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APPENDIX I

AIR QUALITY MODELING PROTOCOL
AND
AMBIENT AIR IMPACT RESULTS
FOR
BREVARD ENERGY, L.L.C.

0090069-004-AC

PSD-FL-378

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AIR QUALITY MODELING PROTOCOL
AND
AMBIENT AIR IMPACT RESULTS
FOR
BREVARD ENERGY, L.L.C.

1.0 INTRODUCTION TO AIR QUALITY IMPACT ANALYSES

Brevard Energy, L.L.C. (Brevard Energy) plans to construct and operate an electricity generation facility that will result in the beneficial use, after treatment, of landfill gas (LFG) that is collected from the Brevard County Solid Waste Management Central Disposal Facility (Brevard Landfill). The proposed facility will be located on a leased site within the boundaries of the county owned landfill property in Cocoa, Brevard County, Florida.

Brevard County owns and operates an active LFG collection system that directs recovered LFG to three (3) open utility flares for destruction of methane and hydrocarbons in the LFG. Brevard Energy will treat the recovered LFG and produce electricity using gas that would otherwise be combusted in the flaring system. The proposed facility is presented in this protocol as a new emission source; however, it is important to note that emissions from the proposed facility will replace air pollutant emissions that would otherwise be released by the flaring system (i.e., the reduction in LFG flaring is a secondary benefit of this project).

1.1 Class II Area Impacts

The proposed Brevard Energy LFG-fueled electricity generation facility will be a major source of CO relative to federal Prevention of Significant Deterioration (PSD) regulations. Therefore, air quality impact analyses are required for all regulated criteria pollutants (CO, NO_X, SO_2, PM_{10}, except ozone) that have the potential to be emitted by the proposed facility in order to demonstrate that these emissions will not cause or significantly contribute to a violation of National Ambient Air Quality Standards (NAAQS).

Results of the analyses presented in this modeling protocol demonstrate that none of the criteria air pollutant emissions will produce ambient air impacts that exceed the significant impact concentrations defined under the PSD permitting program

This protocol presents technical information and procedures that were used for performing air pollutant dispersion modeling analysis to predict maximum ambient air impacts that are produced by the proposed electricity generation facility emissions. Initial results are compared to the significant impact levels for Class II areas established for each criteria air pollutant.

Section 3.0 of this protocol presents technical information and procedures that were used to perform the Class II Area impact analyses.

1.2 Class I Areas

The Brevard Landfill in Cocoa, Florida is located 175 kilometers from the nearest national wilderness areas. Based on the minimum distance to Class I designated areas (175 km) and the results of visibility and Class I impact analyses performed for similar facilities (refer to application PSD-FL-374 for Trail Ridge Energy) Brevard Energy expects that the proposed facility will not have significant pollutant or visibility impacts within any Class I areas.

Table I-1.1 presents the distances from the proposed Brevard Energy facility to the closest three (3) Class I Areas.

Table I-1.1 National Wilderness Areas and their approximate distances from the proposed Brevard Energy Facility

State	Wilderness Area	Representative UTM coordinates (km) East	North	Distance (km)
FL	Brevard Energy Facility	3,140	517	-
FL	Chassahowitzka Wilderness Area	3,174	344	175
GA	Okefenokee National Wilderness Area	3,385	383	278
FL	Everglades National Park	2,860	551	282

2.0 SITE CHARACTERISTICS AND FACILITY INFORMATION

Brevard Landfill owns approximately 4.40 square kilometers (km^2) of land to the west of US Highway 95, on the western edge of Cocoa about 5 miles from the east coast. The property owned by Brevard County has dimensions of 8,809 feet running north/south and 5,380 feet running east/west. The Central Disposal Facility (portion of the property currently used for waste disposal) occupies an estimated one-fourth of the Brevard County property. The Central Disposal Facility is located in the center of the north half of the property. The proposed electricity generation facility will be located south of the landfill; approximately in the center of the county owned property.

The LFG fueled internal combustion (IC) engines will be housed in a single building (with dimensions of 62.7 feet by 108.7 feet) constructed in a leased area (within the landfill property) near the existing LFG collection system header. A gas transmission line (fuel supply pipe) will be connected to the header of the existing LFG collection system and a dedicated gas blower/compressor will be used to draw methane-rich gas (fuel) from the existing LFG collection system to the proposed gas treatment system and electricity generation facility.

A single meter (flow totalizer) will be installed and operated at the Brevard Energy electricity generation facility to measure the total amount of LFG fuel that is supplied to power the six (6) IC engines (i.e., individual engine fuel use meters will not be installed).

Brevard Landfill currently owns and operates three (3) utility flares to control landfill gas emissions. The open utility flares have maximum capacities of 2,360 cubic feet per minute (scfm) of landfill gas for Flares 1 and 2 each, and 2,080 scfm of landfill gas for Flare 3 (i.e., total LFG control capacity of 6,800 scfm). After the installation of the proposed engine facility the flares will serve as back-up control devices and only be used when an excess amount of gas exists (e.g., if an engine is taken off-line for maintenance or if the landfill gas production rate exceeds the amount that can be used in the engines). Initially, the flares will only be used as a backup emission control device (producing electricity from combustion of the LFG in the IC engines is the preferred use for the gas). Throughout the lifetime of the electricity generation project, it is estimated that the maximum amount of LFG recovered from the landfill could equal 6,800 scfm (the maximum capacity of the three utility flares). The proposed electricity generation facility will use at full capacity 3,485 scfm, resulting in the requirement to flare up to 3,315 scfm (slightly less than 50% of the total existing flaring capacity).

2.1 Land Use

The population density of the area within a radius of 1 km from the proposed source was determined using a county population density map from the 2000 U.S. Census Bureau. The density map indicates that the area surrounding the facility has a population density between 0 and 296 persons per square mile. Because the area surrounding the proposed Brevard Energy facility has a population density significantly less than 1000 persons per square mile (and no significant development has occurred since the 2000 census), the general classification of the land use can be considered rural. The Census Bureau lists urban areas as having at least 1000 persons per square mile. The facility location is not in an industrial area that would significantly impact the population density analysis (in heavy industrial areas the non-resident population may be much larger than those indicated by standard population density plots).

2.2 Topography

The topography of the land that surrounds the Brevard Landfill is relatively flat. The base elevation of the proposed Brevard Energy electricity generation facility is approximately 6.4 meters (21 ft.) above sea level and the minimum stack heights of the proposed IC engine exhaust stacks is 20 feet (as measured from local grade), which results in an exhaust stack release elevation of 41 feet above sea level. Based on review of topography plots of the surrounding area there is no terrain within 3 km that has elevations greater than 41 feet above sea level.

Appendix I-1 provides a site plan of the proposed electricity generation facility building and surrounding topography.

2.3 Exhaust Stack Parameters

2.3.1 IC Engines

The proposed Brevard Energy electricity generation facility will use IC engines that are fueled with treated LFG and designed to operate at base load (100% capacity) conditions. Each of the proposed IC engines is expected to exhaust effluent gas at a rate of 12,050 actual cubic feet per minute (acfm) at 900°F through an 18-inch diameter stack. These engines will operate continuously with the exception of planned maintenance shutdowns or automatic engine shutdowns (instantaneous, automatic engine shutdowns if monitored operating parameters are outside of preset ranges). The amount of time required for an engine start-up is minimal. Since the engines are operated at base load conditions and the durations of engine shutdown and startup times are minimal, no air quality impact concentrations analyses were performed for these specific events (i.e., the engines will not be operated for any appreciable amount of time at loads other than 100%).

Each of the six IC engine exhaust stacks were entered into the computer dispersion model as individual point sources.

2.3.2 Open Utility Flares

Brevard Landfill currently owns and operates two (2) 2,360 scfm utility flares (Flares 1 and 2) and a 2,080 scfm utility flare (Flare 3) to control LFG emissions. Following startup of the proposed electricity generation facility the utility flares will be used to control excess emissions of LFG (i.e., during times where the amount of LFG produced exceeds the amount that can be controlled in the IC engines). The flares are designed to achieve a 98% destruction of total hydrocarbons when the LFG has a methane content between 40-60%. The LFG at Brevard Landfill is estimated to have a methane content of 55%. Flares 1 and 2 have actual release heights of 8.53m; Flare 3 has an actual release height of 8.63m. An equivalent release height and diameter were calculated for the flares based on the actual release height and design heat release using the following equations from the TSCREEN users manual:

$H_{equiv} = H_{actual} + 0.00128(Q_c^{0.478})$; and
$D_{equiv} = 1.754*10^{-4} * \text{sqrt}(Q_c)$

Where: H_{equiv} = Equivalent stack height
H_{actual} = Actual stack height (8.53m for Flares 1 & 2 and 8.63m for Flare 3)
D_{equiv} = Equivalent stack diameter (m); and
Q_c = Flared gas heat release ($40.75*10^6$ Btu/hr for Flares 1 & 2 and $68.64*10^6$ Btu/hr for Flare 3)

The equations above account for the flared gas plume rise based on an effective buoyancy flux parameter. Using a gas heat release rate equivalent to the combustion of 1,235 scfm of gas for Flares 1 and 2 and 2,080 scfm of gas for Flare 3 at 550 Btu/scf results in equivalent flare heights of 14.09 m for Flares 1 and 2 and 15.76 m for Flare 3. These parameters also result in an equivalent diameter of 1.120m for Flares 1 and 2 and 1.453m for Flare 3, respectively.

The flares were entered into the computer dispersion model as two (2) individual point sources (Flares 1 and 2 have the same parameters and emissions) using the calculated equivalent height, diameter and default values for temperature (1000 degrees Celsius) and velocity (20 meters per second). Preliminary modeling was performed to determine the flare with the maximum off-site impacts. The results of this modeling indicate that the release parameters and locations (relative to the facility boundary) of Flare 3 result in maximum off-site ambient air impacts. Therefore, the modified source modeling (impacts associated with simultaneous operation of the proposed electricity generation facility and flares) was performed based on the worst-case scenario that Flare 3 is operated at maximum capacity (2,080 scfm) and the remaining gas is directed to Flares 1 and 2 (1,235 scfm, the balance of 3,315 scfm assuming Flare 3 is at maximum capacity).

Table I-2.1 presents exhaust stack parameters for the six (6) identical IC engines and utility flares that were used in the air quality impact analyses.

Appendix I-2 provides a plot plan of the proposed electricity generation facility building, IC engine exhaust stacks and flares on a UTM coordinate system.

2.4 GEP Stack Height Analysis and Influencing Structures

The proposed IC engines will be installed within a 62.7 ft. (width) by 108.7 ft. (length) building that has a roof height of 15 ft. The individual exhaust stacks will be located on the roof of the building. The stacks will extend above the roof at least 5 feet (i.e., overall engine exhaust release height of 20 ft. as measured from grade of the land that surrounds the building) and exhaust vertically. The proposed electricity generation facility will have a maximum projected crosswind width of 125.5 feet (i.e., the diagonal of the rectangular building).

In general, air pollutant dispersion models consider the influence of building structures on exhaust stack plumes (i.e., downwash conditions) when the exhaust stack has a height that is less than its Good Engineering Practice (GEP) stack height. The GEP stack height for the proposed engine exhaust stacks is 37.5 ft. (11.43 meters) determined with the following equation:

$$H_{GEP} = H_b + 1.5L$$

where: H_{GEP} = formula GEP stack height (ft.)
H_b = height of adjacent building (15 ft.)
L = lesser of height or maximum projected width of adjacent building (15 ft)

Other nearby structures have the potential to influence the plume rise of the engine exhaust stacks if the distance between the stacks and the nearby structure is less than five times the L dimension (lesser of the building height or maximum projected width) of the structure. There are no other nearby structures located within the 5L radius.

There are no other structures located near the proposed electricity generation facility that have the potential to increase the calculated GEP stack height (i.e., the dimensions of the proposed facility control the GEP stack height determination). The release height of the proposed identical engine exhaust stacks is less than the GEP stack height (based on the dimensions of the structure in which the engines will be installed); therefore, emissions from the proposed electricity generation facility exhaust stacks have the potential to be influenced by aerodynamic downwash created by the building that houses the equipment. The influence of stack downwash on emission impacts was included in the dispersion modeling analyses.

The UTM coordinate locations and heights of the influencing structure (i.e., the building that houses the proposed engines) and proposed engine exhaust stacks were input to the USEPA Building Profile Input Program, Plume Rise Enhancement version (BPIP-PRIME). This computer program calculates projected building widths and heights for the influencing structure as a function of wind direction for use in the building downwash algorithms of the dispersion model that is used for the significant impact analysis (which is described in the following section of this document).

Appendix I-3 provides a compact disc that contains the BPIP input files (.PIP and .GPW files) and output building parameter files (.TAB, .SUM and .SO files) that were used in the modeling analysis.

Table I-2.1 Exhaust stack parameters for the proposed LFG combustion devices; open utility flares and Brevard Energy facility

Source ID	Location (UTM) East (m)	North (m)	Base Elev. (m)	Stack Height (m)	(ft)	Stack Diameter (m)	(ft)	Temp. (K)	Exit Velocity (m/s)
BICE01	516,755	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
BICE02	516,760	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
BICE03	516,765	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
BICE04	516,770	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
BICE05	516,775	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
BICE06	516,780	3,140,579	6.40	6.09	20.0	0.457	1.5	755	34.64
FLARE1/2†	516,760	3,140,709	6.40	14.09	46.21	1.120	3.67	1273	20.00
FLARE 3†	516,755	3,140,709	6.40	15.76	51.71	1.453	4.77	1273	20.00

† Data presented for height and diameter are equivalent values calculated for open flares, using equations from the TSCREEN users manual. Exit temperature and velocity are default values for open flares.

3.0 CLASS II AREA SIGNIFICANT IMPACT ANALYSIS

3.1 Purpose

A new source that has potential criteria air pollutant emissions in excess of PSD major source thresholds is required to perform analyses to determine whether its regulated air pollutant emissions will significantly impact the ambient air in designated Class II areas. In NAAQS attainment areas, a demonstration that indicates the maximum predicted ambient air pollutant impacts (concentrations) caused by the emissions of a proposed source are less than the applicable PSD significant impact levels is equivalent to a demonstration of compliance with Federal and State ambient air standards.

Table I-3.1 presents PSD significant impact levels established for Class II areas.

Air pollutant emissions from major sources that result in predicted ambient air impacts that exceed the significant impact levels are required to perform additional modeling to consider the cumulative impact caused by background emission sources and regional air pollutant background concentrations to demonstrate compliance with PSD increment consumption requirements and applicable federal ambient air quality standards (NAAQS).

For the purposes of the Class II modeling demonstration the criteria pollutant emissions from the operation of the IC engines at 100% capacity, and the utility flares operating at a capacity of less than 50% (3,315 scfm of the combined 6,800 scfm maximum capacity for the three flares) were considered in order to provide the most conservative (i.e., maximum) estimate of ambient air impacts.

3.2 Criteria Pollutant Emission Rates

Table I-3.2 presents criteria pollutant emission rates for the proposed electricity generation facility that were used in the modeling analysis. These emission rates are the same as those presented in Table 3 of the permit application document. The maximum SO_2 and NO_2 impacts produced by the proposed electricity generation facility were based on the total conversion of SO_X compounds to SO_2, and 75% conversion of NO_X compounds to NO_2.

Table I-3.3 presents criteria pollutant emission rates for the flare that was used in the modeling analysis. The emission rates are based on the LFG throughput specified in the previous section and pollutant emission factors supplied by Brevard Landfill representatives.

3.3 Refined Modeling

Screening modeling is often performed for an initial determination of maximum impacts and the radius of significant impact. However, the screening model (e.g., SCREEN3) only calculates impacts associated with a single representative emission source. Due to the differences between the IC engine and flare exhaust parameters, no screening modeling was performed for this project (the SIA was performed using a refined model).

3.3.1 Model Selection

The AERMOD (American Meteorological Society/Environmental Protection Agency Regulatory Model) air pollutant dispersion model (version No. 04300) was used to calculate ground-level pollutant concentrations resulting from the proposed electricity generation facility and flare air pollutant emission rates and exhaust configuration. AERMOD is the most recent Gaussian steady-state plume dispersion model released by USEPA for use in assessing ambient air impacts associated with air pollutant releases and was adopted by the USEPA as the preferred general purpose dispersion model (Federal Register Notice November 9, 2005). The USEPA *Guideline on Air Quality Models* (40 CFR Part 51, Appendix W) specifies that impacts calculated with most steady-state Gaussian plume models are applicable at distances up to 50 km from the origin of the emission source.

The use of the AERMOD model was determined appropriate because it:

- Can be used to model combined impact concentrations for multiple emission sources.

- Uses the plume rise enhancement (PRIME) building downwash algorithm, which has been shown to be superior to the downwash algorithm in previously released Gaussian steady-state plume dispersion models.

The following sections present input data and processing options that were used for the AERMOD air pollutant dispersion modeling. The AERMOD input files were prepared by entering appropriate data (applicable to the specific emission process) and model operating parameters into a Windows-based graphical user interface (GUI) developed by BEE-Line Software (BEEST for Windows, current version 9.50).

3.3.2 Model Options

The AERMOD dispersion model was executed with regulatory default options, which include the use of stack-tip downwash and incorporate the effects of elevated terrain (if applicable). In regulatory default mode, no calculations are performed for deposition or plume depletion.

Based on information presented in Section 2.1 of this protocol, the land use for the area surrounding the proposed electricity generation facility is predominantly classified as rural (as opposed to urban). Therefore, no options for urban dispersion were used to calculate air quality impact concentrations produced by the modeled emission sources.

3.3.3 Meteorological Data

Meteorological data (hourly surface measurements and upper-air soundings) for the five-year period 1999 through 2003 with site characteristics (surface roughness, albedo and Bowen Ratio) were provided by the Florida DEP for this project. The station numbers identified on the meteorological data files indicate that the surface and upper air data were acquired from the Orlando and Tampa Bay areas. The data were preprocessed by the Florida DEP using the AERMET meteorological preprocessor program to produce two types of data files for each meteorological year that are used by AERMOD; surface scalar parameters (*filename*.sss) and vertical profiles (*filename*.pfc). A profile base elevation of 28.7 meters (94.2 feet) was used with the meteorological data for the execution of AERMOD.

The AERMET data files used for this project are provided on the compact disc in Appendix I-3.

3.3.4 Receptor Network

Ground-level pollutant impact concentrations are required to be calculated for all nearby areas that are considered to be ambient air (i.e., areas in which public access is not precluded or restricted by the stationary source). Preliminary modeling results (using AERMOD) indicate that none of the criteria pollutants exceed PSD Class II significance levels exterior to property owned by the Brevard Landfill. Based on modeling performed for similar sources, the receptor network (locations at which air pollutant impact concentrations are calculated) used in the AERMOD modeling analyses was developed by creating a grid of receptors on a Cartesian coordinate system having a spacing of 100 meters to determine off-site impacts up to 1.6 km from the facility to ensure that all maximum impacts were within the boundary of the receptor grid. Receptors were placed at the Brevard Landfill facility boundary and extended 1.6 km in all directions from the proposed facility.

No flagpole receptors were identified in the area surrounding the proposed facility location.

Figure I-3.1 presents a depiction of the receptor network that was used to perform the refined modeling analysis.

3.3.5 Terrain Data

As presented in Section 2.2 of this protocol and the site plan in Appendix I-1, complex terrain was not considered as part of the refined modeling analysis, as there are no offsite receptors at elevations that exceed the stack height. The terrain in the region surrounding the Brevard Landfill property is at elevations lower than the stack release elevation of the proposed facility; therefore, the terrain was classified as simple.

USGS 30-meter (7.5 minute) ASCII Digital Elevation Models (DEM) files were obtained for the geographical area surrounding the facility. The DEM data were based on the North American Datum of 1927 (NAD27). USEPA's AERMAP computer program was used to extract data from the DEM files and calculate source base elevations and receptor elevations using the default algorithm (inverse distance squared of the nearest four terrain nodes).

The DEM data files and AERMAP output files that were used in the model are provided on the compact disc in Appendix I-3.

3.3.6 Pollutant Impact Averaging Times

Maximum ambient air pollutant impact concentrations produced by the proposed emission sources were determined for the specified five-year meteorological period. These results were compared to the PSD significant impact levels, and if applicable, to establish the radius of significant impact (i.e., the geographic areas that surround the proposed emission facility that are determined to have maximum impacts that are greater than the significance values). The highest calculated impact for each pollutant and averaging period for the five-year meteorological data set was used for the SIA determination.

The impact concentration(s) calculated for:

- SO_2 were based on maximum 3-hr, 24-hr and annual average impacts.
- PM_{10} were based on maximum 24-hr and annual impacts.
- CO were based on the maximum 1-hr and 8-hr average impacts.
- NO_2 was based on the maximum annual average impact.

Highest 2nd high impacts for short-term pollutant averaging periods that are used for PSD and NAAQS demonstrations were not considered for determinations of the SIA.

3.4 Refined Modeling SIA Results

Appendix I-4 provides AERMOD output summary files.

These results indicate that emissions from the combined operation of the utility flares and proposed electricity generation facility result in maximum impact concentrations that are below the Class II significant impact level for all pollutants and averaging times.

Table I-3.4 presents the proposed Brevard Energy facility and utility flare emission rates used in the modeling demonstration, the predicted individual impacts from the flares and proposed electricity generation facility and combined impacts for all on-site LFG combustion sources.

Table I-3.1 Significant Impact Levels for Class II Areas (μg/m[3])

Pollutant	Annual	24-Hr	8-Hr	3-Hr	1-Hr
Nitrogen Dioxide (NO_2)	1.0	--	--	--	--
Carbon Monoxide (CO)	--	--	500	--	2000
Sulfur Dioxide (SO_2)	1.0	5.0	--	25.0	--
Particulates (PM_{10}/TSP)	1.0	5.0	--	--	--

Table I-3.2 Criteria pollutant emission rates for the proposed Brevard Energy facility used in the air quality analysis

Pollutant	LFG-Fired ICE Emission Factors		Single ICE[3] Emissions (lb/hr)	Facility Emission Rate for Six (6) ICE (lb/hr)	Facility Emission Rate for Six (6) ICE (TpY)	Facility Emission Rate for Six (6) ICE (g/s)
Nitrogen Dioxide (NO_x)[1]	0.60	g/bhp-hr	2.95	17.72	77.6	1.67
Carbon Monoxide (CO)	2.75	g/bhp-hr	13.54	81.23	355.8	10.24
Sulfur Dioxide (SO_2)	32.2	lb/MMcf	0.96	5.76	25.23	0.73
Particulates[2]	0.24	g/bhp-hr	1.18	7.09	31.05	0.89

1. Emission factor of 0.60 g/bhp-hr is for total oxides of nitrogen (NO_x), USEPA guidance specifies that 75% of NO_x can be considered NO_2, which is reflected only in the (g/s) emission rate.
2. Particulate emission rate for TSP, PM_{10} and $PM_{2.5}$.
3. Based on operation of a single engine at base load (100% capacity) conditions; engine output of 2,233 hp and maximum theoretical fuel consumption of 35,075 scfh LFG.

Table I-3.3 Criteria pollutant emission rates for the Brevard Landfill utility flares used in the air quality analysis

Pollutant	LFG Utility Flare Emission Factors		Flare 1/2 Emission Rate[2] (lb/hr)	(TpY)	(g/s)	Flare 3 Emission Rate[3] (lb/hr)	(TpY)	(g/s)
Nitrogen Dioxide (NO_x) [1,4]	0.06	lb/MMBtu	2.45	10.7	0.231	4.12	18.04	0.389
Carbon Monoxide (CO) [4]	0.20	lb/MMBtu	8.15	35.7	1.03	13.7	60.1	1.73
Sulfur Dioxide (SO_2) [5]	7.94	lb/MMscf LFG	0.588	2.58	0.074	0.991	4.34	0.125
Particulates [6]	17.0	lb/MMdscf CH_4	1.26	5.52	0.159	2.12	9.30	0.267

1. USEPA guidance specifies that 75% of NO_x can be considered NO_2, which is reflected in the (g/s) emission rate.
2. Based on continuous operation at 1,235 scfm LFG and heat value of 550 Btu/scfm (40.75 MMBtu/hr)
3. Based on continuous operation at 2,080 scfm LFG and heat value of 550 Btu/scfm (68.64 MMBtu/hr)
4. Manufacturer guaranteed emission rate
5. Based on default sulfur content of 46.9 ppmv, provided by landfill representatives
6. Default PM emission rate AP-42 section 2.4-5

Table I-3.4 Air impact results compared to PSD Class II Significant Impact Levels

Pollutant	Averaging Time	Flare Emission Rate (g/s)	Potential Energy Facility Emission Rate (g/s)	Maximum Predicted Flare Impact (μg/m^3)	Maximum Predicted Energy Facility Impact (μg/m^3)	Combined Energy and Flare Impact (μg/m^3)	Class II Significant Impact Levels (μg/m^3)
NO_2	Annual	0.827	1.67	0.03	0.57	0.62	1.0
CO	8-hr	2.757	10.24	5.07	82.5	84.0	500
	1-hr	2.757	10.24	8.02	143	143	2000
SO_2	Annual	0.199	0.726	0.01	0.25	0.26	1.0
	24-hr	0.199	0.726	0.20	3.37	3.60	5.0
	3-hr	0.199	0.726	0.51	8.77	8.79	25.0
PM_{10}	Annual	0.426	0.892	0.23	0.30	0.34	1.0
	24-hr	0.426	0.892	0.43	4.12	4.61	5.0

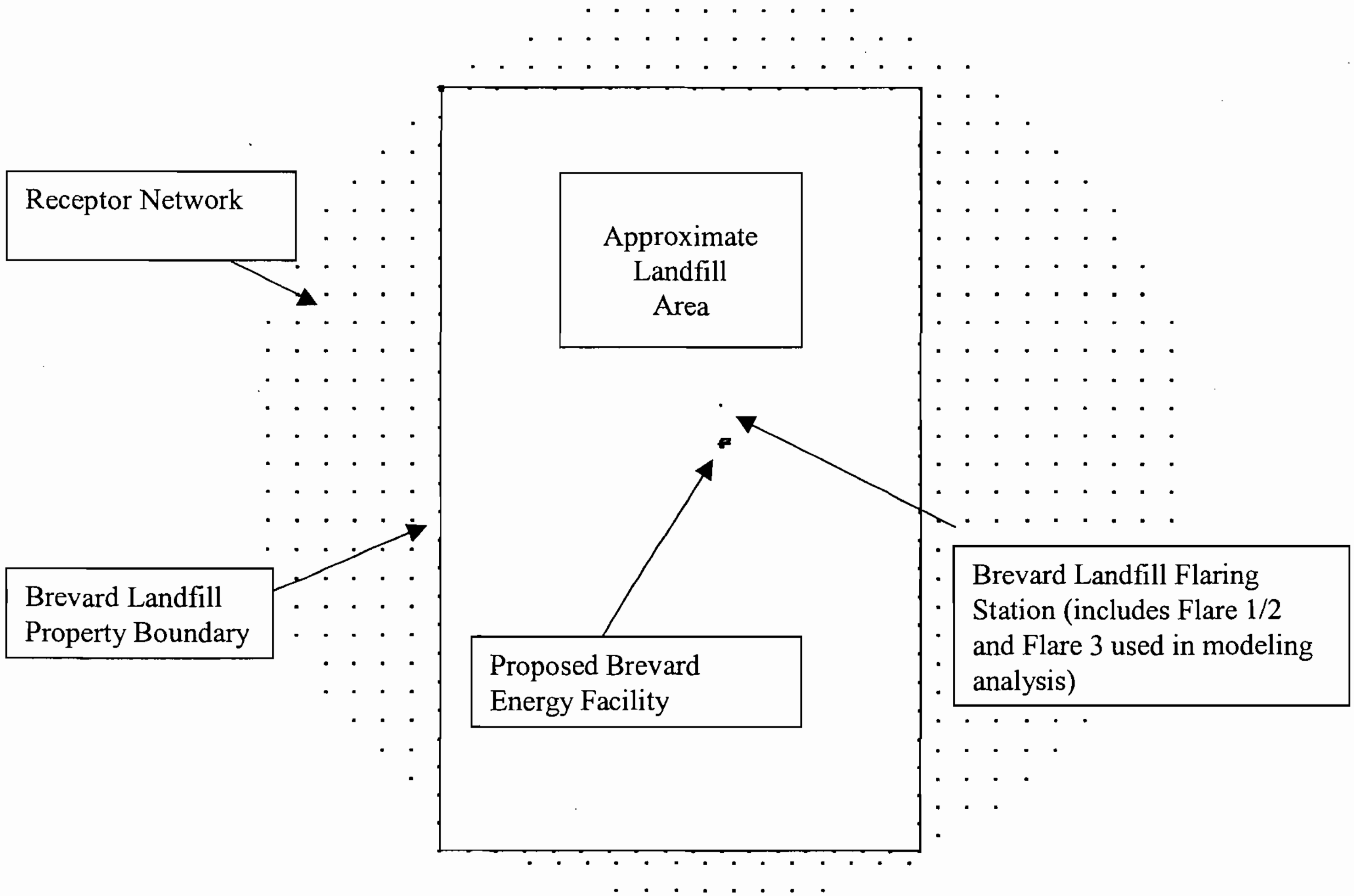


Figure I-3.1 Receptor network used in refined modeling analysis

4.0 SPECIAL MODELING CONSIDERATIONS

4.1 Particle Deposition

Based on the design and operation of the proposed IC engines and the treatment (dewatering, compression and filtration) of LFG received from the landfill prior to its use as a fuel and combustion, the amount of particulates emitted from the combustion process are expected to be relatively small. Therefore, compliance with the particulate matter ambient air quality standards can be achieved without considering particle deposition (i.e., the removal of particulates from the exhaust plume over the distance of maximum ground-level impacts due to deposition are expected to be minimal).

4.2 Fugitive Emissions

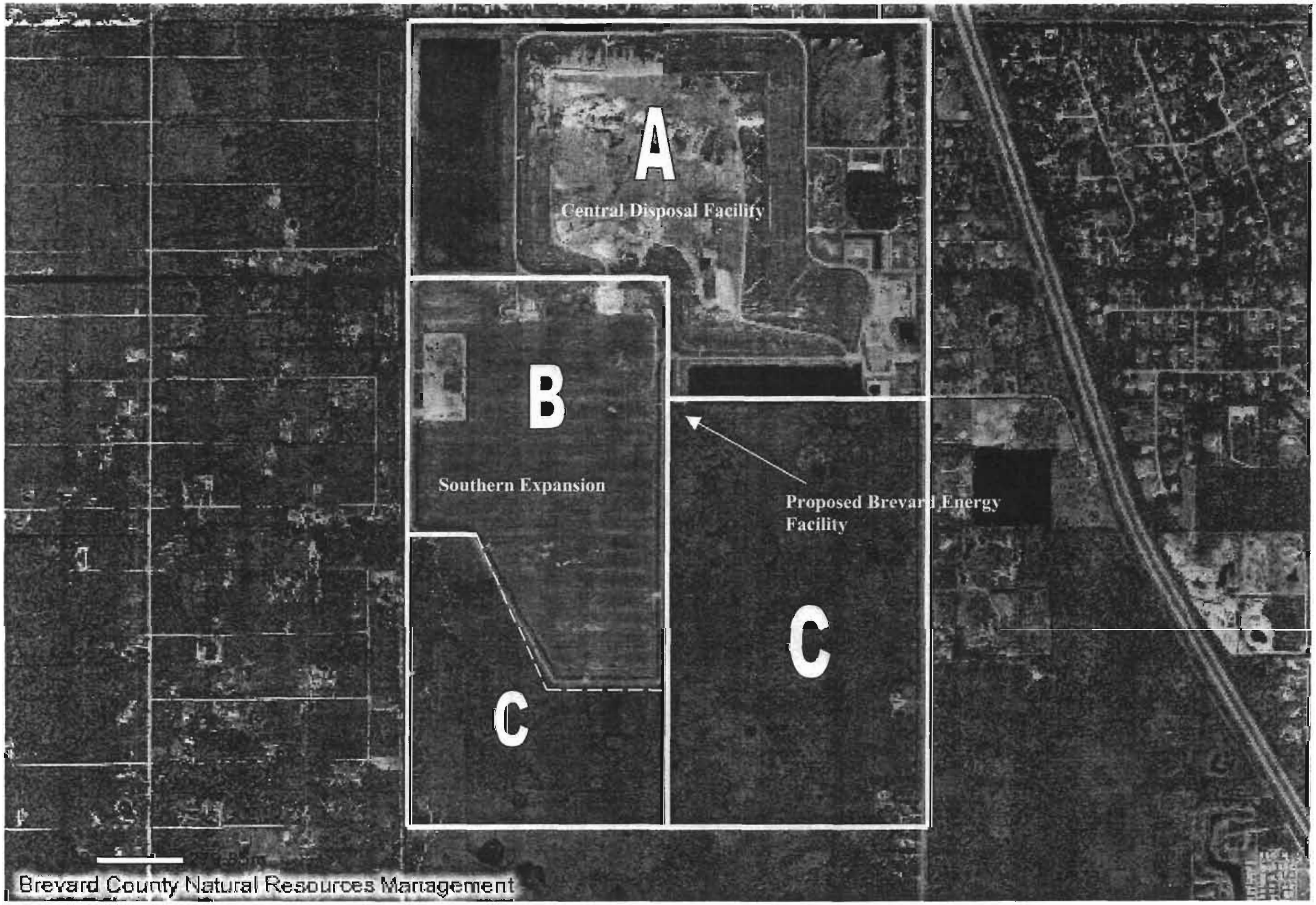
The proposed Brevard Energy electricity generation facility will utilize LFG that is supplied by the Brevard Landfill gas collection and control system. The proposed Brevard Energy electricity generation facility will not be a source of fugitive emissions.

4.3 Start-Up / Shutdown / Low Load Scenarios

The proposed electricity generation facility will use LFG-fueled IC engines that are designed to operate as base load (100% capacity) conditions. These engines will operate continuously with the exception for planned maintenance shutdowns or automatic engine shutdowns (instantaneous, automatic engine shutdowns if monitored operating parameters are outside of preset ranges). The amount of time required for an engine start-up is minimal. Since the engines are operated at base load conditions and the durations of engine shutdown and startup times are minimal, no air quality impact concentrations analyses will be performed for these specific events.

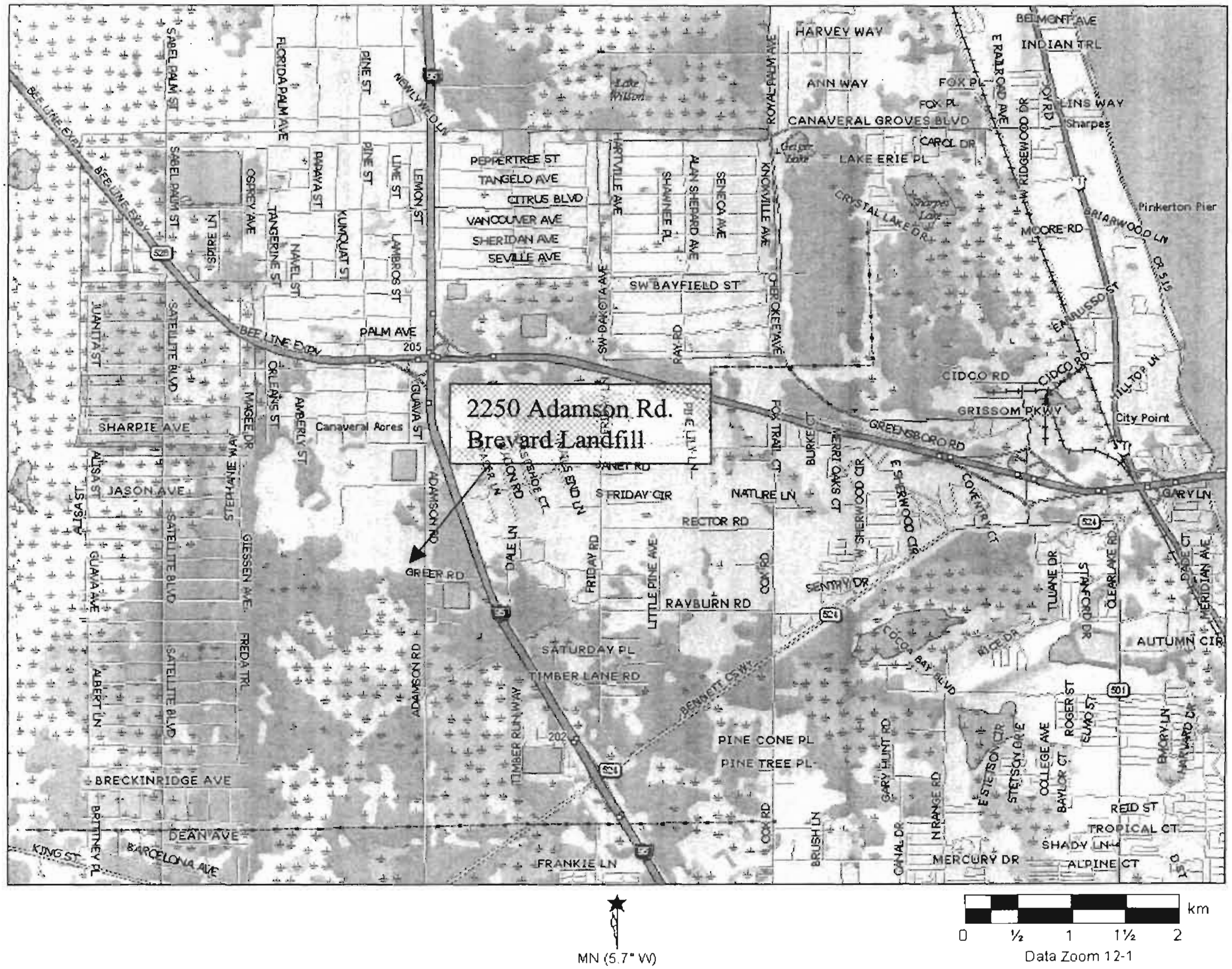
APPENDIX I-1

LANDFILL AND BREVARD ENERGY SITE PLANS
AND
TOPOGRAPHICAL PLOT



Brevard County Property

Derenzo and Associates, Inc.



Brevard Landfill location

APPENDIX I-2

COORDINATES FOR PROPOSED FACILITY AND STACKS

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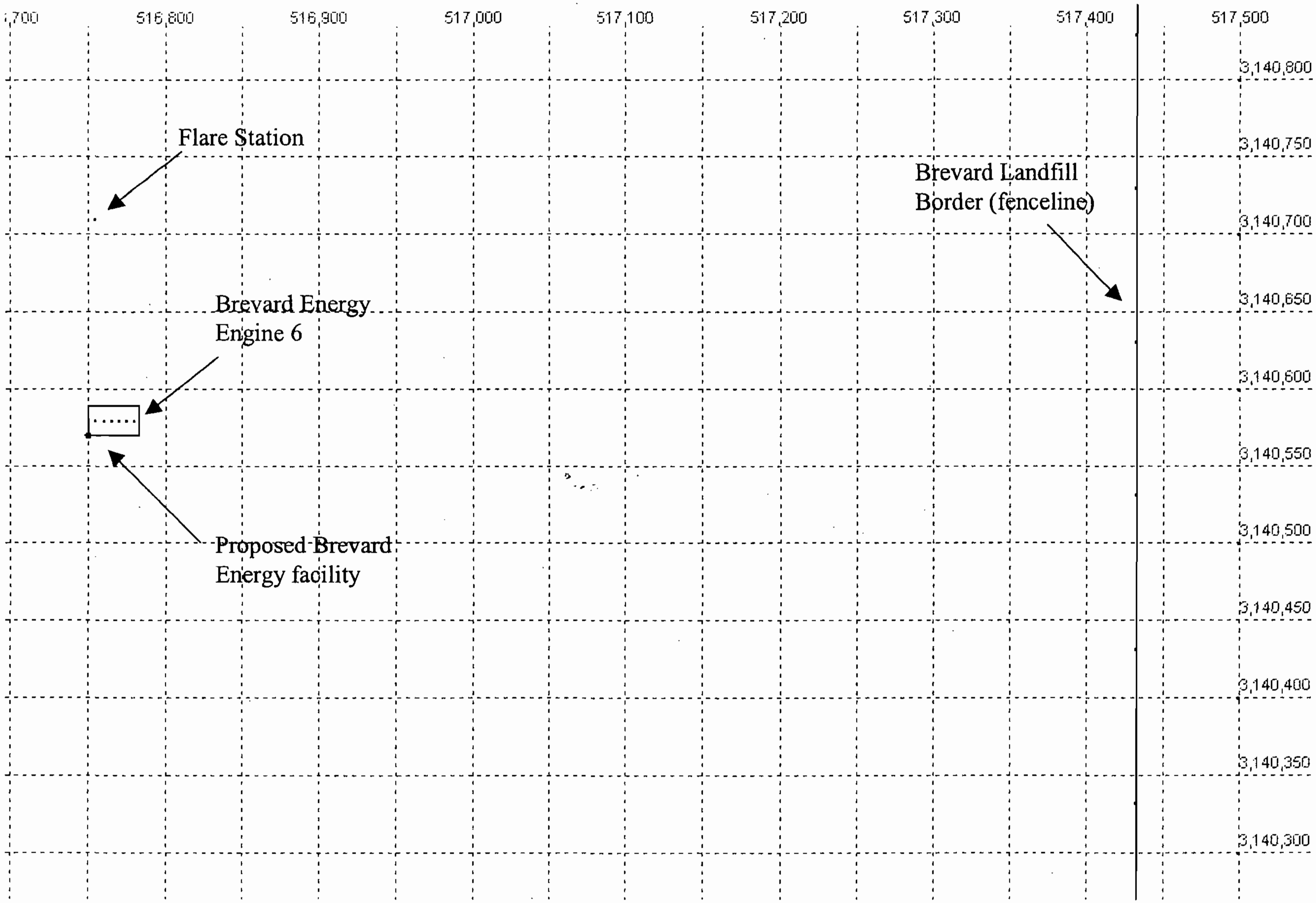

Brevard Energy Proposed Facility and Stacks

APPENDIX I-3

MODELING INPUT FILES

APPENDIX I-4

RESULTS OF CLASS II SIGNIFICANT IMPACT ANALYSIS

Appendix I-4

AERMOD Modeling Results (NO_X Annual Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_02_NOX.USF	NOX	ANNUAL	ALL	1ST	0.6174	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_00_NOX.USF	NOX	ANNUAL	ALL	1ST	0.5863	516661	3139139	6.10	ORLANDO_2000.SFC
AERMOD	Brevard02_03_NOX.USF	NOX	ANNUAL	ALL	1ST	0.5628	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_NOX.USF	NOX	ANNUAL	ALL	1ST	0.5573	517433	3140432	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_01_NOX.USF	NOX	ANNUAL	ALL	1ST	0.5488	515793	3140332	5.79	ORLANDO_2001.SFC
AERMOD	Brevard02_02_NOX.USF	NOX	ANNUAL	BNRG	1ST	0.5648	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_00_NOX.USF	NOX	ANNUAL	BNRG	1ST	0.5520	516661	3139139	6.10	ORLANDO_2000.SFC
AERMOD	Brevard02_99_NOX.USF	NOX	ANNUAL	BNRG	1ST	0.5250	516758	3139139	6.10	ORLANDO_1999.SFC
AERMOD	Brevard02_03_NOX.USF	NOX	ANNUAL	BNRG	1ST	0.5091	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_01_NOX.USF	NOX	ANNUAL	BNRG	1ST	0.4985	515793	3140332	5.79	ORLANDO_2001.SFC
AERMOD	Brevard02_00_NOX.USF	NOX	ANNUAL	FLARE1/2	1ST	0.0286	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_NOX.USF	NOX	ANNUAL	FLARE1/2	1ST	0.0273	517433	3140531	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_NOX.USF	NOX	ANNUAL	FLARE1/2	1ST	0.0261	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_NOX.USF	NOX	ANNUAL	FLARE1/2	1ST	0.0247	515793	3140432	5.87	ORLANDO_2002.SFC
AERMOD	Brevard02_01_NOX.USF	NOX	ANNUAL	FLARE1/2	1ST	0.0237	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_00_NOX.USF	NOX	ANNUAL	FLARE3	1ST	0.0332	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_NOX.USF	NOX	ANNUAL	FLARE3	1ST	0.0325	517433	3140631	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_NOX.USF	NOX	ANNUAL	FLARE3	1ST	0.0311	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_NOX.USF	NOX	ANNUAL	FLARE3	1ST	0.0300	515793	3140830	6.10	ORLANDO_2002.SFC
AERMOD	Brevard02_01_NOX.USF	NOX	ANNUAL	FLARE3	1ST	0.0275	515793	3140531	6.10	ORLANDO_2001.SFC

Appendix I-4

AERMOD Modeling Results (SO_2 Annual Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_02_SO2.USF	SO2	ANNUAL	ALL	1ST	0.2625	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	ANNUAL	ALL	1ST	0.2510	516661	3139139	6.10	ORLANDO_2000.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	ANNUAL	ALL	1ST	0.2386	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	ANNUAL	ALL	1ST	0.2370	516758	3139139	6.10	ORLANDO_1999.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	ANNUAL	ALL	1ST	0.2329	515793	3140332	5.79	ORLANDO_2001.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	ANNUAL	BNRG	1ST	0.2456	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	ANNUAL	BNRG	1ST	0.2400	516661	3139139	6.10	ORLANDO_2000.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	ANNUAL	BNRG	1ST	0.2283	516758	3139139	6.10	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	ANNUAL	BNRG	1ST	0.2214	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	ANNUAL	BNRG	1ST	0.2168	515793	3140332	5.79	ORLANDO_2001.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	ANNUAL	FLARE1/2	1ST	0.0092	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	ANNUAL	FLARE1/2	1ST	0.0088	517433	3140531	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	ANNUAL	FLARE1/2	1ST	0.0084	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	ANNUAL	FLARE1/2	1ST	0.0079	515793	3140432	5.87	ORLANDO_2002.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	ANNUAL	FLARE1/2	1ST	0.0076	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	ANNUAL	FLARE3	1ST	0.0107	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	ANNUAL	FLARE3	1ST	0.0104	517433	3140631	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	ANNUAL	FLARE3	1ST	0.0100	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	ANNUAL	FLARE3	1ST	0.0096	515793	3140830	6.10	ORLANDO_2002.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	ANNUAL	FLARE3	1ST	0.0088	515793	3140531	6.10	ORLANDO_2001.SFC

Appendix I-4

AERMOD Modeling Results (SO_2 24-Hour Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_03_SO2.USF	SO2	24-HR	ALL	1ST	3.5940	517433	3140631	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	24-HR	ALL	1ST	3.4957	517433	3140631	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	24-HR	ALL	1ST	3.1106	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	24-HR	ALL	1ST	3.0643	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	24-HR	ALL	1ST	3.0306	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	24-HR	BNRG	1ST	3.3663	517433	3140631	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	24-HR	BNRG	1ST	3.2223	517433	3140631	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	24-HR	BNRG	1ST	2.9560	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	24-HR	BNRG	1ST	2.9152	517433	3140332	6.84	ORLANDO_2001.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	24-HR	BNRG	1ST	2.9140	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	24-HR	FLARE1/2	1ST	0.1574	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	24-HR	FLARE1/2	1ST	0.1535	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	24-HR	FLARE1/2	1ST	0.1401	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	24-HR	FLARE1/2	1ST	0.1224	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	24-HR	FLARE1/2	1ST	0.1052	517433	3140631	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	24-HR	FLARE3	1ST	0.2027	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	24-HR	FLARE3	1ST	0.1940	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	24-HR	FLARE3	1ST	0.1921	517433	3140432	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	24-HR	FLARE3	1ST	0.1583	517433	3140432	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	24-HR	FLARE3	1ST	0.1425	515793	3140631	6.10	ORLANDO_2000.SFC

Appendix I-4

AERMOD Modeling Results (SO_2 3-Hour Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_00_SO2.USF	SO2	3-HR	ALL	1ST	8.7872	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	3-HR	ALL	1ST	8.7677	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	3-HR	ALL	1ST	8.3888	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	3-HR	ALL	1ST	8.3239	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	3-HR	ALL	1ST	7.9404	517433	3140432	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	3-HR	BNRG	1ST	8.7717	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	3-HR	BNRG	1ST	8.7576	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	3-HR	BNRG	1ST	8.3610	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	3-HR	BNRG	1ST	8.2727	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	3-HR	BNRG	1ST	7.9168	517433	3140432	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	3-HR	FLARE1/2	1ST	0.3725	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	3-HR	FLARE1/2	1ST	0.3689	517433	3140830	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	3-HR	FLARE1/2	1ST	0.3624	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	3-HR	FLARE1/2	1ST	0.3599	517433	3140830	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	3-HR	FLARE1/2	1ST	0.3408	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_SO2.USF	SO2	3-HR	FLARE3	1ST	0.5127	517433	3140730	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_SO2.USF	SO2	3-HR	FLARE3	1ST	0.4933	517433	3140631	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_01_SO2.USF	SO2	3-HR	FLARE3	1ST	0.4558	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_00_SO2.USF	SO2	3-HR	FLARE3	1ST	0.4380	517433	3140631	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_02_SO2.USF	SO2	3-HR	FLARE3	1ST	0.3793	517433	3140631	6.71	ORLANDO_2002.SFC

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AERMOD Modeling Results (CO 1-Hour Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_02_CO.USF	CO	1-HR	ALL	1ST	142.9	517433	3140830	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_00_CO.USF	CO	1-HR	ALL	1ST	140.6	517433	3140830	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_CO.USF	CO	1-HR	ALL	1ST	138.6	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_01_CO.USF	CO	1-HR	ALL	1ST	136.1	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_CO.USF	CO	1-HR	ALL	1ST	136.0	517433	3140929	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_CO.USF	CO	1-HR	BNRG	1ST	142.8	517433	3140830	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_00_CO.USF	CO	1-HR	BNRG	1ST	140.5	517433	3140830	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_CO.USF	CO	1-HR	BNRG	1ST	138.6	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_CO.USF	CO	1-HR	BNRG	1ST	135.9	517433	3140929	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_01_CO.USF	CO	1-HR	BNRG	1ST	135.9	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_CO.USF	CO	1-HR	FLARE1/2	1ST	6.175	517433	3140929	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_02_CO.USF	CO	1-HR	FLARE1/2	1ST	6.111	517433	3140730	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_99_CO.USF	CO	1-HR	FLARE1/2	1ST	6.094	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_00_CO.USF	CO	1-HR	FLARE1/2	1ST	6.067	517433	3140730	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_CO.USF	CO	1-HR	FLARE1/2	1ST	6.049	517433	3140730	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_CO.USF	CO	1-HR	FLARE3	1ST	8.021	517433	3140730	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_01_CO.USF	CO	1-HR	FLARE3	1ST	8.011	517433	3140631	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_00_CO.USF	CO	1-HR	FLARE3	1ST	7.953	517433	3140631	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_99_CO.USF	CO	1-HR	FLARE3	1ST	7.877	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_02_CO.USF	CO	1-HR	FLARE3	1ST	7.860	517433	3140631	6.71	ORLANDO_2002.SFC

Appendix I-4

AERMOD Modeling Results (CO 8-Hour Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_02_CO.USF	CO	8-HR	ALL	1ST	84.02	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_00_CO.USF	CO	8-HR	ALL	1ST	83.59	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_CO.USF	CO	8-HR	ALL	1ST	80.66	517433	3140233	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_CO.USF	CO	8-HR	ALL	1ST	72.04	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_CO.USF	CO	8-HR	ALL	1ST	71.30	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_00_CO.USF	CO	8-HR	BNRG	1ST	82.51	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_02_CO.USF	CO	8-HR	BNRG	1ST	81.88	517433	3140332	6.84	ORLANDO_2002.SFC
AERMOD	Brevard02_01_CO.USF	CO	8-HR	BNRG	1ST	78.29	517433	3140233	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_03_CO.USF	CO	8-HR	BNRG	1ST	70.30	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_CO.USF	CO	8-HR	BNRG	1ST	69.41	517433	3140730	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_99_CO.USF	CO	8-HR	FLARE1/2	1ST	3.975	517433	3140830	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_03_CO.USF	CO	8-HR	FLARE1/2	1ST	3.927	517433	3140730	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_00_CO.USF	CO	8-HR	FLARE1/2	1ST	3.632	517433	3140631	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_CO.USF	CO	8-HR	FLARE1/2	1ST	2.971	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_02_CO.USF	CO	8-HR	FLARE1/2	1ST	2.876	516758	3141824	6.40	ORLANDO_2002.SFC
AERMOD	Brevard02_03_CO.USF	CO	8-HR	FLARE3	1ST	5.068	517433	3140730	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_CO.USF	CO	8-HR	FLARE3	1ST	4.878	517433	3140830	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_00_CO.USF	CO	8-HR	FLARE3	1ST	4.599	517433	3140631	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_CO.USF	CO	8-HR	FLARE3	1ST	3.812	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_02_CO.USF	CO	8-HR	FLARE3	1ST	3.284	516661	3141824	6.29	ORLANDO_2002.SFC

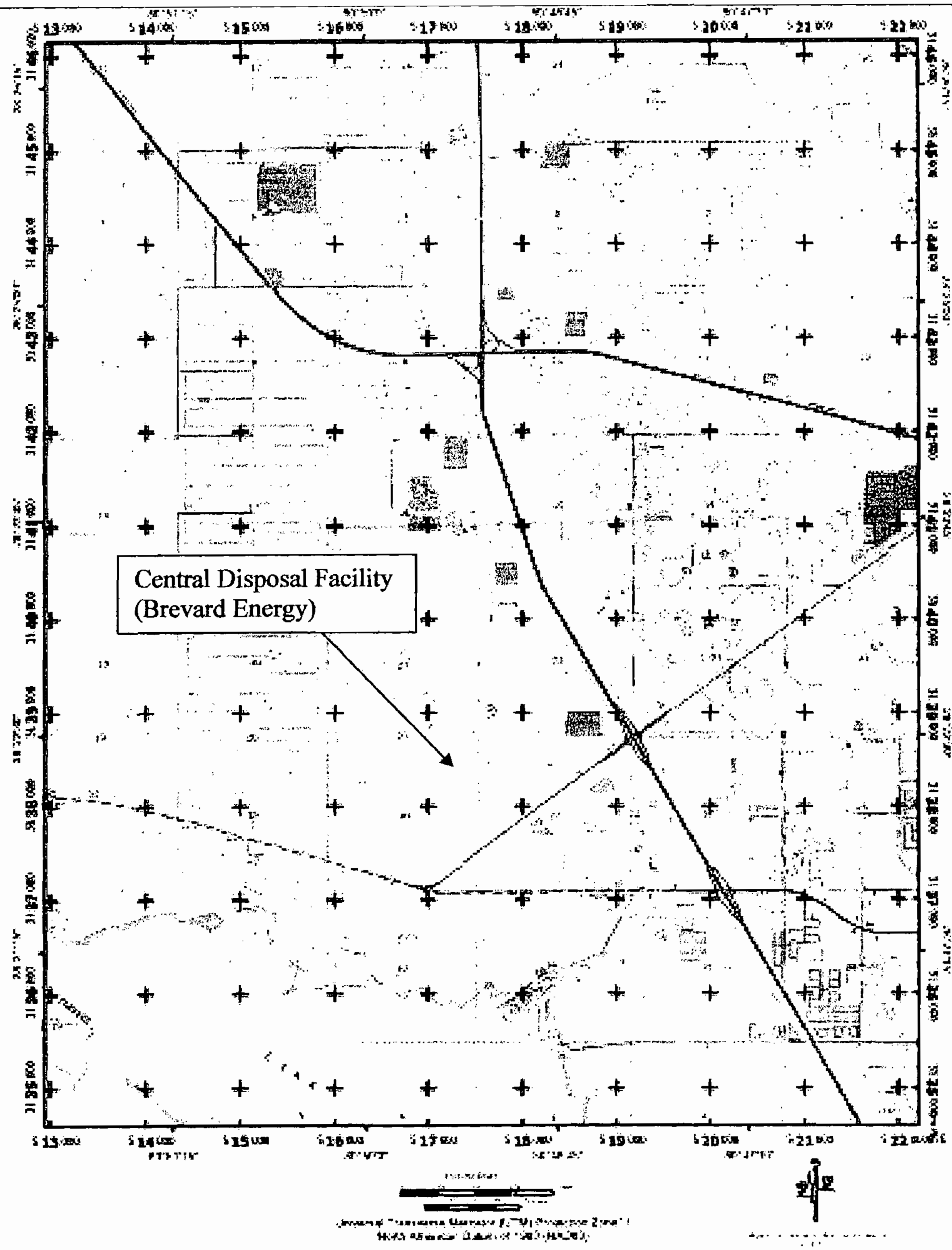
Appendix I-4

AERMOD Modeling Results (PM_{10} Annual Significant Impact Analysis)

Model	File	Pollutant	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Met File
AERMOD	Brevard02_02_PM10.USF	PM10	PERIOD	ALL	1ST	0.3371	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	PERIOD	ALL	1ST	0.3371	515793	3140332	5.79	ORLANDO_2003.SFC
AERMOD	Brevard02_00_PM10.USF	PM10	PERIOD	ALL	1ST	0.3200	517433	3140432	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_PM10.USF	PM10	PERIOD	ALL	1ST	0.3200	517433	3140432	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_99_PM10.USF	PM10	PERIOD	ALL	1ST	0.3051	517433	3140432	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_02_PM10.USF	PM10	PERIOD	BNRG	1ST	0.3009	515793	3140332	5.79	ORLANDO_2002.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	PERIOD	BNRG	1ST	0.3009	515793	3140332	5.79	ORLANDO_2003.SFC
AERMOD	Brevard02_00_PM10.USF	PM10	PERIOD	BNRG	1ST	0.2940	516661	3139139	6.10	ORLANDO_2000.SFC
AERMOD	Brevard02_01_PM10.USF	PM10	PERIOD	BNRG	1ST	0.2940	516661	3139139	6.10	ORLANDO_2001.SFC
AERMOD	Brevard02_99_PM10.USF	PM10	PERIOD	BNRG	1ST	0.2797	516758	3139139	6.10	ORLANDO_1999.SFC
AERMOD	Brevard02_00_PM10.USF	PM10	PERIOD	FLARE1/2	1ST	0.0197	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_PM10.USF	PM10	PERIOD	FLARE1/2	1ST	0.0197	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_02_PM10.USF	PM10	PERIOD	FLARE1/2	1ST	0.0197	517433	3140531	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	PERIOD	FLARE1/2	1ST	0.0197	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_PM10.USF	PM10	PERIOD	FLARE1/2	1ST	0.0187	517433	3140531	6.71	ORLANDO_1999.SFC
AERMOD	Brevard02_00_PM10.USF	PM10	PERIOD	FLARE3	1ST	0.0228	517433	3140531	6.71	ORLANDO_2000.SFC
AERMOD	Brevard02_01_PM10.USF	PM10	PERIOD	FLARE3	1ST	0.0228	517433	3140531	6.71	ORLANDO_2001.SFC
AERMOD	Brevard02_02_PM10.USF	PM10	PERIOD	FLARE3	1ST	0.0228	517433	3140531	6.71	ORLANDO_2002.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	PERIOD	FLARE3	1ST	0.0228	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_99_PM10.USF	PM10	PERIOD	FLARE3	1ST	0.0223	517433	3140631	6.71	ORLANDO_1999.SFC

AERMOD Modeling Results (PM_{10} 24-Hour Significant Impact Analysis)

AERMOD	Brevard02_03_PM10.USF	PM10	24-HR	ALL	1ST	4.61151	517433	3140631	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	24-HR	BNRG	1ST	4.1241	517433	3140631	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	24-HR	FLARE1/2	1ST	0.33708	517433	3140531	6.71	ORLANDO_2003.SFC
AERMOD	Brevard02_03_PM10.USF	PM10	24-HR	FLARE3	1ST	0.43372	517433	3140531	6.71	ORLANDO_2003.SFC



Central Disposal Facility (Landfill) Site Map