

Total Estimated Budgetary Price: \$475,000.00 USD

Estimated delivery: 18 to 24 weeks.

This is a budgetary estimate based on the removal of water, VOCs, and siloxanes. There are ways to reduce the cost of a system, which can be discussed before a formal proposal is prepared. A lot of the cost is related to the price of steel, which is increasing at a rate of 1% to 2% per month, and has increased by more than 30% in just the last 9 months alone.

#### Operation and Maintenance:,

(Includes new media, media removal and disposal, freight, power consumption, testing)

Considerable savings are afforded by the use of the WavPack™ regenerable system.

	SAG™ System	WavPack™
Estimated Annual O&M	Non-regenerable	Regenerable System
At 59 SCFM	\$ 77,250	\$ 22,300
At 117 SCFM	\$ 144,000	\$ 32,950

#### Summary

Damage to power generation equipment by anaerobic digester gas can be from inorganics contained in the water vapor, the hydrogen sulfide, the siloxanes, or a combination of two or all three. ALL Hydrogen sulfide and other sulfur species must be removed for use of the biogas for fuel cells. Siloxanes are most often responsible for nearly all of the damage to other types of combustion equipment. Four siloxanes species were detected at a very high total level in this gas and would be expected to inflict significant damage to power generation equipment. A WavPack TM microwave regenerable VOC and siloxane removal system will eliminate the damage caused by these siloxanes.

With a single grab sample, it is not possible to know if the digester gas is variable in contaminant concentration. Further, the EPA Method TO-14A is limited to just the list of 63 compounds and as a result, misses more than half of the VOCs in heavily contaminated biogas. A full VOC scan is necessary to confirm the VOC levels and to determine the proper treatment system design for a firm proposal.



### **Applied Filter Technology**

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				Silo	xane Remova	l System D	esign Parame	ters			
Ргојесt: Ма	nitowoc					•			R	evision Date:	5/23/2007
Analytical Resul	lts	ppbv	µg/m³	Gas Constituer	nts, VOCs	Date	Sulfur Species	Sulfur Species Date		Inorganics	Date
	Others			••				·			
	Siloxane D4	491	5,953	Major Gas Con	nponents	?	Inorganic Sulfur	fur 4/30/20		NIOSH	
	Siloxane D5	13,500	205,000	TVOCS		4/30/2007	Organic Sulfur	4/30/20		Ash	
	Siloxane D6	464	8,440 .	Organosilicons	i	4/30/2007	Other			}	
	Total	14,455	219,393	TVOCs Scan		4/30/2007					
Biogas Charac		-					GAS STREAM	CONDITIONS			
•	Molecular Weight:	29.7			<u> </u>						
(	Gas Density, lb/ft³:	0.10		1			(maximum) Total Flow in ACFM: 97				
	ACF/lbMole: 291.4 Pressure, psig: 4			Tota	l Pressure (psia)	': \ 18.70					
	Total Moles/Hr.:	20.1		Temp	erature in Deg. F.:			.: 25.0	*(psig + 14.7)		
Tota	otal Relative Density: 1.02 Total mJ/m³: 23.30										
<u>-</u>	Silico	Snecies Cont	ribution to Silicat	e Production (as	SiO			Poton	Hal Damage fre	m Silican	
Silicon Source		D5	D4	D6 Others¹ Total			Potential Damage from Silicon  µg Silicon per BTU				
Pounds per Ye	ar ·	712.4	20.7	29.4	0.00	762.5	< 0.01 - 0.09	0.10 - 0.19	0.20 - 0.49	0.50 - 0.99	1.00 - 2.00 +
% of Total Silic	I	93.4%	2.7%	3.9%	0.0%	100%				1	
µg Silicon per S		2194.3	63.8	75.4	0.00	2334		Potentia	l Contribution to	O&M Costs	•
µg Silicon per E		3.505	0.102	0.120	0.000	3.73	+25-50%	+50-100%	+100-200%	+200-400%	> 4 0 0%
Others: See C	Organosilicons Repo	rt									,
			Siloxane Remova						Media Life		
					· · · · · · · · · · · · · · · · · · ·				ays to Breakthr		
Desig	in Flow	SAGTM	SAG <sup>TM</sup> media	Velocity	Resistance	Ib. SAG			xanes and Organ		
ACFM	Model	Depth ft.	ft <sup>3</sup>	FPM	in. w.c.*	media	D5	D6	D4	D3	MDM
48	36D	16	113	6.8	6.4	3,200	33	33	33	-	-
62	36D .	. 16	113	8.8	8.5	3,200	26	26	26	- 1	•
95	36D	16	113	13.4	13.7	3,200	17	17	17	•	٠.
97	36D	16	113	13.8	14.1	3,200	16	16	16		

<sup>1</sup> Assumes water has been removed from the gas stream and that the sulfur species and organics will not interfere with siloxane removal. Assumes that the
temperature of the gas stream is 77 oF (25 °C). If water has not been removed to below 45% RH equivalent, the life of the media could be reduced by 50% or more.
Media life calculations assume 2 beds in series. *Resistance based on 3 mm media. Hydrogen sulfide must be reduced to below 50 ppmv to protect SAG™ media.

At constant operation, this gas will produce up to 762.5 lb. of silicates (as SiO<sub>2</sub>) per year upon combustion.

NOTE: Breakthrough order is approximate. Actual field results may vary. To determine precise system performance, a pilot study is recommended.

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### **Applied Filter Technology**

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H<sub>2</sub>S and Siloxane Removal System Design Parameters

Project: Manitowoc

Revision Date: 5/23/2007

Requested Design	<b>in Parameters</b> SCFM	SCFM	OCEM	G Brassins	!-		<b>A</b> do latura
Year	Design	Minimum	SCFM Махітит	Gas Pressure For H₂S Removal	psig Ambient	psia 14.7	Moisture Saturated
2007	76.4	59	116.7	For Siloxanes Removal:	4	18.7	40 °F. PDDP
				Gas Temperature	°F.	°C.	
				For H₂S Removal	N/A	N/A	
				For Siloxanes Removal:	77	25.0	

Biogas Characteristics (Estimat	ed values	test not run)	Contaminant Information	ppbv	µ/m³	
Gas Avg. Molecular Weight:	29.71	Methane:	62.6%	Siloxanes, organositicons:	2,300	29,300
Gas Density, lb/ft <sup>3</sup> :	0.10	Total BTU/ft <sup>3</sup> :	635	H₂S:	255,000	355,000
Total Relative Density:	1.02	Total mJ/m3;	23.30	Total VOCs:	17,900	92,000

Biogas Combu	stion information	on					
	<b>Before Treatm</b>	ent (Raw gas)		After Treatn	ent (Sulfur, Sil	icon & Haloger	ns Removal)
μg per SCF:	Silicon (Si) 2334	Sulfur (S) 456	Halogens (CI) 8.79	μg per SCF:	Silicon (Si) < 25	Sulfur (S) < 3.70	Halogens (CI) < 10.0
µд ВТО:	3.73	0.7	0.014	· µg ВТU:	< 0.035	< 0.01	< 0.015

Proposed H <sub>2</sub> S Removal System and Performance											
Desig	n Flow	CIS <sup>™</sup> Media	.CIS™ media	lb. CIS™	Resistance	Resistance	Est. CIS™ Me	edia Life, Days			
SCFM	Model	Depth ft.	ft <sup>3</sup>	media	in. w.c. min.	in. w.c. max.	Anaerobic	Aerobic			
(Not required)	- '					l''''					
						}					
					'						

Non-Regen <i>e</i> r	Non-Regen <i>e</i> rable Siloxane Removal System and Performance (Vessesi in series operation)											
				_		Est. SAG™ M	edia Life, Days					
Desig	n Flow	SAG <sup>™</sup>	lb. SAG™	Resistance	Siloxane	Siloxane	Siloxane	% of total				
SCFM	Model	Depth ft.	media	in. w.c,	D5	D6	D4	SiO₂ Prod.				
59	36D	16	3,200	6.4	33	33	33	100%				
.76	36D	16	3,200	8.5	26	26	26	100%				
117	36D	16	3,200	13.7	17	17	17	100%				
120	36D	16	3,200	14.1	16	16	16	100%				

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# **Attachment 4**

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 16:37:29 \*\*\*

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags NL 2009 1111\_2001 10PM\_01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA01.SFC

Number of sources - 60 Number of source groups - 2 Number of receptors - 2042

#### \*\*\* POINT SOURCE DATA \*\*\*

ID	PART.	EMISSION RATE (GRAMS/SEC)	Х	(METERS)	(METERS)		(DEG.K)	(M/SEC)	STACK DIAMETER (METERS)			HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	566113 7	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.20790E+00		2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00		2825166.0		12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00		2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02		2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01		2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2		7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1		9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01		2859638.1		15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1		0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1		0.00	0.00	294.26	0.00	NO	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1		0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1		0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1		0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04		2843168.8		8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02		2843168.8		8.53	394.26	0.00	0.30	NO	NO	NO	
2503144	0	0.60633E-02		2843168.8		. 8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02		2843168.8		21.03	0.91		0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO	
2503482	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	
2503483	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	ИО	ИО	ИО	

2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	ИО
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
,													
2505202	0	0.12696E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505203	0	0.18958E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	ИО	NO	NO	
2505206	0	0.28746E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505207	0	0.14440E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	ИО	NO	NO	
2505208	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	ИО	
2505209	0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	ИО	NO	NO	
2505871	0	0.41580E+00	563501.1	2806740.3	0.8	12.50	410.93	22.86	1.37	NO	ИО	ИО	
2506141	0	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	ИО	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	ИО	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	ИО	ИО	
25000311	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	ИО	NO	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367 <sup>-</sup> .59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	ИО	
25052011	0	0.25890E-02	565901.2	2825259.5	1.5	6.40	0.82	294.26	0.00	NO	NO	ИО	
25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	NO	NO	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 , 2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 ,

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2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,
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#### \*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID	) 		AVERAGE CONC		R	ECEPTOR	(XR,	YR,	ZELEV,	ZHILL,	ZFLAG)	OF	TYPE	NETWORK GRID-ID
ALL	1STHIGHEST	VALUE İS	3.26736 <i>I</i>	) TA	565324.68	, 28250	01.56	,	1.50,	1.	50,	0.00	DC	
	2NDHIGHEST	VALUE IS							1.50,			0.00		
	3RDHIGHEST	VALUE IS	2.97466 A	) TA	565325.90	, 28249	52.96	,	1.50,	1.	50,	0.00	DC	
	4THHIGHEST	VALUE IS	2.95425 A	T (	565273.47	, 28250	48.90	,	1.53,	1.5	53,	0.00	DC	
	5THHIGHEST	VALUE IS	2.90141 A	T/	565275.92	, 28249	51.71	,	1.50,	1.	50,	0.00	DC	
	6THHIGHEST	VALUE IS	2.70822 F	) TA	565323.46	, 28250	50.16	,	1.60,	1.	60,	0.00	DC	
	7THHIGHEST	VALUE IS	2.68155 A	T/	565374.66	, 28250	02.82	,	1.50,	1.	50,	0.00	DC	
A	8THHIGHEST	VALUE IS	2.60979 F	YT (	565157.00	, 28250	02.00	,	1.60,	1.	60,	0.00	DC	
	9THHIGHEST	VALUE IS	2.50204 F	AT (	565375.88	, 28249	54.22	,	1.50,	1.	50,	0.00	DC	
	10THHIGHEST	VALUE IS	2.45737 A	AT (	565157.00	, 28251	02.00	,	1.60,	1.	60,	0.00	DC	
INGENCO	1STHIGHEST	VALUE IS	1.10184 A	AT (	565985.04	, 28253	92.89	,	1.50,	1.	50,	0.00	DC	
	2NDHIGHEST	VALUE IS	1.04226 A	) TA	566027.29	, 28253	66.52	,	1.50,	1.	50,	0.00	) DC	
	3RDHIGHEST	VALUE IS	1.03171 A	) TA	565942.79	, 28254	19.27	,	1.59,	1.	59,	0.00	) DC	
	4THHIGHEST	VALUE IS	0.88899 A	) TA	565900.54	, 28254	45.64	,	1.50,	1.	50,	0.00	) DC	
	5THHIGHEST	VALUE IS	0.85624 A	) TA	566069.53	, 28253	40.14	,	1.60,	1.	60,	0.00	) DC	
	6THHIGHEST	VALUE IS	0.74407 <i>I</i>	) TA	565858.29	, 28254	72.02	,	1.50,	1.	50,	0.00	) DC	
	7THHIGHEST	VALUE IS	0.70080 A	) TA	565969.26	, 28254	61.68	,	1.70,	1.	70,	0.00	) DC	
	8THHIGHEST	VALUE IS	0.69884 A	) TA	566011.51	, 28254	35.31	,	1.50,	1.	50,	0.00	) DC	
	9THHIGHEST	VALUE IS	0.65930 A	) T <i>F</i>	565927.02	, 28254	88.06	, ·	1.59,	1.	59,	0.00	) DC	
	10THHIGHEST	VALUE IS	0.62473	) T <i>A</i>	565816.04	, 28254	98.39	,	1.50,	1.	50,	0.00	) DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART .

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

#### \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	) 		AVERAGE CONC	DATE (YYMMDDHH)	RECE!	PTOR (XR, YR,	ZELEV, ZHILL	, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH HIGH	1ST HIGH VALUE 2ND HIGH VALUE		ON 01030224: AT ( ON 01103124: AT (	564107.00, 565328.34,	2823052.00, 2824855.76,	1.40, 1.50,	1.40, 1.50,	0.00) DC 0.00) DC	
INGENCO	HIGH HIGH	1ST HIGH VALUE 2ND HIGH VALUE		ON 01013024: AT (ON 01091424: AT (	566069.53, 566196.28,	2825340.14, 2825261.02,	1.60, 1.50,	1.60, 1.50,	0.00) DC 0.00) DC	
*** REC	EPTOR	TYPES: GC = GRI	DCART							

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 17:38:32 \*\*\*

\* + +

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags NL 2009 1111\_2002\_10PM\_01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA02.SFC

Number of sources - 60 Number of source groups - 2 Number of receptors - 2042

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X	Y (METERS)		STACK HEIGHT (METERS)		STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	566113.7	2825183.6	11.3	12.19	741.48	45.84	0.41	YES.	NO	NO	
40FEET2	0	0.20790E+00	566125.8	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	566113.7	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	566125.8	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	. 1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01		2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00		2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00		2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01		2859638.1	2.0	15.24	0.76		20400.00	NO	NO	NO	
2500224	0	0.28889E+00		2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01		2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500227	0	0.17667E+01		2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01		2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02		2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04		2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02		2843168.8	3.0	8.53	394.26		0.30	NO	NO	NO	
2503144	0	0.60633E-02		2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	•	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01		2843168.8	3.0	8.53	394.26	0.00	0.37	NO	ИО	NO	
2503148	0	0.50848E-02		2843168.8	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	ИО	

2503482	0	0.83160E+00	563831.2 2857458.	2 1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.83160E+00	563831.2 2857458.	2 1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503484	0	0.83160E+00	563831.2 2857458.	2 1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.	2 1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.	2 1.5	0.00	0.00	298.15	0.00	NO	ИО	NO
2503488	0	0.21575E-01	563831.2 2857458.	2 1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	2 1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	3 2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	3 2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	3 2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	.570611.3 2853218.3	3 2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	5 2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	Ω	0 .15133F-01	565901 2 2825259	5 1 5	12 19	0 46	688 71	2758 00	NO	NO	NΟ

#### \*\*\* POINT SOURCE DATA \*\*\*

COLLDGE		EMISSION RAT			BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART,	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS,	•	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
2505202	0	0.12696E-01	565901.2 2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505203	0	0.18958E-01	565901.2 2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505206	0	0.28746E-02	565901.2 2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505207	0	0.14440E-02	565901.2 2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505208 .	0	0.20535E-02	565901.2 2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505209	0	0.21056E-02	565901.2 2	2825259.5	1.5	6.40	0.84	616.48	0.00	, NO	NO	NO	
2505871	0	0.41580E+00	563501.1 2	2806740.3	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2506141	0	0.62244E+01	562401.1 2	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2 2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2 2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
25000310	0	0.22176E+01	566591.2 2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2 2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.22176E+01	566591.2 2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	ИО	NO	ИО	
25002214	0	0.67658E+00	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	ИО	NO	
25002215	0	0.63690E-04	567301.2 2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2 2	2859638.1	2.0	15.85	1.22	294.26	0.00	ИО	NO	NO	
25052010	0	0.23410E-02	565901.2 2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2 2		1.5	6.40	0.82	294.26	0.00	NO	ИО	NO	
25052013	0	0.20833E-02	565901.2 2	825259.5	1.5	6.40	0.70	663.71	0.00	NO	ИО	ИО	

\*\*\* SOURCE IDS DEFINING SOURCE GROUPS \*\*\*

GROUP ID . SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 ,

2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013, INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

#### \*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

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#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	)	AVERAGE CONC	REG	CEPTOR (XR, YR,	ZELEV,	ZHILL, ZFLAG)	OF TY	NETWORK PE GRID-ID
ALL	1STHIGHEST VALUE IS	S 3.36206 AT (	565324.68,	2825001.56,	1.50,	1.50,	0,00)	DC
	2NDHIGHEST VALUE IS	S 3.28154 AT (	565274.69,	2825000.31,	1.50,	1.50,	0.00)	DC
	3RDHIGHEST VALUE IS	S 3.03889 AT (	565273.47,	2825048.90,	1.53,	1.53,	0.00)	DC
	4THHIGHEST - VALUE IS	S 2.88234 AT (	565325.90,	2824952.96,	1.50,	1.50,	0.00)	DC
	5THHIGHEST VALUE IS	S 2.82996 AT (	565323.46,	2825050.16,	1.60,	1.60,	0.00)	DC
	6THHIGHEST VALUE IS	S 2.79647 AT (	565374.66,	2825002.82,	1.50,	1.50,	0.00)	DC
	7THHIGHEST VALUE IS	S 2.79060 AT (	565275.92,	2824951.71,	1.50,	1.50,	0.00)	DC
A	8THHIGHEST VALUE IS	S 2.61367 AT (	565157.00,	2825002.00,	1.60,	1.60,	0.00)	DC
	9THHIGHEST VALUE IS	S . 2.54330 AT (	565157.00,	2825102.00,	1.60,	1.60,	0.00)	DC
	10THHIGHEST VALUE IS	S 2.51826 AT (	565272.25,	2825097.50,	1.50,	1.50,	0.00)	DC
INGENCO	1STHIGHEST VALUE IS	S 1.34950 AT (	565985.04,	2825392.89,	1.50,	1.50,	0.00)	DC
	2NDHIGHEST VALUE I	S 1.30357 AT (	566027.29,	2825366.52,	1.50,	1.50,	0.00)	DC
	3RDHIGHEST VALUE I	S 1.25396 AT (	565942.79,	2825419.27,	1.59,	1.59,	0.00)	DC
	4THHIGHEST VALUE I	S 1.08495 AT (	565900.54,	2825445.64,	1.50,	1.50,	0.00)	DC
	5THHIGHEST VALUE I	S 1.06759 AT (	566069.53,	2825340.14,	1.60,	1.60,	0.00)	DC
	6THHIGHEST VALUE I	S 0.91487 AT (	565858.29,	2825472.02,	1.50,	1.50,	0.00)	DC
	7THHIGHEST VALUE I	S 0.87335 AT (	566011.51,	2825435.31,	1.50,	1.50,	0.00)	DC
	8THHIGHEST VALUE I	S 0.87002 AT (	565969.26,	2825461.68,	1.70,	1.70,	0.00)	DC
	9THHIGHEST VALUE I	S 0.80778 AT (	565927.02,	2825488.06,	1.59,	1.59,	0.00)	DC
	10THHIGHEST VALUE I	S 0.77178 AT (	565816.04,	2825498.39,	1.50,	1.50,	0.00)	DC

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

#### \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH) RECEF	TOR (XR, YR, ZELEV, ZHILI	NETWORK ,, ZFLAG) OF TYPE GRID-ID
ALL HIGH 1ST HI	GH VALUE IS 20.34375c	ON 02080224: AT ( 566607.00,	2823052.00, 0.70,	0.70, 0.00) DC
HIGH 2ND HI	GH VALUE IS 15.43822c	ON 02071824: AT ( 564557.00,	2823402.00, 1.40,	1.40, 0.00) DC
INGENCO HIGH 1ST HI	GH VALUE IS 16.68959c	ON 02061424: AT ( 566196.28,	2825261.02, 1.50,	1.50, 0.00) DC
HIGH 2ND HI	GH VALUE IS 10.08250	ON 02092624: AT ( 566069.53,	2825340.14, 1.60,	1.60, 0.00) DC
*** RECEPTOR TYPES:	GC = GRIDCART			
	GP = GRIDPOLR			
	DC = DISCCART			
	DP = DISCPOLR			

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 18:39:17 \*\*\*

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags NL 2009 1111\_2003\_10PM\_01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Mode1\Met Data\MIAMIA03.SFC

Number of sources - 60 Number of source groups - 2 Number of receptors - 2042

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RAT (GRAMS/SEC)	X	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)		STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
			~										
40FEET1	0	0.20790E+00	566113.7	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.20790E+00	566125.8	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET3	0	0.20790E+00	566113.7	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	566125.8	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	ИО	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	ИО	ИО	ИО	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	ИО	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	ИО	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	ИО	ИО	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	ИО	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	.0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2503141	0	0.89984E-04	565921.2	2843168.8	-3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503144	0	0.60633E-02	565921.2	2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	NO	NO	
2503146	0	0.90179E-01	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2	2843168.8	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	

2503482	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	. 0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	074025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	Ò	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E~01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RAT	E		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
2505202	0	0.12696E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505203	0	0.18958E-01	565901.2	2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505206	0	0.28746E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505207	0	0.14440E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505208 .	0	0.20535E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505209	0	0.21056E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1	2806740.3	0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2506141	0	0.62244E+01	562401.1	2816239.9	1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	МО	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2	2825259.5	1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	NO	NO	

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDS

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 ,

2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310, 25000311, 25000312, 25002210, 25002214, 25002215, 25002219, 25052010, 25052011, 25052013,

INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

#### \*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID			AVERAGE CONC	RE	CCEPTOR (XR, YR,	ZELEV,	ZHILL, ZFLAG	OF T		ETWORK RID-ID 
ALL	1STHIGHEST VA	LUE IS	2.83543 AT (	565324.68,	2825001.56,	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST VA	LUE IS	2.71009 AT (	565274.69,	2825000.31,	1.50,	1.50,	0.00)	DC	
	3RDHIGHEST VA	LUE IS	2.59383 AT (	565273.47,	2825048.90,	1.53,	1.53,	0.00)	DC	
	4THHIGHEST VA	LUE IS	2.49170 AT (	565374.66,	2825002.82,	1.50,	1.50,	0.00)	DC	
	5THHIGHEST VA	LUE IS	2.46058 AT (	565323.46,	2825050.16,	1.60,	1.60,	0.00)	DC	
	6THHIGHEST VA	LUE IS	2.33884 AT (	565325.90,	2824952.96,	1.50,	1.50,	0.00)	DC	
	7THHIGHEST VA	LUE IS	2.27958 AT (	565275.92,	2824951.71,	1.50,	1.50,	0.00)	DC	
	8THHIGHEST VA	LUE IS	2.16495 AT (	565272.25,	2825097.50,	1.50,	1.50,	0.00)	DC	
	9THHIGHEST VA	LUE IS	2.16184 AT (	565985.04,	2825392.89,	1.50,	1.50,	0.00)	DC	
Α	10THHIGHEST VA	LUE IS	2.15575 AT (	565157.00,	2825002.00,	1.60,	1.60,	0.00)	DC	
INGENCO	1STHIGHEST VA	LUE IS	1.28114 AT (	565985.04,	2825392.89,	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST VA	LUE IS	1.23644 AT (	566027.29,	2825366.52,	1.50,	1.50,	0.00)	DC	
	3RDHIGHEST VA	LUE IS	1.18311 AT (	565942.79,	2825419.27,	1.59,	1.59,	0.00)	DC	
	4THHIGHEST VA	LUE IS	1.04221 AT (	566069.53,	2825340.14,	1.60,	1.60,	0.00)	DC	
	5THHIGHEST VA	LUE IS	1.01028 AT (	565900.54,	2825445.64,	1.50,	1.50,	0.00)	DC	
	6THHIGHEST VA	LUE IS	0.85264 AT (	566011.51,	2825435.31,	1.50,	1.50,	0.00)	DC	
	7THHIGHEST VA	LUE IS	0.837.09 AT (	565858.29,	2825472.02,	1.50,	1.50,	0.00)	DC	
	8THHIGHEST VA	LUE IS	0.83581 AT (	565969.26,	2825461.68,	1.70,	1.70,	0.00)	DC	
	9THHIGHEST VA	LUE IS	0.77042 AT (	566053.76,	2825408.93,	1.50,	1.50,	0.00)	DC	
	10THHIGHEST VA	LUE IS	0.76818 AT (	565927.02,	2825488.06,	1.59,	1.59,	0.00)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

#### \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	) 					AVERAGE CONC	-	DATE (YYMMDDHH)		RECE	PTOR 	(XR, Y	R, ZELEV	, ZHIL	L, ZFLAG)	OF 7	ГҮРЕ 	NETWORK GRID-ID
ALL	HIGH HIGH			VALUE VALUE				03061924: 03012224:		564607.00, 563857.00,		23052.00 23052.00	•	40, 50,	1.40, 1.50,	0.00)		
INGENCO	HIGH HIGH			VALUE VALUE		13.90585c 11.52308		03052924: 03042524:	,	566196.28, 566069.53,		25261.02 25340.14	,	50, 60,	1.50, 1.60,	0.00)		
*** REC	CEPTOR	TYPE	G1 D0	C = GR: P = GR: C = DI: P = DI:	I DPOI SCCAF	LR RT												

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 19:40:43 \*\*\*

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags NL 2009 1111 2004 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA04.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE	PART.	EMISSION RATE (GRAMS/SEC)	X	Y	BASE ELEV.	STACK HEIGHT	STACK TEMP.	STACK EXIT VEL. (M/SEC)		BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
ID	CATS.		(METERS)	(MEIERS)	(MEIERS)	(MEIERS)	(DEG.K)	(M/SEC)	(METERS)				VARI DI
			<b>-</b>			<del>-</del>							
40FEET1	0	0.20790E+00	566113.7 2	825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	Ō	0.20790E+00	566125.8 2		11.3	12.19	741.48	45.84	0.41	YES	NO	ИО	
40FEET3	0	0.20790E+00	566113.7 2	825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET4	0	0.20790E+00	566125.8 2	825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2 2	834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	NO	
2500014	0	0.20412E+02	569741.2 2	834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031 ·	0	0.48509E+02	566591.2 2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2 2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2 2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2 2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2 2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2 2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2 2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2 2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NO	NO	
2500223	0	0.62592E-01	567301.2 2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500225	0	0.35442E-01	567301.2.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	ИО	NO	
2500227	0	0.17667E+01	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500228	0	0.52631E-01	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2 2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2503141	0	0.89984E-04	565921.2 2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503143	0	0.21577E-02	565921.2 2		3.0	8.53	394.26	0.00	0.30	NO	NO	NO	
2503144	0	0.60633E-02	565921.2 2	2843168.8	3.0	8.53	298.15	0.00	0.30	NO	NO	ИО	
2503145	0	0.47700E-01	565921.2 2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	ИО	ИО	
2503146	0	0.90179E-01	565921.2 2		3.0	8.53	394.26	0.00	0.37	NO	NO	NO	
2503148	0	0.50848E-02	565921.2 2	2843168.8	3.0	21.03	0.91	294.26	0.00	NO	NO	NO	
2503481	0	0.83160E+00	563831.2 2	2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO	

2503482	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO
2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	ИО
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	. 0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

	NUMBER	EMISSION RAT	Ξ		BASE	STACK	STACK	STACK	STACK	BLDG	URBAN	CAP/	EMIS RATE
SOURCE	PART.	(GRAMS/SEC)	Х	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SOURCE	HOR	SCALAR
ID	CATS.	•	(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)				VARY BY
	<b>-</b> :-												
2505202	. 0	 0.12696E-01	565901.2	2825259 5	. 1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505202	-	0.12050E 01	565901.2		1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505205	0	0.28746E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
	0 ·		565901.2			6.40	0.84	616.48	0.00		NO	NO	
2505207	-	0.14440E-02			1.5					NO			
2505208	0	0.20535E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505209	0	0.21056E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505871	0	0.41580E+00	563501.1		0.8	12.50	410.93	22.86	1.37	NO	ИО	NO	
2506141	0	0.62244E+01	562401.1		1.5	0.00	294.26	0.00	0.00	NO	ИО	ИО	
2506231	0	0.17962E+00	565511.2	2824949.5	1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506232	0	0.21633E+00	565511.2	2824949.5	1.5	15.24	3.35	1172.04	4000.00	NO	ИО	ИО	
25000310	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25002210	0	0.53308E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002214	0	0.67658E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002215	0	0.63690E-04	567301.2	2859638.1	2.0	8.53	0.30	298.15	0.00	NO	NO	NO	
25002219	0	0.56886E-01	567301.2	2859638.1	2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2	2825259.5	1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2		, 1.5	6.40	0.82	294.26	0.00	NO	NO	NO	
25052013	Ô	0.20833E-02	565901.2		1.5	6.40	0.70	663.71	0.00	NO	NO	NO	
	•				1.0		3		5.00				

\*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 ,

2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505201 , 2506141 , 2506231 , 2506232 , 2506232 , 25000310 , 25000311 , 25000312 , 25002210 , 25002214 , 25002215 , 25002219 , 25052010 , 25052011 , 25052013 ,

INGENCO 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

DP = DISCPOLR

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

\*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP II	) 		AVERAGE CONC	REG	CEPTOR (X	(R, YR,	ZELEV,	ZHILL, ZFLA	G) OF .	TYPE 	NETWORK GRID-ID
ALL	1STHIGHEST	VALUE IS	3.08827 AT (	565325.90,	2824952.	96.	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST		3.02743 AT (	565275.92,	2824951.		1.50,		0.00)	DC	
	3RDHIGHEST	VALUE IS	2.98918 AT (	565274.69,	2825000.	31,	1.50,	1.50,	0.00)	DC	
	4THHIGHEST	VALUE IS	2.97085 AT (	565324.68,	2825001.	56 <sup>-</sup> ,	1.50,	1.50,	0.00)	DC	
	5THHIGHEST	VALUE IS	2.57427 AT (	565375.88,	2824954.	22,	1.50,	1.50,	0.00)	DC	
	6THHIGHEST	VALUE IS	2.56818 AT (	565273.47,	2825048.	90,	1.53,	1.53,	0.00)	DC	
A	7THHIGHEST	VALUE IS	2.52766 AT (	565157.00,	2825002.	00,	1.60,	1.60,	0.00)	DC	
	8THHIGHEST	VALUE IS	2.40651 AT (	565374.66,	2825002.	82,	1.50,	1.50,	0.00)	DC	
	9THHIGHEST	VALUE IS	2.38722 AT (	565277.14,	2824903.	11,	1.50,	1.50,	0.00)	DC	
	10THHIGHEST	VALUE IS	2.36960 AT (	565323.46,	2825050.	16,	1.60,	1.60,	0.00)	DC	
INGENCO	1STHIGHEST	VALUE IS	0.86661 AT (	565985.04,	2825392.	89,-	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST	VALUE IS	0.85375 AT (	566027.29,	2825366.	52,	1.50,	1.50,	0.00)	DC	
	3RDHIGHEST	VALUE IS	0.80244 AT (	565942.79,	2825419.	.27,	1.59,	1.59,	0.00)	DC	
	4THHIGHEST	VALUE IS	0.73802 AT (	566069.53,	2825340.	14,	1.60,	1.60,	0.00)	DC	
	5THHIGHEST	VALUE IS	0.70643 AT (	565469.75,	2825199.	72,	1.50,	1.50,	0.00}	DC	
	6THHIGHEST	VALUE IS	0.70271 AT (	565900.54,	2825445	.64,	1.50,	1.50,	0.00)	DC	
	7THHIGHEST	VALUE IS	0.69592 AT (	565468.53,	2825248	.32,	1.50,	1.50,	0.00)	DC	
	8THHIGHEST	VALUE IS	0.68908 AT (	565470:97,	2825151	.12,	1.50,	1.50,	0.00)	DC	
	9THHIGHEST	VALUE IS	0.66158 AT (	565467.31,	2825296	.92,	1.50,	1.50,	0.00)	DC	
	10THHIGHEST	VALUE IS	0.65219 AT (	565419.76,	2825198	.47,	1.50,	1.50,	0.00)	DC	
*** REC	CEPTOR TYPES:	GC = GR GP = GR DC = DI	IDPOLR		, · ·		. •				

#### \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR,	ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE GRID-ID
	IGH 1ST HIGH VALUE : IGH 2ND HIGH VALUE :		ON 04022624: AT (ON 04111524: AT (	566238.53, 2825234.64, 565378.33, 2824857.02,	1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC
н	IGH 1ST HIGH VALUE : IGH 2ND HIGH VALUE :	IS 13.34586	ON 04092624: AT ( ON 04090524: AT (	566154.03, 2825287.39, 566154.03, 2825287.39,	1.50, 1.50, 1.50, 1.50,	0.00) DC 0.00) DC

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

\*\*\* AERMOD - VERSION 09292 \*\*\*

\*\*\* INGENCO - South Dade Landfill Location

\*\*\* Model Executed on 11/12/09 at 20:35:28 \*\*\*

Output File - U:\Projects\080670A\Dade South Permit Files\Model\Revised PM10 Model November 2009\PM increment and naags NL 2009 1111 2005 10PM 01.LST

Met File - u:\Projects\080670A\Dade South Permit Files\Model\Met Data\MIAMIA05.SFC

Number of sources - 60
Number of source groups - 2
Number of receptors - 2042

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	Х	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
40FEET1	0	0.20790E+00	566113.7	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
40FEET2	0	0.20790E+00	566125.8	2825183.6	11.3	12.19	741.48	45.84	0.41	YES	ИО	ΝО	
40FEET3	0	0.20790E+00	566113.7	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	ИО	ИО	
40FEET4	0	0.20790E+00	566125.8	2825166.0	11.3	12.19	741.48	45.84	0.41	YES	NO	NO	
2500013	0	0.11844E+02	569741.2	2834789.1	4.4	45.72	413.71	15.45	4.27	NO	NO	ИО	
2500014	0	0.20412E+02	569741.2	2834789.1	4.4	45.72	413.71	18.50	4.27	NO	NO	NO	
2500031	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	24.51	5.52	NO	NO	NO	
2500032	0	0.48509E+02	566591.2	2813050.1	1.5	121.92	408.15	23.47	5.52	NO	NO	NO	
2500035	0	0.57995E-01	566591.2	2813050.1	1.5	6.10	663.71	44.41	0.56	NO	NO	NO	
2500036	0	0.22412E-02	566591.2	2813050.1	1.5	3.96	814.26	53.10	0.20	NO	NO	NO	
2500037	0	0.25409E-02	566591.2	2813050.1	1.5	2.44	683.15	66.51	0.10	NO	NO	NO	
2500039	0	0.22176E+01	566591.2	2813050.1	1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
2500051	0	0.28026E+00	568801.2	2855238.2	1.6	7.62	346.48	30.78	1.16	NO	NO	NO	
2500221	0	0.13291E+00	567301.2	2859638.1	2.0	9.14	0.70	338.71	0.00	NO	NО	ИО	
2500223	0	0.62592E-01	567301.2	2859638.1	2.0	15.24	0.76	522.04	20400.00	NO	NO	NO	
2500224	0	0.28889E+00	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	ИО	NO	
2500225	0	0.35442E-01	567301.2	2859638.1	2.0	000	0.00	294.26	0.00	ИО	NO	NO	
2500227	0	0.17667E+01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2500228	0	0.52631E-01	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
2500229	0	0.12505E-02	567301.2	2859638.1	2.0	0.00	0.00	294.26	0.00	NO	NO	ИО	
2503141	0	0.89984E-04	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	ΝО	
2503143	0	0.21577E-02	565921.2	2843168.8	3.0	8.53	394.26	0.00	0.30	NO	NO	ИО	
2503144	0	0.60633E-02	565921.2	2843168.8	3.0	8.53	298.15	0.00	0.30	. NO	NO	NO	
2503145	0	0.47700E-01	565921.2	2843168.8	3.0	0.00	0.00	298.15	0.00	NO	ИО	NO	
2503146	0	0.90179E-01		2843168.8	3.0	8.53	394.26		0.37	NO	NO	ИО	
2503148	0	0.50848E-02	565921.2	2843168.8	3.0	21.03	0.91		0.00	NO	NO	ИО	
2503481	0	0.83160E+00	563831.2	2857458.2	1.5	76.20	422.04	41.21	2.57	ИО	ИО	ИО	

2503482	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503483	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	NO	NO
2503484	0	0.83160E+00	563831.2 2857458.2	1.5	76.20	422.04	41.21	2.57	NO	ИО	NO
2503486	0	0.68581E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503487	0	0.38462E+00	563831.2 2857458.2	1.5	0.00	0.00	298.15	0.00	NO	NO	NO
2503488	0	0.21575E-01	563831.2 2857458.2	1.5	0.00	0.00	298.15	2000.00	NO	NO	NO
2503489	0	0.28767E-03	563831.2 2857458.2	1.5	0.00	0.00	294.26	0.00	NO	NO	NO
2503931	0	0.73710E+00	570611.3 2853218.3	2.5	11.58	1255.37	11.61	0.91	NO	NO	NO
2503933	0	0.74025E+00	570611.3 2853218.3	2.5	11.58	538.71	6.40	1.22	NO	NO	NO
2503937	0	0.16380E+00	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2503938	0	0.31644E-02	570611.3 2853218.3	2.5	2.44	477.59	0.00	0.15	NO	NO	NO
2504701	0	0.46620E+00	579561.4 2850618.5	2.0	39.62	388.71	16.46	2.74	NO	NO	NO
2505201	0	0.15133E-01	565901.2 2825259.5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO

#### \*\*\* POINT SOURCE DATA \*\*\*

SOURCE	NUMBER PART.	EMISSION RATI	E X	Y	BASE ELEV.	STACK HEIGHT	STACK TEMP.	STACK EXIT VEL.	STACK DIAMETER	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR
ID	CATS.	(0111110,000,	(METERS)		(METERS)	(METERS)		(M/SEC)	(METERS)				VARY BY
2505202	0	0.12696E-01	565901.2	2825259 5	1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505202	0	0.18958E-01	565901.2		1.5	12.19	0.46	688.71	2758.00	NO	NO	NO	
2505205	0	0.10336E 01 0.28746E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505200	0	0.14440E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505207	0	0.14440E-02 0.20535E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505208	0	0.21056E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
2505205	0	0.41580E+00	563501.1		0.8	12.50	410.93	22.86	1.37	NO	NO	NO	
2506141	0	0.62244E+01	562401.1		1.5	0.00	294.26	0.00	0.00	NO	NO	NO	
2506231	0	0.17962E+00	565511.2		1.5	13.72	3.05	1172.04	4000.00	NO	NO	NO	
2506231	0	0.21633E+00	565511.2		1.5	15.24	3.35	1172.04	4000.00	NO	NO	NO	
2500232	0	0.21035E+00 0.22176E+01	566591.2		1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000310	0	0.22176E+01	566591.2		1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000311	0	0.22176E+01	566591.2		1.5	39.93	367.59	17.98	5.79	NO	NO	NO	
25000312	0	0.53308E-01	567301.2		2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
25002210	0	0.67658E+00	567301.2		2.0	0.00	0.00	294.26	0.00	NO	NO	NO	
												NO	
25002215	0	0.63690E-04	567301.2		2.0	8.53	0.30	298.15	0.00	NO	NO		
25002219	0	0.56886E-01	567301.2		2.0	15.85	1.22	294.26	0.00	NO	NO	NO	
25052010	0	0.23410E-02	565901.2		1.5	6.40	0.84	616.48	0.00	NO	NO	NO	
25052011	0	0.25890E-02	565901.2		1.5	6.40	0.82	294.26	0.00	NO	ИО	NO	
25052013	0	0.20833E-02	565901.2	2825259.5	1.5	6.40	0.70	663.71	0.00	NO	ИО	ИО	

. \*\*\* SOURCE IDs DEFINING SOURCE GROUPS \*\*\*

GROUP ID SOURCE IDs

ALL 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 , 2500013 , 2500014 , 2500031 , 2500032 , 2500035 , 2500036 , 2500037 , 2500039 ,

#### \*\*\* THE SUMMARY OF HIGHEST 24-HR RESULTS \*\*\*

#### \*\* CONC OF 10PM

				** CONC OF	10PM	IN M	ICROGE	AMS/M**3		. **				
GROUP ID				AVERAGE CONC	(	DATE YYMMDDHH)		RECE!	TOR (XR, YR,	ZELEV, ZHILL	, ZFLAG)	OF T	YPE	NETWORK GRID-ID
ALL	HIGH HIGH	1ST HIGH 2ND HIGH	VALUE IS			05031424: 05121624:	•	564107.00, 564057.00,	2823052.00, 2823302.00,	1.40, 1.50,	1.40,	0.00)	DC DC	
INGENCO	HIGH HIGH	1ST HIGH 2ND HIGH	VALUE IS			05031124: 05042324:		566238.53, 566238.53,	2825234.64, 2825234.64,	1.50, 1.50,	1.50, 1.50,	0.00)	DC DC	
*** REC!	EPTOR	G D	C = GRIDO P = GRIDO C = DISCO P = DISCO	POLR CART										

2500051 , 2500221 , 2500223 , 2500224 , 2500225 , 2500227 , 2500228 , 2500229 , 2503141 , 2503143 , 2503144 , 2503145 , 2503146 , 2503148 , 2503481 , 2503482 , 2503483 , 2503484 , 2503486 , 2503487 , 2503488 , 2503489 , 2503931 , 2503933 , 2503937 , 2503938 , 2504701 , 2505201 , 2505202 , 2505203 , 2505206 , 2505207 , 2505208 , 2505209 , 2505871 , 2506141 , 2506231 , 2506232 , 25000310 , 25000311 , 25000312 , 25002210 , 25002214 , 25002215 , 25002219 , 25052010 , 25052011 , 25052013 , 40FEET1 , 40FEET2 , 40FEET3 , 40FEET4 ,

\*\*\* THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS \*\*\*

#### \* CONC OF 10PM IN MICROGRAMS/M\*\*3

GROUP ID	,		AVERAGE CONC		REC	CEPTOR	(XR, YR,	ZELEV,	ZHILL, ZFLAG	) OF T	YPE	NETWORK GRID-ID
ALL	1STHIGHEST	VALUE IS	2.53917	AT (	565275.92,	282495	1.71,	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST	VALUE IS	2.53752	AT (	565325.90,	282495	2.96,	1.50,	1.50,	0.00}	DC	
	3RDHIGHEST	VALUE IS	2.52648	AT (	565274.69,	282500	0.31,	1.50,	1.50,	0.00)	DC	
	4THHIGHEST	VALUE IS	2.48141	AT (	565324.68,	282500	1.56,	1.50,	1.50,	0.00)	DC	
Α	5THHIGHEST	VALUE IS			565157.00,	282500	2.00,	1.60,	1.60,	0.00)	DC	
	6THHIGHEST	VALUE IS	2.16902	AT (	565273.47,	282504	8.90,	1.53,	1.53,	0.00)	DC	
	7THHIGHEST	VALUE IS	2.08345	AT (	565375.88,	282495	4.22,	1.50,	1.50,	0.00)	DC	
	8THHIGHEST	VALUE IS	2.05691	AT (	565374.66,	282500	2.82,	1.50,	1.50,	0.00)	DC	
	9THHIGHEST				•		0.16,	1.60,	•	0.00)	DC	
	10THHIGHEST	VALUE IS	1.99755	AT (	565277.14,	282490	3.11,	1.50,	1.50,	0.00)	DC	
INGENCO	1STHIGHEST	VALUE IS	0.92893	AT (	565985.04,	282539	2.89,	1.50,	1.50,	0.00)	DC	
	2NDHIGHEST	VALUE IS	0.88738	AT (	565942.79,	282541	9.27,	1.59,	1.59,	0.00)	DC	
	3RDHIGHEST	VALUE IS	0.87661	AT (	566027.29,	282536	6.52,	1.50,	1.50,	0.00)	DC	
	4THHIGHEST	VALUE IS	0.85931	AT (	566238.53,	282523	4.64,	1.50,	1.50,	0.00)	DC	
	5THHIGHEST	VALUE IS	0.78791	AT (	565900.54,	282544	5.64,	1.50,	1.50,	0.00)	DC	
	6THHIGHEST	VALUE IS	0.70237	AT (	566069.53,	282534	0.14,	1.60,	1.60,	0.00)	DC	
	7THHIGHEST	VALUE IS	0.68002	AT (	565858.29,	282547	2.02,	1.50,	1.50,	0.00)	DC	
	8THHIGHEST	VALUE IS	0.61495	AT (	566265.01,	282527	7.05,	1.50,	1.50,	0.00)	DC	
	9THHIGHEST	VALUE IS	0.59463	AT (	566307.26,	282525	0.68,	1.50,	1.50,	0.00)	DC	
	10THHIGHEST	VALUE IS	0.59078	AT (	565969.26,	282546	51.68,	1.70,	1.70,	0.00)	DC	

\*\*\* RECEPTOR TYPES: GC = GRIDCART

INGENCO

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR



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November 20, 2009



Project No. G080670A

INGENCO Industrial Power Generating Company, LLC Dade South Landfill Response to FDEP 10/21/2009 Request for Addl. Info.

# **Attachment 5**

#### **Professional Engineer Certification**

1	Professional Engineer Names James A. Cycon, D.E.
1.	Professional Engineer Name: <u>James A. Susan, P.E.</u>
_	Registration Number: 61237
2.	
	Organization/Firm: Fishbeck, Thompson, Carr & Huber, Inc.
	Street Address: 1515 Arboretum Drive, SE
	City: Grand Rapids State: MI Zip Code: 49546
3.	Professional Engineer Telephone Numbers
	Telephone: (616) 575-3824 ext. 3734 Fax: (616) 575-8155
4.	Professional Engineer E-mail Address: jasusan@ftch.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions
	unit(s) and the air pollution control equipment described in this application for air permit, when
	properly operated and maintained, will comply with all applicable standards for control of air
	pollutant emissions found in the Florida Statutes and rules of the Department of Environmental
	Protection; and
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application
	are true, accurate, and complete and are either based upon reasonable techniques available for
	calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an
	emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here $\square$ , if so), I further certify that each emissions unit described in this application for air permit, when
	properly operated and maintained, will comply with the applicable requirements identified in this
	application to which the unit is subject, except those emissions units for which a compliance plan
	and schedule is submitted with this application.
	(4) If the purpose of this application is to obtain an air construction permit (check here $X$ , if
	so) or concurrently process and obtain an air construction permit and a Title V air operation
	permit revision or renewal for one or more proposed new or modified emissions units (check here
	, if so), I further certify that the engineering features of each such emissions unit described in this
	application have been designed or examined by me or individuals under my direct supervision and
	found to be in conformity with sound engineering principles applicable to the control of emissions
	of the air pollutants characterized in this application.
	(5) If the purpose of this application is to obtain an initial air operation permit or operation
	permit revision or renewal for one or more newly constructed or modified emissions units (check
	here , if so), I further certify that, with the exception of any changes detailed as part of this
	application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with
	all provisions-contained in such permit.
-	11/20/09
	Signature Date
	(seal) No. GYZYY

